Appendix A : IIA Framework

This appendix pulls together the IIA themes and suggested objectives along with the supporting decision-aiding questions. Taken together, this list indicates the parameters of the IIA, providing a methodological 'framework' for assessment.

Table A1: The full IIA Framework

ISA theme	ISA objective	Assessment Questions (will the option / proposal help to…)
Biodiversity	Minimise, and avoid impacts upon biodiversity whilst achieving net gains through enhancement and creation of well-connected, functional habitats that are resilient to the effects of climate change.	• Avoid unacceptable harm to key biodiversity assets? • Avoid severing ecological corridors? • Improve the resilience of ecosystems to climate change and other pressures? • Achieve net gain in biodiversity value? • Seek to help improve the conditions of unfavourable assets? • Recognise the multiple ecosystem services that biodiversity provide? • Ensure communities benefit from interaction with wildlife without generating unacceptable harm to species and habitats?
Water Resources	Promote sustainable forms of development which minimise pressure on water resources, whilst maintaining and enhancing the quality of the Borough's rivers, lakes and aquifers.	• Maintain areas with good water quality and make improvements where necessary? • Promote the role of water resources for their recreational and economic benefits without compromising environmental quality? • Promote the integration of blue infrastructure into new developments? • Ensure the timely phasing of wastewater and drainage infrastructure improvements to support new development?
Soil and Land	Promote the effective use of land and soil, ensuring that the best and most versatile agricultural land resources are protected and used effectively, whilst also preserving minerals resources.	• Promote the use of previously developed land where this exists as a viable alternative to greenfield development? • Avoid the loss of the highest quality agricultural land (particularly, where there are poorer quality alternatives)? • Promote the effective use of agricultural land for temporary uses where soil quality can be retained? • Promote community food growing and greater self-sufficiency? • Avoid the unnecessary sterilisation of minerals deposits and associated infrastructure?
Landscape	Protect and enhance the character of landscapes and townscapes; whilst ensuring their multifunctional use and enjoyment by all.	• Preserve and strengthen areas of tranquillity throughout the borough? • Protect and enhance access to high quality green and open space in urban areas? • Enhance poor quality landscapes and townscapes? • Protect sensitive landscapes that makes a positive contribution to landscape character and provide recreational opportunities?

ISA theme	ISA objective	Assessment Questions (will the option / proposal help to…)
		• Consider effects of climate change on landscape environments?
Historic Environment	Protect, maintain and enhance heritage assets (including their setting), cultural heritage and natural history.	• Protect historic assets and their settings? • Support patterns of growth that are in keeping with settlement character? • Recognise and promote the role of the historic environment in contributing to community identity?
Waste	Minimise waste generation and support the circular economy by implementing the waste hierarchy.	• Reduce waste generation associated with new development. • Promote the use of secondary materials. • Support the management of waste close to sources of generation. • Ensure that negative health impacts associated with waste management are avoided.
Climate Change Resilience	Adapt and become more resilient to the impacts of climate change, including directing growth away from areas of highest flood risk and preparing for more extreme weather events.	• Ensure that development does not increase flood risk on site or downstream? • Implement multifunctional green infrastructure? • Ensure that critical infrastructure is resilient to the effects of climate change? • Avoid vulnerabilities to flood risk, considering locally specific circumstance? • Locate development in appropriate locations?
Climate Change Mitigation	Facilitate and contribute to the move towards a zero carbon Telford and Wrekin whilst improving social equity of access to energy.	• Avoid the sterilisation of renewable energy opportunities by locating incompatible development in areas with greatest suitability for generation? • Support the continued growth in renewable energy generation across Telford and Wrekin, particularly where opportunities exist? • Continue to drive down greenhouse gas emissions associated with transport, housing and business? • Reduce energy consumption? • Decouple energy consumption and affluence? • Ensure affordable access to energy for all members of the community? • Lead to greater self-sufficiency?
Housing	Support timely delivery of an appropriate mix of housing types and tenures, including a focus on maximising the potential of brownfield opportunities, to ensure delivery of high quality housing that meets the	• Support timely delivery of an appropriate mix of housing types and tenures to meet objectively assessed housing need in the most sustainable locations ? • Maximise potential from brownfield opportunities in the borough, including unlocking opportunity sites in public ownership? • Support delivery of a range of good quality, affordable and specialist housing that meets the needs of Telford and Wrekin's residents, including older people, people with disabilities and families with children?

ISA theme	ISA objective	Assessment Questions (will the option / proposal help to…)
	needs of Telford and Wrekin residents.	• Enable managed growth at rural communities where to do so would help improve the sustainability of these settlements?
Health and Wellbeing	Support healthy, safe lifestyles and environments for all community groups; whilst seeking to close 'inequality gaps' and improve resilience to health issues.	• Ensure there is adequate access to open/ green space facilities across all areas within the local plan boundary. • Ensure that recreational spaces are kept to a high quality standard, are accessible and able to provide for required demands. • Ensure that places are designed that allow social distancing measures to be employed effectively. • Improve active transport accessibility to suitable housing, employment opportunities. • Reduce inequalities in health between the most and least deprived areas. • Support active travel. • Support mental health trends and continues to plan for and acknowledge mental health issues.
Economy and Infrastructure	Ensure that the local economy is equipped to support key local industries which bring tangible benefits to the lives of local residents whilst ensuring environmental degradation is minimised and social equity is achieved.	• Ensure that adequate skills, education and training are in place to meet the needs of the local economy? • Reduce the polarised nature of urban inequalities? • Boost self-employment through schemes designed to support entrepreneurial activity? • Reduce the economic and healthcare costs of people classified as long-term sick? • Boost the number of managerial and professional occupations in the Borough? • Improve digital connectivity? • Ensure the protection of the natural, historic and leisure attractions the Borough has to offer? • Ensure the longevity of the Borough's retail centres?
Transportation	Ensure that provision of transport infrastructure reflects local population and demographic needs, promotes sustainable modes of travel, connects new housing to employment, education, health and local services and maximises accessibility for all.	• Improve transport infrastructure throughout the borough including active and public transport? • Meet future transport trends and service those of all abilities? • Encourage active transport to improve the communities health in the longer term, whilst benefiting the environment? • Improve transport to ensure sustainable and active modes are most desired as used to connect people to places? • Support home working and positive changes in travel behaviours that emerge in response to crises such as Covid19.
Equality and Diversity	Tackle inequalities, ensure that decisions do not disproportionately affect minority populations and that services can	• Enable all people from all background to access services and facilities? • Ensure that decisions and do not disproportionately affect minority populations?

ISA theme	ISA objective	Assessment Questions (will the option / proposal help to…)
	be accessed equally by all.	• Ensure that areas which require greater attention and need of services are accommodated?

Appendix B : Strategic Housing Options Appraisal

Biodiversity

Avoid impacts on biodiversity, whilst mitigating and compensating any acceptable impacts, achieving net gains through enhancements, and creation of well-connected, functional habitats that are resilient to development, recreational and climate change pressures.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

This approach would likely be able to accommodate the housing growth in Newport on sites which are largely unconstrained by existing biodiversity designations. The exception to this is where a number of sites contain Tree Preservation Orders (TPOs) which may become threatened by development. Where this is the case, larger sites offer more scope to be able to retain and protect the TPOs through early scheme design and careful consideration of potential effects of development on important trees.

Some potential minor negative effects may arise as a result of the majority of sites in Newport being greenfield sites, as such, it is likely that some species for whom grassland is their native habitat may be negatively impacted, though it is unlikely that this would lead to significant effects due to a lack of identified designations/protections for these pieces of land.

The SSSI impact zones for Aqualate Mere (which spread to the east and south of Newport in particular) suggest that residential development above 100 dwellings will need to be assessed to ensure that significant negative effects do not occur. The cumulative effects of growth could therefore give rise to minor negative effects.

With regards to enhancement and biodiversity net gain, there are no mapped agri-environment schemes to the south of Newport. The development of land here would therefore not replace protection schemes, and might provide an opportunity to implement net gain on site. This is uncertain, but could potentially offset any negative effects in the long term. At the scale of growth involved, there ought to be some potential to set aside land for biodiversity enhancement.

It would be likely that in order to meet the growth in Telford, the majority of site options within the existing urban area would be allocated. These are largely unconstrained in relation to biodiversity designations and for the most part do not contain any TPOs which could not be retained. Where there are a number of sites which are adjacent to, or in very close proximity to designated areas of biodiversity importance, early consideration in the design stage of schemes should be able to ensure that suitable protections such as development buffers reduce the potential for linked and functional land to cause negative effects on flora and fauna within the protected areas.

The majority of sites within the urban area are brownfield, reducing the potential for issues linked to greenfield development, however equally disused sites can form habitats to important species such as bats and birds. Any potential negative effects under this approach within the existing urban area are likely to be very minor and uncertain, depending on specific site circumstances.

Further growth in Telford, making up the majority of the housing delivery for the area would be expected to come from sites on the urban periphery, the majority of which are relatively large, greenfield options leading to potential effects similar to those discussed above. The band of site options along the northern edge of Telford's urban area are broadly unconstrained by designations and could deliver a significant proportion of the housing need outlined under this approach. Any overlaps with TPOs would be likely to be able to be mitigated through retention due to the larger size of the sites. However, there are parcels of land here that are under agri-environment schemes. Their development for housing would mean these benefits no longer arise, unless on site enhancements can be achieved. These areas to the north are also constrained in terms of soil resources and landscape character.

Whilst sites to the east and west of Telford's periphery are also broadly unconstrained in terms of actual overlap with designations, there is a significantly larger amount of sensitive land in the areas in close proximity to the sites. The areas contain Local Wildlife Sites (LWS), Local Nature Reserves (LNR) as well as a number of SSSIs. This raises potential negative effects related to recreational pressures, adjoined functional land and polluting factors (noise, air and water) which all have the potential to disrupt both fauna and flora. Appropriate buffering and habitat enhancement would need to be established.

Given the factors discussed above, it is likely that there would be some disturbance to biodiversity irrespective of the location of growth around Telford. This would either be disturbance to designated sites, or through a loss of land that is under stewardship agreements. The strategic nature of sites ought to allow for mitigation and enhancement measures though, meaning overall effects are predicted to be minor.

With regards to biodiversity net gain, where land is less sensitive (including many of the sites within the urban areas of Telford and Newport, as well as some peripheral sites)), it would be likely that habitat creation would be met onsite, leading to some potential benefits for fauna and flora both within the main urban conurbations in the Borough. On land which is more sensitive, whilst the principal of net gain could mean that where any biodiversity is lost, it is replaced nearby. However, replacement of established habitats is not generally preferable to avoiding loss in the first instance. As such, there is some uncertainty associated with effects relating to net gain in sensitive areas which will be broadly dependent upon site specific circumstances and scheme design. However where land is largely devoid of biodiversity assets, net gain should help to improve flora and fauna in these areas.

Growth in rural areas would be of a low scale. Considering the broadly unconstrained nature of the rural site options, any sites identified as more sensitive (in terms of environmental constraints) would be expected to be omitted from allocation. There are some areas that are covered by environmental stewardship schemes, but these would not necessarily be required for development, and / or, there will be a need to ensure net gain.

Overall, some **minor negative effects** are predicted, broadly relating to growth which may fall within impact zones of biodiversity designations as well as the potential for TPOs to be negatively affected, and for areas covered by environmental stewardship to be developed.

The long term effects are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved. Large scale growth close to important habitats is likely to lead to disturbance, which could make efforts to achieve net gain harder to achieve in a sustained manner.

Option 1.2: Rural growth

Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

The growth under this approach in Newport would replicate that set out under Option 1.1, as such, effects would be expected to be aligned (i.e. potential minor negative effects in the short term, with potential for net gain if less sensitive sites are developed including areas of new or enhanced habitats).

Growth in Telford would see approximately 1300 fewer dwellings being delivered than seen under Option 1.1. The sites within the urban area would be likely to come forward regardless so the effects in this respect would be the same.

At a lower scale of growth, the pressures on biodiversity would be reduced, whether this be through less disturbance to designated sites, the avoidance of sites that provide a supporting role to species, or to maintain connectivity. It would therefore be expected that this approach would not result in the significant loss of habitats in and around Telford. In addition, there ought to be greater flexibility in the identification of sites that could best accommodate areas for enhancement or new habitats.

This strategy would place a greater pressure on rural housing delivery. The largely unconstrained nature of rural site options (with regards to existing designations) should mean that effects for rural areas would not be significant. At a higher level of growth there might be a requirement to develop sites that are currently under stewardship agreements, and / or adjacent to small local wildlife sites. The potential for minor negative effects therefore exists in some select locations.

Overall, an uncertain **minor negative effect** is predicted with regards to biodiversity. Whilst there could be some minor negative effects in rural areas and Newport, these could be managed through mitigation and enhancement measures. The scale of growth in Telford could lead to some disturbances to wildlife, but the lower scale of development should provide flexibility to avoid sensitive locations and to incorporate mitigation and enhancement of a strategic scale.

The long term effects are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Option 1.3: Newport growth

Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This approach would seek to deliver almost four times the growth in Newport as proposed under Options 1.1 and 1.2. This scale of growth would be expected to mean that a greater number of sites are required to be allocated, leaving a reduced ability to selectively allocate sites based on their merit. This would be expected to place pressures where sites are partially constrained.

To the south west of the urban area of Newport there is the potential disruption of a number of TPOs. Growth in the southern part of the urban area could also place pressures on the Black Butts LWS, this could be through increased recreational pressures, issues related to functional land or pollution based issues.

That said, biodiversity net gain could serve to protect and enhance the designated LWS with additional land forming a protective buffer around the designation. The cluster of sites to the south of Newport urban area could also provide the opportunity to deliver a more networked approach to biodiversity net gain, where areas of habitat improvement, restoration and delivery could be clustered together, improving the level of biodiversity in this area of the Borough.

To the north of Newport there are two water-based designations (Strine Brook and Newport Canal SSSO), whilst only one site is immediately adjacent to either asset, recreational pressures and potential contamination of watercourses could occur, with risks of harming the habitats. The SSSI impact zones suggest that the risks are not significant though unless immediately adjacent.

In addition to locally specific issues in Newport, the cumulative increase in growth under this option has the potential to contribute to negative effects on Aqualate Mere SSSI.

Overall, for Newport, the effects are likely to be mixed. There would unlikely be a direct loss or disturbance to habitats, but cumulative pressures on nearby SSSIs could possibly arise. On the flip side, development of this scale might offer further opportunities to plan for strategic enhancements to biodiversity, which would be positive in the longer term.

Growth in Telford would be aligned with Option 1.2 and as such, effects are expected to be the same (i.e. minor negative).

Growth in rural areas would be of a low scale. Considering the broadly unconstrained nature of the rural site options, any sites identified as more sensitive would be expected to be omitted from allocation. There are some areas that are covered by environmental stewardship schemes, but these would not necessarily be required for development, and / or, there will be a need to ensure net gain.

Overall, the balance of reduced pressures in Telford with some potential additional pressures in Newport is likely to result in **minor negative effects.**

The long term effects are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Option 1.4: Rural and Newport growth

Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This approach would be likely to deliver a slightly reduced level of growth in Newport when compared to Option 1.3. As such, this may give a slightly improved prospect of avoiding the most sensitive sites whilst also retaining the potential to ensure net gain to the south of the urban area (which could potentially be carried forward in a way which supports the development of biodiversity/habitats in a clustered/networked manner). As such, some potential minor and uncertain negative effects could occur relating to loss of established habitat or TPOs which are found in the area.

In addition to this, some more positive (minor) effects could occur as a result of clustering areas of net gain in close proximity to one another.

Growth in Telford would be approximately 500 dwellings less than that seen under Options 1.2 and 1.3. The effects would therefore be relatively similar. There would be greater flexibility to avoid sites that are constrained by existing biodiversity assets, but potential minor negative effects could still arise (at least in the short term).

Rural growth and associated effects under this approach would be broadly aligned with Option 1.2, but the likelihood of negative effects is somewhat lower (i.e. largely neutral effects, with uncertain minor negative effects in some locations).

Weighing up the reduced pressure on Telford's urban periphery alongside increased growth in Newport and Rural areas, the effects are predicted to be **minor negative**. This approach provides the greatest flexibility in terms of managing biodiversity impacts at this scale of growth. This is reflected by the negative effects being more uncertain.

The long term effects are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved. The spread of development across the borough and in less sensitive locations ought to make enhancement strategies more apparent though.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

Under this approach, the majority of growth would be directed to Telford which would see almost 8,000 dwellings being delivered over the plan period (in addition to committed growth). As outlined under growth scenario 1, the majority of sites within the existing urban area would be expected to come forward (excluding where significant constraints are identified). These sites are broadly unconstrained and as explained under Option 1.1, any identified biodiversity assets (including TPOs) could likely be retained or protected at the early stages of design.

The higher level of growth under this approach is likely to put increased cumulative pressures on sites at Telford's urban periphery. The strategic nature of the sites involved, should allow for major permanent effects to be avoided. However, disturbance to adjacent areas of wildlife importance would be likely. The most sensitive habitats and species ought to be possible to protect as there would be a degree of flexibility in site choice and the scale of developable areas.

On the flip side, biodiversity net gain could potentially be implemented at a more strategic level on large sites or clusters of sites. This could complement existing biodiversity assets by better linking them together, creating enhanced connectivity. This is uncertain though, as details about site layout, design or opportunity areas for enhancement are not clear.

Growth in Newport would be almost double that set out under Option 1.1. Whilst there would be a requirement to allocate a larger amount of land in the area, sensitive sites should be avoidable and as previously discussed (under higher growth scenarios for Newport), the

principle of biodiversity net gain could lead to some improvements to the flora and fauna found in Newport, especially on the southern side of the town.

Rural growth under this approach would still be expected to be of a low magnitude, with a relatively small proportion of site options being required to be allocated. Very few sites are identified as sensitive and as such, it is expected that allocations would avoid such sites and/ or that suitable mitigation could be achieved.

Overall, the additional pressure placed on Telford's urban periphery would be expected to lead to some increase in magnitude of the effects outlined under Option 1.1. That said, the fact that site options mean that there would be no direct loss of biodiversity designations means that these more negative potential effects need not be major. This, alongside relatively low pressures elsewhere in the Borough should mean that effects would still be broadly classed as **minor negative**.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This approach would alleviate some pressure in Telford, allowing a more selective approach to the location and layout of development in order to avoid more significant effects. As previously discussed, there are still likely to be some minor negative effects, but there could also be opportunities to enhance biodiversity networks, particularly to the north and north east of the Telford urban area. As such the effects would be likely to be broadly of a magnitude in between Option 1.1 and 2.1 (i.e. minor negative).

Growth and effects in Newport would be aligned with those set out under Option 2.1 (i.e. minor negative effects)

This strategy would require higher rural housing delivery. Whilst this would place a greater pressure on habitats and species in these locations, their largely unconstrained nature (in regard to existing designations) should mean that effects for rural areas would be expected to be minor negative, and be localised in nature to specific settlements.

Overall, this approach is likely to have minor negative effects. Whilst the pressure on Telford would be somewhat reduced, there would still be potential for negative effects around the urban periphery. The increased scale of growth in rural areas could also lead to **minor negative effects**.

The long term effects are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Option 2.3: Newport growth

Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Growth and associated effects in Telford would be aligned with those set out under Option 2.2. (i.e. minor negative effects).

Additional housing growth under this strategy would be focused in Newport. The high level of growth would leave less flexibility to avoid the more constrained sites in Newport.

Whilst there are no sites which are significantly constrained in a manner which would not permit mitigation, TPOs are likely to be disrupted, especially to the south / south-west of the urban area. Some mitigation would be likely to come in the form of replacement and retention of habitats, however where there could be losses, tree planting to replace lost trees can be seen as a less desirable outcome when compared to avoiding the removal of protected trees. The anticipated development on the cluster of sites to the south of Newport could result in some biodiversity net gain which helps to connect existing assets as well as improve the spread of fauna and flora in the area.

In addition to locally specific issues in Newport, the cumulative increase in growth under this option has the potential to contribute to negative effects on Aqualate Mere SSSI. At the scale of growth involved, potential moderate negative effects could arise, but this is uncertain.

Rural growth and associated effects under this approach would remain relatively limited (i.e. neutral / minor negative effects).

Overall effects from this approach would place additional pressures on habitats and species in Newport, crucially, this could also lead to cumulative pressures in relation to Aqualate Mere SSSI. These issues need to be explored in detail, but as a precaution a moderate negative effect is predicted. There would be minimal issues in rural areas, and some relieved pressures around Telford when compared to Option 2.1. These still constitute minor negative effects though. Overall, uncertain **moderate negative effects** are predicted, mainly reflecting potential cumulative effects on SSSIs close to Newport.

The long term effects for the borough are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Option 2.4: Rural and Newport growth

Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

The growth in Telford under this approach would be expected to be broadly aligned (albeit with a slightly lower scale of growth) with that set out under Option 2.1 (i.e. minor negative effects).

The growth and associated effects in Newport under this approach would be likely to be broadly aligned with that set out under Option 1.3, albeit with a slightly higher scale of housing delivery which could slightly magnify the discussed effects. Minor to moderate negative effects are recorded.

Rural growth and associated effects under this approach would be broadly aligned with Option 2.2. (i.e. minor negative effects).

This approach would reduce the potential for more negative effects around Telford, however this would sit alongside some increased pressure on biodiversity assets around Newport and the rural areas. This balancing of additional/relieved pressures would still be expected to result in **minor negative effects** overall.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would focus the highest level of growth in and around Telford. The sites within the urban area would be likely to come forward as previously discussed, as such, broadly similar effects would be expected. The higher level of growth would put a greater magnitude of pressure on areas surrounding Telford. As mentioned previously, growth to the north of Telford is not constrained by designated habitats, and so some enhancement could potentially be achieved. However, this would most likely include sites that are currently under environmental stewardship. On land to the east and west, there would likely be a requirement for development as well. These locations are adjacent to designated sites, and so the potential for disturbances could be higher.

The pressures associated with development could lead to some negative effects relating to recreational pressures, functional adjacent land and various forms of pollution disrupting existing biodiversity assets, including SSSIs, LNRs and LWSs. The higher scale of growth would also reduce the ability to selectively avoid the most sensitive areas.
That said, the fact that very few sites actually overlap with biodiversity assets means that more significant effects could be avoided. Therefore, only moderate negative effects are predicted.

Whilst net gain would be expected to ensure that any loss was mitigated, it is preferable to preserve existing assets. Conversely, the development pressures in areas nearby to sensitive land could increase the potential for the development's duty to ensure biodiversity net gain to provide linkages between existing sites of ecological importance, helping to form a more networked distribution.

Growth in Newport would be slightly higher than Option 2.1, so it is likely that effects would be very similar (i.e. minor negative effects)

Growth under this approach in Rural areas would still be relatively low and would be expected to permit allocation in a manner which avoids more sensitive land.

Overall, a **moderate negative effect** is predicted. Whilst the effects are minor for the rural areas and Newport, they are potentially more notable around Telford.

The long term effects for the borough are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. At a higher scale of growth, there could also be greater potential to implement on site schemes or secure funding towards off site net gain schemes. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Growth in Telford under this approach would alleviate some of the pressures discussed under Option 3.1 slightly, meaning that the most sensitive locations could be avoided, and there would be slightly less cumulative effects

However, the high level of growth would still be expected to result in recreational pressures, disturbance and a loss of functional land. The potential for moderate negative effects is therefore still an issue, but less certain compared to Option 3.1.

Growth and consequential effects in Newport under this approach would be expected to mimic that set out in Option 3.1. (I.e. minor negative effects).

Rural growth under this approach would be likely to be fairly high, placing some pressure on the ability to allocate unconstrained sites. The sites are nearly all unconstrained in relation to designations, however it would be likely to lead to the loss of trees and hedgerows identified across some sites. This may disrupt species which use these assets as their habitats. There would also be a greater likelihood that land under stewardship agreements could be required.

Overall, growth would still be high around Telford, the associated pressures on biodiversity designations associated with this alongside the potential impacts on trees and hedgerows (including habitat disruption) across other areas of the Borough mean that uncertain **moderate negative effects** are predicted.

Option 3.3: Newport growth

Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Growth and its related effects in and around Telford in this approach would be expected to mimic that set out under Option 3.2. (i.e. potential moderate negative effects)

Growth in Newport under this strategy would limit the ability to selectively allocate sites based on their biodiversity sensitivity due to the high level of growth and relatively low number of suitable site options. It would be likely that all of the site options in the area would need to be allocated (excluding any with identified significant constraints). This would be expected to have to greatest impacts on the ecological value of the Strine Brook and Newport Canal in the north of the town, though these pressures would be mostly secondary in nature and relating to recreational pressure and potential pollution, especially during construction phases. To the south, a number of TPOs could be negatively affected with potential losses. Whilst it would be likely that any loses would be mitigated and enhancement sought, it is generally accepted that it is more desirable to avoid loss in the first instance. The scale of growth involved in Newport poses the greatest risk of cumulative pressures on the Aqualate Mere SSSI, and thus overall, this option could have moderate negative effects in biodiversity with all these factors considered.

On a more positive note, the expectation of net biodiversity gain could result in a more biodiverse area to the south of Newport, supporting a more diverse range of flora and fauna. The high level of more concentrated growth in this area may also lead to the opportunity to form some connected networks of ecological value, potentially benefiting existing biodiversity assets in the area.

Rural growth and associated effects under this approach would mimic that set out under Option 3.1. (I.e. neutral / minor negative)

This approach would be expected to lead to **moderate negative effects**, mostly related to pressures of development in Newport and Telford's periphery.

The long term effects for the borough are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Option 3.4: Rural and Newport growth

Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

Growth in Telford under this approach would be marginally higher than seen under Option 2.1; as such, the effects would be likely to be broadly aligned (minor to moderate negative effects)

Growth in Newport under this approach would be likely to be of a magnitude which sits between Options 2.3 and 3.3. As such, potential moderate negative effects are predicted.

Rural growth and associated effects under this approach would mimic that set out under Option 2.4, albeit to a slightly increased magnitude. These are minor negative effects.

This approach would be expected to lead to uncertain **moderate negative effects**, mostly related to pressures of development in Newport and the peripheral parts of Telford. With a more dispersed approach to growth, the negative effects could potentially be avoided more, but this depends on the precise sites that are involved.

The long term effects for the borough are presumed to be positive as it is expected that biodiversity net gain would be sought in all new developments. However, at this stage, it is not possible to say with certainty how and where such benefits would be achieved.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
			?			?					?

Air Quality

Protect and improve local air quality through implementing measures to reduce air pollution caused by road traffic and other sources in the borough.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

As previously discussed, it would be assumed that all of the site options which are not significantly constrained within the Telford and Newport urban areas would be allocated under this approach. These sites are generally well connected to shops, services, employment, public transport and active travel infrastructure. These factors are likely to support sustainable modes of travel which maximise use of active or communal forms of travel, reducing the propensity for people to rely on private motor vehicles which exacerbate air quality issues. Whilst these accessible locations for development should promote modes of travel which reduce air quality issues, prevalent behavioural norms are likely to mean that any development would result in an increase in car use in the surrounding areas. Built-up areas are more likely to experience issues associated with congestion, which worsens air quality issues and as such, where these sites are medium/large, air quality is likely to worsen in the surrounding areas, especially at peak journey times and traffic pinch points. Remaining growth in Telford and Newport would be expected to come forward on sites on the peripheries of the built-up areas. Whilst some onsite shops and services would be expected to be delivered on larger sites and to serve clusters of sites, it is likely that the less accessible locations would lead to some increased car dependency, especially in the context of poor accessibility to frequent public transport networks. These sites border the existing built-up area also meaning that pinch points where traffic from the new growth meets main roads and joins the existing urban area may see some increases in air quality issues, especially at peak journey times. The above effects are likely to be more pronounced in Telford where more growth is directed under this approach. The main area of concern in Telford is around the B5061, with hotspots at Mill Bank / Watling Street. Therefore, growth that encourages trips through these areas in particular are likely to be most negative with regards to air quality. The sites of particular interest in this respect are those to the north and west of the Telford urban area.

At the scale of growth involved for this option, there will be an element of urban growth, but residual growth at the urban edge could be located towards the west to avoid air quality pressures around areas of concern. There is flexibility in site choice at this scale, but it is still possible that sites would be brought forward in a range of locations around Telford. Therefore minor negative effects are likely, at least in the short to medium term.

Whilst issues associated with air quality are commonly associated with motor vehicle use, longer-term projections suggest a future scenario characterised by more widespread electric vehicle usage, whilst this significantly reduces air quality issues, issues associated with high volumes of vehicles will not be fully solved due to electrification (e.g. particulate matter associated with rubber degradation). Throughout all options, sites would be expected to improve the availability of electric car charging infrastructure, assisting with the acceleration of the shift from combustion engines to electric powered vehicles. Therefore, longer term effects on air quality due to growth ought to be offset to an extent.

Rural growth would be of a very low scale. Whilst this could drive up car dependency and reduce the potential for new populations to travel by active means, the scale of growth would be unlikely to affect air pollution across the Borough. Therefore, neutral effects are predicted.

At Newport, there are no major concerns with regards to air quality, and though some peripheral sites could lead to increased car dependency, the effects on air quality are considered to be negligible given the low scale of growth.

Overall, whilst there would be expected to be some level of growth in less accessible locations, these areas would also be likely to see some improvements to accessibility, including some potential beneficial effects for those living nearby to growth (reducing the need to travel by means which may worsen air quality). The scale of growth in Newport and rural areas would be unlikely to lead to significant implications for air quality, and whilst some pressure for growth in Telford could lead to poorer quality in the urban areas, it ought to be possible to direct growth to less sensitive areas and manage negative effects. Therefore, **minor negative effects** are predicted overall.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This approach would lead to reduced scale of growth in Telford and similar scales of growth in Newport compared to Option 1.1. As such the effects would be likely to be broadly the same in Newport. In Telford the effects would be expected to be similar to those outlined above, however the potential air quality issues would be expected to be of a lower magnitude and there would also be greater flexibility in terms of avoiding areas of greatest concern for air quality.

Rural growth would see some increased pressures under this approach. It would be likely that this may drive up car dependency in rural areas. Whilst this could be seen as more negative, the dispersed nature of the growth would be expected to mean that no single area would be likely to see a significant increase in traffic volumes, reducing the magnitude of effects with regards to air quality (however, there is also potential for increased trips from rural areas into areas that are more congested such as Telford).

Overall, **neutral effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This approach would see broadly similar growth and effects in Telford as those outlined under Option 1.2.

Newport would see a significant increase in the share of housing it receives. This would mean that a greater number of less accessible sites to the south of the urban area would be allocated to meet the housing need, likely increasing car dependency to some extent. Whilst this cluster of sites may improve the delivery of shops and services in the area (including some potential minor improvements to public transport), it would still be expected to result in some localised traffic issues, especially at peak journey times.

This could affect air quality negatively, but the baseline levels are not a particular concern here, and growth would be unlikely to lead to significant long term effects.

Rural growth under this approach would be double that of option 1.1, but the effects would still be anticipated to be neutral given the dispersed nature of development and no serious concerns with regards to air quality.

The growth in Newport in a relatively concentrated area would be likely to lead to some localised air quality issues, especially at peak times. However, in the context of relatively good air quality, it is expected that the residual effects in the long term would be broadly neutral. Therefore, **neutral effects** are predicted overall.

Option 1.4: Rural and Newport growth

Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This strategy would see a reduced scale of growth in Telford when compared to aforementioned strategies. This would further reduce the spread of potential air quality issues seen from new developments on the urban periphery of Telford. Provided that growth is directed away from the more sensitive locations near to the B5061, then the long term residual effects should be neutral.

Growth in Newport under this strategy would be slightly less that that seen under Option 1.3, though not by a significant amount. Effects would be broadly expected to be similar, albeit more confined to roads and traffic pinch points which are local to the chosen areas of growth.

Rural growth under this approach (as well as its associated effects), would be likely to be broadly aligned with that set out under Option 1.2 (though to a slightly lesser extent).

This approach could see some negative effects associated with potential increased car dependencies to the south of Newport, in rural areas and potentially around Telford's urban periphery. However, in the context of generally good air quality, (and presuming significant growth in Telford is not directed to where it could lead to increased trips along the B5061) the residual long term effects are predicted to be **neutral**.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This approach would see an uplift in growth in Telford compared to aforementioned options. As referenced previously, the sites within the urban areas would be likely to come forward, mimicking previously discussed growth and effects. In addition to this it is likely that a fairly substantial amount of growth would come forward on the edge of Telford's existing urban area. This would be likely to exaggerate the associated effects in this area discussed under Option 1.1. Whilst this level of growth would allow for site selection to be based on each site's merits and accessibility, it would further support an approach where growth could be clustered together, increasing the viability of new shops and services (including sustainable travel services/infrastructures), in turn reducing the need to travel for new and existing populations in the area.

Where some of the growth in these peripheral locations would be expected to be mixed use, as well as some housing sites adjacent to proposed employment sites, this could help to ensure that there is accessible employment options from the housing delivery, further reducing the need to travel. A drawback of this clustering approach and despite the likely improved accessibility of the area, there would be a likely increase in traffic volumes in the area, potentially leading to congestion at traffic pinch points at peak journey times. If there is a greater need to release sites that draw traffic along the B5061 there could be increased pressure on areas of concern with regards to air quality, particularly in the short to medium term.

Growth in Newport's urban area would be the same as other options, and is unlikely to cause major air quality issues. The level of growth on the town's periphery would be almost double that under the low growth option 1.1. This increases the potential for increased car dependencies and trips, but it is unlikely to lead to significant issues with regards to air quality.

Rural growth under this approach would be of a low magnitude and would be likely to be dispersed. Whilst these prospective rural populations may see some car dependencies, this would be unlikely to result in significant negative effects on air quality.

Overall, potential negative effects of greater volumes of clustered growth on Telford's periphery would be expected to mean that this approach could see potential moderate negative effects through Telford. Considering the Borough as a whole and less pronounced effects elsewhere, the overall effect is an uncertain **moderate negative effect**.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This scenario would be expected to involve growth of approximately 1600 fewer dwellings in Telford than described under Option 2.1. Development within the existing built-up area would be likely to remain the same, inducing similar effects. The lower scale of growth should mean that there is greater ability to avoid more sensitive locations, and the overall scale of growth would also draw less traffic through the urban areas. The scale of growth would still be sufficient to enable some delivery of additional shops and services with the potential to locate the housing nearby to existing and future planned employment land (in turn reducing the need to travel longer distances and thereby increasing the potential for residents to travel by active means or by public transport). However, it would also still be likely to increase congestion locally, especially at traffic pinch points and at peak journey times with potential negative consequences on local air pollution levels. As such, minor negative effects are likely.

Growth and effects in Newport would be expected to be aligned with that set out under Option 2.1 (I.e. broadly neutral effects).

Rural growth would be of a higher scale under this approach. Whilst this would potentially lead to greater number of people experiencing car dependency, the dispersed housing delivery should not lead to any significant negative effects in relation to air quality in these locations (though it could lead to increased trips towards urban areas such as Telford).

Overall, **minor negative effects** are predicted, which are mainly related to increased growth around Telford and increased car dependencies in rural areas.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

This approach would mimic the housing growth and associated effects in Telford as Option 2.2 (i.e. minor negative effects).

This approach would place an emphasis of growth in Newport, exaggerating the effects outlined under Option 1.3. This would be expected to lead to an increase in congestion at traffic pinch points in the south of the town, especially at peak times. That said, a concentration of growth may lead to some services being delivered to enable residents to access local shops, employment and other facilities. It may also increase the viability of some improved access to sustainable transport provisions, though this scale of growth would only be likely to deliver some small scale projects such as extensions of existing bus routes or junction improvements for cycle safety. As Newport is a relatively small town, growth could lead to some town centre congestion related issues, where traffic volumes from surrounding areas would be likely to have a more concentrated and pronounced effect than growth surrounding a larger built-up area such as Telford. However, significant implications for air quality are unlikely given the baseline position.

Rural growth is relatively low, and so neutral effects are predicted in this respect.

Overall, broadly relating to the potential for air quality issues around Telford and to the south of Newport, some **minor negative effects** are predicted.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

A shift of growth away from Telford would help to reduce effects on air quality compared to options 2.2 and 2.3. However, this would not be of a magnitude which would be likely to alter the likely effects.

Growth and effects in Newport would be broadly aligned with Option 1.3, with some minor increased level of growth being expected to marginally amplify the associated effects.

Rural growth under this approach is fairly high, though less than Option 2.2. It is possible that some minor negative effects could arise as a result of car dependencies, but air quality is unlikely to be significantly affected.

This approach would be likely to see the greatest effects across Telford and Newport's peripheries, resulting in some worsening air quality at peak journey times at traffic pinch points, particularly nearby to development. Rural growth may also lead to some increase car dependency. As such, **minor negative effects** are likely overall.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would be likely to involve all of the sites within the urban area of Telford, as well as a substantial proportion of the site options on the periphery of the urban area. As such, effects from the sites within the built-up area would be likely to be the same as those already discussed. Additional effects would be related to the development on Telford's periphery. This would be expected to magnify previously discussed effects under Option 2.1; which could lead to more congestion-related air pollution issues at traffic pinch points and at peak travel times on Telford's periphery, especially nearby the development and where their access roads meet the strategic road network. There would be less flexibility to avoid locations to the north and west, which could draw traffic along the B5061, which contains areas of concern for air quality. Conversely, this uplift in growth would have the potential to increase the viability of new shops and services within the new settlements, which would drive down the need to travel, consequentially reducing the potential for air pollution related issues.

Housing delivery in Newport under this approach would be slightly higher than for Option 2.1. This could have minor effects on air quality nearby to growth, alongside some minor improvements to active travel infrastructures and public bus services (though this scale of growth would not be expected to lead to a substantial improvement to these transport offerings). Given the baseline position, only minor effects on air quality are considered likely.

Rural growth under this approach would be of a relatively low scale and distributed. Whilst these populations may see some car dependency, the effects on air pollution would not be expected to be significant.

Overall, **moderate negative effects** are predicted as a result of this approach, mostly relating to the likelihood of deteriorating air quality at traffic pinch points nearby to clustered growth around Telford. At this scale of growth the cumulative pressures increase, as does the possibility that growth to the north and west would occur (which are more sensitive locations in terms of attracting traffic through areas of air quality concern).

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Growth in Telford under this approach would be expected to include the sites and previously discussed associated effects in the urban area. In addition to this, a fairly substantial amount of growth on the urban periphery would come forward, resulting in effects of a magnitude which would be similar to Option 2.1. These are potential moderate negative effects.

Growth and associated effects in Newport would mimic that set out under Option 3.1 (i.e. neutral / potential minor effects).

Rural areas under this approach would see a larger amount of growth. Areas seeing more concentrated shares of this housing delivery may see some localised worsening air quality where new growth connects to the strategic road network at peak journey times. That said, a more distributed approach to rural housing would mitigate this to an extent. In any event, air quality would not be considered to be significantly affected given the relatively low levels of air pollution in these locations.

Overall, this approach may see some very minor effects on air quality in rural areas, though not to an unacceptable level. Further potential issues may be experienced at locations where peripheral growth connects to established urban areas and the strategic road network around Newport and Telford. Though minor negative effects are likely for most locations, the cumulative growth at Telford (particularly if located to the north and west) could constitute **moderate negative effects**.

Option 3.3: Newport growth
Growth in Telford: 9,760
Growth in Newport: 2,301
Growth in Rural Areas: 1,161

Growth and associated effects in Telford would be expected to mimic that set out under Option 3.2 (i.e. potential moderate negative effects).

Housing growth in Newport under this strategy would see the highest growth of any potential option. This would be likely to exaggerate the effects outlined in Option 2.3, including potential additional shops and services within the areas of growth helping to reduce the need to travel by private motor vehicle. It would also be expected to lead to some congestion related issues to the south of Newport as well as in the town centre and approach roads from the south, issues expected to be exaggerated at traffic pinch points at peak journey times. In the context of existing air quality issues, this is still only considered to be a minor negative effect.

Rural growth under this approach and its associated effects would be expected to align with that set out under Option 2.3, which involves a similar degree of growth. Distributed growth could lead to increased car dependency, but would unlikely lead to concentrated effects with regards to air quality.

Overall, the more pronounced effects may be seen around Telford and the south of Newport, with less pronounced effects elsewhere. On balance, **moderate negative effects** are likely.

Option 3.4: Rural and Newport growth
Growth in Telford: 9,054
Growth in Newport: 1,948
Growth in Rural Areas: 2,220

Growth in Telford under this approach would be slightly higher than under Option 2.1; it is expected that the consequential effects would be broadly aligned (i.e. potentially moderate negatives).

Growth in Newport under this approach would be slightly lower than that seen under Option 3.3, leading to similar effects, albeit more focused around the areas of growth (still likely to be largely to the south of the existing built-up area of Newport).

Rural growth and consequential predicted effects under this approach would be likely to be broadly aligned with those set out under Option 3.2.

Overall, balancing the likely effects across the Borough, it is likely that this approach would see the most distributed negative effects. As such, there are likely to be **moderate negative effects**.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
				?							

Water Resources

Promote sustainable forms of development which minimise pressure on water resources, whilst maintaining and enhancing the quality of the Borough's rivers, lakes and aquifers.

Growth Scenario 1: Extending existing Local Plan growth 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

For any scale or distribution of growth, there is an assumption that appropriate waste water treatment capacity would exist or be planned for to accommodate new development. In this respect, neutral effects are predicted. However, an increase in the number of homes and new businesses could well lead to a deterioration in water quality in watercourses (albeit at an 'acceptable' level).

Deliverable development within the existing urban areas of Telford and Newport would be expected to come forward regardless of the adopted strategy and potential effects are therefore relevant across all options. The vast majority of these sites are not sensitive in terms of proximity to nearby water sources, meaning that contamination from site-related pollutants (including both during the construction and post-construction phases) would be unlikely to be significant. Furthermore, the majority of these sites would be unsuitable for agriculture and as such, their development and use for housing purposes would be unlikely to lead to a reduced likelihood of nitrate ground and/or surface water pollution stemming from the site use (which is commonly associated with some agricultural fertilising practices).

This approach would be likely to require some release from sites across the Telford urban peripheries.

The site options to the north and north-east of Telford intersect or are in relatively close proximity to some smaller water courses which feed into the River Tern and subsequently the River Severn. Whilst some mitigation measures would be expected to be put in place, it is possible that construction phases could lead to some contamination of these water courses. However, where this option offers a relatively low scale of growth, construction of developments in very close proximity to water courses could be avoided, reducing the likelihood of more significant effects stemming from construction related contamination.

Whilst constrained in relation to other factors, a cluster of site options to the west of Telford's built-up are further from water sources and are hence of a lower sensitivity when it comes to potential effects on local water quality and resources.

Whilst some site options to the north of Newport are in close proximity to a canal and brook, leading to potential construction related contamination and recreational pressures, there are sufficient site options to the south of the urban area which are not close to water courses, reducing the potential for negative effects. The overall scale of growth is also relatively low, providing flexibility with regards to site choices and mitigation.

Rural growth under this approach would be of a very small scale meaning that the most sensitive sites in relation to water could be omitted from allocation and / or effects effectively managed.

Where a majority of site options on the peripheries of Telford and Newport as well as many of the sites in rural areas are greenfield with some assumed agricultural use, their allocation would go some way towards reducing the potential for future agricultural uses to lead to nitrate pollution of surface and groundwater. Throughout all options the magnitude of this predicted effect directly correlates to the proposed scale of growth. The effects are uncertain, but potentially positive. However, increased urbanisation can have the opposite effects by increasing pollutant run-off and the demand for water treatment.

Overall, both uncertain **minor positive effects** and uncertain **minor negative effects** are predicted.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This approach would relieve some pressure on development to the periphery of Telford when compared to Option 1.1. This would be expected to enhance the ability for development to be placed away from existing watercourses, reducing the potential for contamination, especially during construction phases.

Growth in Newport would be the same as that outlined under Option 1.1, leading to the same effects.

Rural growth under this approach would be of a higher magnitude. This should be able to be met on sites which are broadly unconstrained by nearby watercourses whilst increasing the potential for reducing future agricultural nitrate pollution. However, an increase in urbanisation could also lead to an increase in pollution from run-off.

Overall, mixed effects are likely as per Option 1.1. Both uncertain **minor positive effects** and uncertain **minor negative effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

Growth and associated effects in Telford under this approach would be expected to mimic that set out under Option 1.2 (which involves the same amount of growth).

This approach would place a greater emphasis of growth on areas in and around Newport. The growth would be expected to be largely greenfield sites, helping to reduce the potential for future land uses to add to nitrate pollution of ground and surface water. Some potential contamination of water courses may occur to the north and north west of the built-up area, however for the most part a number of site options to the south of Newport without existing watercourses nearby should alleviate these potential pressures. It is also possible that increased urbanisation could lead to alternative sources of pollution.

Rural growth under this approach is almost double that set out within option 1.1, but is still of a scale that would be possible to manage without causing significant effects on water quality.

Overall, mixed effects are likely as per Option 1.1. Both uncertain **minor positive effects** and uncertain **minor negative effects** are predicted.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This approach would further alleviate pressures on the greenfield land surrounding Telford when compared to earlier options. This would be expected to result in a situation where development could be situated away from existing watercourses, reducing the potential for their contamination. That said, the reduction in greenfield sites being required for development around Telford would be expected to mean that future land use continues to hold the potential for agricultural nitrate contamination of surface and ground water.

This approach would place a greater emphasis of growth in Newport than Options 1.1 and 1.2, however it would result in a marginally reduced scale of growth when compared to Option 1.3. As such, effects would be likely to be broadly similar to those outlined under Option 1.3, however with some increased potential for development to be on sites away from water courses. It would also be likely to reduce the extent of land use change away from agricultural uses, meaning that a reduction in future nitrate pollution would not be realised to the extent of that seen under higher growth options.

Rural growth and associated effects under this approach would be similar to those set out under Option 1.2 (though slightly lower).

Overall, mixed effects are likely as per Option 1.1. Both uncertain **minor positive effects** and uncertain **minor negative effects** are predicted.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 2,001

This option would deliver an uptick in growth mostly focused around Telford, with an increase in growth in Newport compared to Option 1.1. This increase in housing delivery in Telford would put greater pressure on greenfield land adjacent to the west, north and / or north east of the existing built-up area. This would be likely to exaggerate effects outlined under Option 1.1, leading to the potential contamination of some existing water courses. The uptick in growth would also magnify the effects relating to a likely future reduction in nitrate pollution of water in the area, due to the increase in land use change away from agricultural uses. Likewise, an increase in growth would require greater capacity at waste water treatment facilities to accommodate growth. It is presumed that such capacity would need to be planned for though, and so significant effects ought to be avoidable.

Whilst this approach would be expected to see effects more pronounced than those set out under Option 1.1. They would still be largely expected to fall into the magnitude threshold of **minor positive effects** and **minor negative effects.** There is less uncertainty about whether the effects would likely occur though, given the greater cumulative effects of growth on water resources.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

Whilst this approach would be expected to see effects more pronounced than those set out under Option 1.2. They would still be largely expected to fall into the magnitude threshold of **minor positive effects** and **minor negative effects.** There is less uncertainty about whether the effects would likely occur though, given the greater cumulative effects of growth on water resources.

Option 2.3: Newport growth

Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Whilst this approach would be expected to see effects more pronounced than those set out under Option 1.3. They would still be largely expected to fall into the magnitude threshold of **minor positive effects** and **minor negative effects.** There is less uncertainty about whether the effects would likely occur though, given the greater cumulative effects of growth on water resources.

Option 2.4: Rural and Newport growth

Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

Whilst this approach would be expected to see effects more pronounced than those set out under Option 1.4. They would still be largely expected to fall into the magnitude threshold of **minor positive effects** and **minor negative effects.** There is less uncertainty about whether the effects would likely occur though, given the greater cumulative effects of growth on water resources.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This option would place a large amount of growth in Telford, putting additional pressures on land to the west, north and north-eastern peripheries. Site selection in this area would be less likely to be able to avoid land immediately adjacent to or overlapping with water courses. This is a potential issue to the north and north-east of the urban area. As such, these watercourses could potentially experience some pollution, especially where construction related activities are occurring nearby.

On the flipside, the anticipated large amount of mostly greenfield development surrounding Telford could reduce the potential for future nitrate pollution in the area, stemming from the land's potential or current agricultural use. As mentioned previously though, these are uncertain effects (and could also be offset through polluting urban activities).

Development in Newport would be likely to require the release of land at a scale slightly above that set out under Option 2.1. It would be expected that the sites which are in close proximity to watercourses (in the north of the urban area) could be omitted from allocation if it was deemed likely that the canal and brook in the area would see unavoidable pollution (though this is considered unlikely). The development of some greenfield land in the area may also help to reduce potential future nitrate pollution of ground and surface water (provided that this was not simply offset through increased urban pollution sources).

Rural growth under this approach would be relatively small scale and presumably dispersed, so sensitive locations in relation to water could be avoided and / or mitigation measures secured. Greenfield sites with agricultural uses that are developed could increase the possibility of reducing future agricultural nitrate pollution to a small degree.

This scale of growth would be likely to, in overall terms, offer a more limited ability to avoid development close to watercourses, and would put greater pressure on waste water treatment facilities (at least in the short term if development comes on stream before upgrades are secured). As such, the potential for negative effects is greater, and uncertain **moderate negative effects** are predicted.

The larger release of greenfield land under this approach would also offer a heightened potential future reduction in nitrate pollution from agricultural land uses such as fertilisers used for crops. As such, **minor positive effects** are predicted.

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Whilst housing growth in Telford under this approach would be less that seen under option 3.1, it would still see a substantial release of land for housing development leading to effects of a slightly reduced magnitude and character to those set out under Option 3.1

Development and consequential effects in Newport would be expected to be aligned with that set out under Option 3.1.

Rural growth under this approach would be amplified compared to earlier options. This would reduce the ability to avoid sites in very close proximity to watercourses, increasing the likelihood of pollution, especially during construction phase. There may also be a need to consider where additional surface water run-off and wastewater would be managed.

This scale of growth would be likely to, in overall terms, offer a more limited ability to avoid development close to watercourses, and would put greater pressure on waste water treatment facilities (at least in the short term if development comes on stream before upgrades are secured). As such, the potential for negative effects is greater, and uncertain **moderate negative effects** are predicted.

The larger release of greenfield land under this approach would also offer a heightened potential future reduction in nitrate pollution from agricultural land uses such as fertilisers used for crops. As such, **minor positive effects** are predicted.

Option 3.3: Newport growth

Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

This approach would see the same growth and effects in Telford as outlined under Option 3.2.

Newport would see an uplift in housing delivery under this approach, with it being expected that the vast majority of sites in and around Newport would need to be allocated. Whilst this increase in land use change from land with agricultural potential on many of the sites to residential area would be expected to reduce the potential for future nitrate-based pollution, construction related contamination of nearby watercourses may be more likely (and there would also be greater requirements for waste water treatment).

Rural housing delivery and its consequential effects under this option would be likely to generate minor effects.

This scale of growth would be likely to, in overall terms, offer a more limited ability to avoid development close to watercourses, and would put greater pressure on waste water treatment facilities (at least in the short term if development comes on stream before upgrades are secured). As such, the potential for negative effects is greater, and uncertain **moderate negative effects** are predicted.

The larger release of greenfield land under this approach would also offer a heightened potential future reduction in nitrate pollution from agricultural land uses such as fertilisers used for crops. As such, **minor positive effects** are predicted.

Option 3.4: Rural and Newport growth

Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

Growth and associated effects in Telford under this approach would be expected to be broadly aligned with that seen under Option 2.1, albeit at a marginally greater magnitude.

Growth and consequential effects in Newport under this approach would be likely to be of a magnitude somewhere between that outlined under Option 2.3 and 3.3.

Rural housing delivery and its consequential effects under this approach would be expected to align with Option 3.2.

This scale of growth would be likely to, in overall terms, offer a more limited ability to avoid development close to watercourses, and would put greater pressure on waste water treatment facilities (at least in the short term if development comes on stream before upgrades are secured). As such, the potential for negative effects is greater, and uncertain **moderate negative effects** are predicted.

The larger release of greenfield land under this approach would also offer a heightened potential future reduction in nitrate pollution from agricultural land uses such as fertilisers used for crops. As such, **minor positive effects** are predicted.

Growth Scenario 1								Growth Scenario 2								Growth Scenario 3							
1.1		1.2		1.3		1.4		2.1		2.2		2.3		2.4		3.1		3.2		3.3		3.4	
?	?	?	?	?	?	?	?										?		?		?		?

Soil and Land

Promote the effective use of land, minerals and soil resources; supporting the protection of best and most versatile agricultural land, preserving minerals resources, and taking opportunities to enhance the value of land for biodiversity, carbon sequestration, and other beneficial functions.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

Growth within the urban boundaries of Telford and Newport would be likely to come forward under any approach if deliverable. This would have neutral effects on land and soil where it is generally inappropriate for agricultural use and commonly made up of brownfield land. It is therefore peripheral housing growth which is likely to lead to effects on land and soils as a topic.

Option 1.1 would be expected to lead to some release of land on the periphery of both Telford and Newport. Whilst the scale of growth in both areas would permit site allocation which avoids the most valuable agricultural land, the majority of sites are on either Grade 2, 3 or 3a agricultural land. Therefore it is expected that whilst much of this development could come forward on Grade 3b or 3a land, some Grade 2 land could be lost depending on site locations.

Newport would be more likely to be able to meet some or all of this need on land classified as urban or Grade 4, reducing the negative effects in this area.

Telford has potential to avoid Grade 2 land at this scale of growth, but would result in substantial loss of Grade 3 land (some of which is likely to be Grade 3a).

Rural growth under this strategy would be at a very low scale. However, the broad majority of rural sites are located on land identified as Grade 2. When considering other factors and constraints, it is unlikely that allocations could avoid developing on land which could be valuable for agricultural purposes. As such, rural housing delivery would be expected to result in the loss of such land. This would be of a low magnitude though, and so significant effects are avoidable.

Overall, **minor negative effects** are predicted, mostly reflecting the substantial loss of Grade 3 land around Telford. The loss of Grade 2 land should be easier to avoid for this option compared to options 1.2, 1.3 and 1.4.

Option 1.2: Rural growth

Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

The level of growth for Option 1.2 in Newport is the same for Option 1.1, and thus the effects are predicted to be the same in this respect (i.e. neutral).

Whilst this option would promote a reduced scale of growth across the peripheral areas of Telford, it would still be expected to lead to the loss of best and most versatile agricultural land.

There should be sufficient flexibility to take a sequential approach to the loss of soil resources though, meaning that Grade 2 land ought to be possible to avoid around Telford. Nevertheless, some Grade 3 land could be lost.

This approach would inflate rural growth when compared to Option 1.1. The majority of site options in the rural areas fall within Grade 2 land, and at the scale of growth proposed, it would be necessary to develop site options overlapping with such resources. It is probable that over 40ha of Grade 2 land would be lost.

At Newport, it ought to be possible to avoid widespread loss of agricultural land, especially of the higher value grade 2.

Overall, **moderate negative effects** are predicted. There would be a large amount of greenfield release at Telford, and whilst this could be accommodated on Grade 3 land, some would likely be best and most versatile (i.e. Grade 3). There would also be a substantial loss of Grade 2 land in the rural areas.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This approach would mimic the losses of valuable agricultural land seen in Telford under Option 1.2 due to the same levels of proposed growth.

A greater loss of potentially more valuable land would be expected to be seen to both the north and south of Newport. The sites which would require allocation are mostly greenfield with only a small level of scope to select sites on land which do not contain important soil resources. Some of this need could be met on Grade 3 land, however this approach would still require the release of Grade 2 agricultural land to the south of Newport.

Rural growth and associated effects under this approach are still relatively low, but could result in some loss of best and most versatile agricultural land.

Overall, **moderate negative effects** are predicted. This reflects the overall scale of growth and the loss of soil resources in Telford, and a loss of over 40ha of Grade 2 land across Newport and the rural areas in combination.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

The approach would propose a reduced scale of growth in Telford, giving an increased potential to avoid the most valuable agricultural land, however there would still be some expected loss of Grade 2, 3a and 3 greenfield agricultural land, leading to consequential negative effects. The growth in Newport would be similar to that seen under Option 1.3, albeit to a slightly reduced magnitude with the associated loss of Grade 2 and 3 land.

Rural growth and associated effects under this approach would be similar to that under Option 1.3, but with a slightly lower level of land release being required. The majority of site options in the rural areas fall within Grade 2 land, and at the scale of growth proposed, it would be necessary to develop site options overlapping with such resources. It is probable that over 30ha of Grade 2 land would be lost.

Overall, **moderate negative effects** are predicted.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This approach would be expected to amplify the effects outlined under Option 1.1, leading to a more substantial loss of valuable greenfield Grade 3 (and potentially Grade 2) agricultural land, especially around Telford's urban periphery.

Rural growth would be of a relatively small scale overall, but would most likely involve Grade 2 land.

Where this approach has an overall greater delivery of housing, the greater amount of land required to meet this need would lead to an overall greater loss of potentially valuable agricultural land. Though the loss on Newport and the Rural Areas would be of a lower magnitude, it is more likely that this would be Grade 2 land (particularly for the rural areas), and so overall **moderate negative effects** are predicted.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This approach would be expected to lead to effects across the Borough of similar pattern, but at an increased magnitude to those seen under Option 1.2. There would a more substantial loss of agricultural land around Telford, though it ought to be possible to still avoid significant amounts of grade 2 land.

In particular, there would likely be a higher loss of Grade 2 land in the Rural areas and possibly a requirement to release agricultural land in Newport (though there could be some flexibility). This is likely to lead to at least 50ha Grade 2 land in total being permanently lost.

Overall, **major negative effects** are predicted, but there is a degree of uncertainty as the extent of loss depends on which sites are selected.

Option 2.3: Newport growth

Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

This approach would be expected to lead to effects across the Borough of a similar pattern, but at an increased magnitude to those seen under Option 1.3. There would be a more substantial loss of agricultural land around Telford, though it ought to be possible to still avoid grade 2 land.

In the rural areas, some loss of Grade 2 land (up to 20ha) would be expected.

To support 1,729 dwellings in Newport, it is likely that site opportunities would need to be maximised and this would involve the loss of Grade 2 land (at least 15ha).

Overall, **moderate negative effects** are predicted.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

This approach would be expected to lead to effects across the Borough of similar pattern, but at an increased magnitude to those seen under Option 1.4.

There would be a more substantial loss of agricultural land around Telford, though it ought to be possible to still avoid grade 2 land in the main.

In both the rural areas and Newport, it would be likely that Grade 2 agricultural land is lost, which in combination could potentially be over 50ha.

Overall, **major negative effects** are predicted.

Growth Scenario 3: High performance growth- 11,662

Option 3.1: Maintain current strategy
Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would be likely to further increase the magnitude of effects outlined under Option 1.1 and 2.1, leading to some substantial loss of greenfield Grade 2 and 3 agricultural land.

There would be an increasing requirement to release Grade 2 land in Telford under this approach, and therefore the potential for negative effects increases in this respect, and also in terms of the overall area of land that would be lost.

There would also be pressure on Grade 2 land in the rural areas and to a certain extent at Newport.

The overall loss of best and most versatile land would likely exceed 200 ha, and thus overall **major negative effects** are predicted.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

This approach would be likely to increase the magnitude of effects outlined under Option 1.2 and 2.2, leading to some substantial loss of greenfield Grade 2 and 3 agricultural land.

There would likely be a substantial loss of Grade 2 land in the rural areas and some pressure on agricultural land around Newport. The large amount of land released at Telford would almost certainty affect Grade 3 land, and possibly Grade 2 land. The overall loss of best and most versatile land would likely exceed 200 ha, with a higher proportion being Grade 2, and thus overall **major negative effects** are predicted.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

This approach would be likely to increase the magnitude of effects outlined under Option 1.3 and 2.3, leading to some substantial loss of greenfield Grade 2 and 3 agricultural land. There would be significant pressure on land surrounding Newport's urban periphery, which would involve Grade 2 agricultural land. Likewise, growth in the rural areas would likely be grade 2, but of a lesser amount.

In Telford, a substantial amount of grade 3 land would be affected. Whilst Grade 2 could potentially be avoided, this is not a certainty, and the overall loss of soil resources in land take would still be significant (i.e. in excess of 200ha).

Overall **major negative effects** are predicted.

Option 3.4: Rural and Newport growth
Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

This approach would be expected to lead to effects in and around Telford and Newport of similar pattern, but at an increased magnitude to those seen under Option 1.4 and 2.4 leading to a more substantial loss of valuable greenfield Grade 2, 3a and 3 agricultural land, including around Telford's and Newport's urban periphery and in rural areas seeing growth.

Overall **major negative effects** are predicted.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4

Landscape

Protect and enhance the character of valuable landscapes and townscapes; whilst ensuring their multifunctional use and enjoyment by all.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

Growth within the existing urban areas of Telford and Newport would be likely to come forward under any approach, making use of the deliverable urban sites which do not have significant constraints. Generally, these sites are not considered to be sensitive in terms of their landscape or visual characteristics and their associated effects would be likely to be broadly neutral across all options. In some circumstances, positive effects could arise if high quality design is introduced that improves townscape.

At Telford, there are different sensitivities with regards to landscape character. To the west, close to the AONB there are areas with high and very high sensitivity, whilst to the north and east of the urban area there are a greater number of parcels with lower sensitivity. Taking into account other constraints such as flood risk and soil resources, it should be possible to direct growth to areas with a lower environmental sensitivity (including landscape character). However, this would require substantial growth to the east of Telford. At the level of growth involved, it ought to be possible to avoid the most sensitive locations, but the scale of development (especially if focused heavily into a particular location) involved is still likely to lead to some **minor negative effects.**

In Newport, a limited amount of land would be needed to meet the residual housing need. Some land to the south of the built-up area is identified as being of low/medium-low sensitivity meaning that allocation within these areas should be able to avoid significant effects.

Rural growth under this approach would be of a very small scale. The majority of site options in rural areas are not located in areas of landscape or visual sensitivity rated as more sensitive than medium. As such, it would be expected that this growth could be met on sites which are not visually sensitive or likely to disrupt the rural landscape significantly.

Overall, whilst the most sensitive landscapes would be expected to be avoided and mitigation measures would help to minimise effects, the loss of open countryside which in areas is at least somewhat sensitive to development would mean that **minor negative effects** are likely. This is particularly the case for Telford, where the vast majority of growth is focused.

Option 1.2: Rural growth

Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

A reduced scale of housing delivery in Telford under this approach would enable an increased likelihood of allocating sites on the urban periphery which avoid the most sensitive land and prioritise land which is identified as of low and low-medium sensitivity (for both visual and landscape considerations).

Growth and associated effects on visual and landscape in the area of Newport would be the same as set out under Option 1.1 (given that the scale is the same).

Rural housing delivery would be focused upon under this approach. This would place greater pressure on the ability to selectively allocate sites based on their constraints. This may result in some more sensitive sites being allocated which could be an issue in more sensitive areas, particularly around Edgmond and Lilleshall. Elsewhere, sensitivities are lower, but cumulative losses of land could alter the setting of settlements.

On balance, the increased ability to avoid sensitive sites in Telford's periphery would be offset by the expected effects relating to some more sensitive rural landscapes being affected by development. **Minor negative effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

Growth and associated effects in Telford under this option would replicate that set out under Option 1.2.

Growth in Newport under this approach would see an increase when compared to Options 1.1 and 1.2 resulting in an increased requirement for land to be released on its periphery. Whilst there would be some ability to selectively allocate sites based on their merit in relation to landscape and visual sensitivities, the majority of the peripheral land around Newport is not identified as being particularly sensitive. As such, it would be likely that the least sensitive pieces of land could be allocated in the first instance. However, the higher scale of growth could potentially give rise to minor negative effects with regards to cumulative pressures between different built up areas. Buffering and landscape measures should help to mitigate such effects.

Rural growth under this approach would be higher than Option 1.1, but still of a scale where negative effects are likely to be avoidable through site selection and suitable mitigation.

Overall, the greater focus of growth around Newport's southern periphery which is broadly of a low sensitivity in terms of visual and landscape character would reduce some pressure on more sensitive locations in Telford and rural areas. The increased growth in Newport could potentially give rise to cumulative **minor negative effects** though.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

A further reduction in growth in Telford under this approach would exaggerate the aforementioned ability for site selection to avoid areas of land which are identified as sensitive in relation to its visual contribution to the area or its landscape value, reducing the magnitude of any potential negative effects.

Housing delivery in Newport would be at a scale lower than that outlined under Option 1.3. This would better enable the less sensitive sites to be allocated, reducing the potential for more significant effects.

Rural growth and effects would be expected to align with that set out under Option 1.2, which are minor negative effects. Overall, **minor negative effects** are likely.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This approach would seek to deliver an uptick on growth when compared to growth scenario 1. Whilst this would place a greater level of pressure on sites on the periphery of Telford in particular. It should still be possible to allocate sites which avoid the most sensitive areas in terms of visual and landscape characteristics. That said, it may be that some sites are allocated on land which is more sensitive than areas allocated under lower growth scenarios, for example of pieces of land identified as medium (or higher) sensitivity. The effects are still likely to be minor though and would be mostly related to cumulative impacts of urbanisation.

In relation to Newport, this approach would deliver a marginally higher level of growth than seen under Option 1.1. Whilst a small amount of additional land would need allocating to meet the need, this would not be expected to significantly change the effects outlined for Option 1.1 and the ability to avoid developing on more sensitive land would be retained. Therefore, neutral to minor negative effects are predicted.

Rural housing growth under this approach would be of a relatively small scale (similar to options marginally higher than seen under Option 1.1. As such effects in these areas would be likely to be similar (i.e. neutral).

Overall, a minor negative effect could be predicted, mostly relating to cumulative effects on landscape openness on the periphery of Telford. However, this is reliant on lower sensitivity sites being brought forward. Should some of the more sensitive sites need to be released, then potential **moderate negative effects** are more likely. Given the higher growth involved, flexibility is lower and so a precautionary approach is taken when predicting the effects at this stage.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This option would see growth in Telford at a scale roughly in between that seen in Option 1.1 and 2.1. As such, effects would be expected to be of a magnitude in the middle of the two previously discussed options. It would be likely that the most sensitive land in relation to landscape and visual characteristics could be avoided, however where some allocations may be on medium sensitivity land, mitigation measures would be required. On balance, minor negative effects are predicted.

Growth and associated effects in Newport under this approach would be aligned with that set out under Option 2.1 (i.e. neutral / minor negative effects).

Rural housing delivery would be focused upon under this approach. This would place greater pressure on the ability to selectively allocate sites based on their merit. This may

result in some more sensitive sites being allocated which could be an issue in more sensitive areas, particularly around Edgmond and Lilleshall. Elsewhere, sensitivities are lower and effects would be less pronounced as such. This presents the potential for residual minor negative effects, particularly when considering cumulative effects.

Overall, this higher growth would be expected to lead to **minor negative effects,** mostly associated with higher growth in the rural areas and cumulative effects around Telford.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Growth and associated effects in Telford under this approach would be aligned with that set out under Option 2.2 (i.e. minor negative effects).

A greater focus on housing in Newport would be expected to result in a large delivery of housing in this area, with much of the land likely coming forward to the south of the urban area. Whilst it would mean that a large proportion of sites would be required to be allocated, the land is not identified as being particularly sensitive in terms of landscape and visual characteristics. However, at a higher scale of growth, site capacities would need to be maximised, and to expand beyond the immediate urban fringes. This could start creating coalescence concerns with regards to nearby small villages such as Chetwynd Aston and Church Aston.

Rural growth and consequential effects under this approach would be expected to be neutral given the relatively low level and distribution of growth.

Overall, the effects are likely to be neutral to minor negative across much of the borough. However, the higher scale of growth in Newport could give rise to more prominent effects. **Minor negative effects** are predicted overall.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

Growth in Telford under this approach would be expected to be marginally lower than that set out under Options 2.2 and 2.3. The residual effects are likely to range from neutral to minor negative (presuming that the more sensitive sites are avoided).

Growth and associated effects in Newport would be approximately 300 dwellings lower than for Option 2.3. Development would likely require clustering to the south of Newport, in addition to growth in other lower sensitivity areas. Whilst no individual sites are particularly sensitive to change, there could be some cumulative effects as there will be a need to develop multiple sites close to one another.

Rural growth under this approach would be marginally lower than seen under Option 2.2, and therefore similar effects are likely (i.e. minor negative effects).

Overall, **minor negative effects** are predicted, reflecting the potential for residual impacts in several locations due to cumulative impacts. Overall though, the more sensitive locations in the borough could be avoided.

Growth Scenario 3: High performance growth- 11,662

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This option would maximise growth in and around Telford, resulting in the likely outcome that some more sensitive sites would need to be allocated to meet the need. There are a number of pockets of more sensitive land on Telford's eastern and western peripheries where release of land could be more likely. The most sensitive land may be able to be avoided, and some mitigation measures may help to reduce more significant effects. However, it is still likely that some negative effects would occur in the more sensitive locations. Focusing growth into areas of lower sensitivity could only go so far without creating cumulative negative effects in those locations too in terms of coalescence and urban sprawl. Maximising capacities on lower sensitivity areas might lead to developments that are not as well supported by open space and green infrastructure, so this might not be a suitable approach (hence the greater likelihood that higher sensitivity sites would be involved for this approach).

Housing delivery and its associated effects in Newport would be increased by 189 dwellings compared to Option 2.1. This would require higher density development, or the release of more land. This increases the potential for minor negative effects, but the residual effects are likely to be neutral with well-designed development.

Rural growth would be of a scale slightly higher than seen under Option 2.1. Though this would put additional pressures on allocating sites which are more sensitive in terms of their visual and landscape characteristics, however there would still be a range of lower sensitivity sites that could be selected. Effects would therefore be predicted to be neutral (but with a greater degree of uncertainty).

Overall, the effects are predicted to be potentially **major negative effects**. Though minor negative or neutral effects would be anticipated in many settlements, the bulk of growth would be at Telford and could be of a scale that gives rise to significant negative effects. (particularly if growth needs to encroach onto land that is visible to and from the AONB).

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Growth under this option in Telford should permit the most sensitive landscapes to be avoided in the allocation process, helping to minimise potential negative effects. That said, where other constraints are present, some land identified as more sensitive in relation to its landscape and visual characteristics may be required to be allocated, with the high amount of housing delivery under this approach making alternative options in this sense more challenging. As such, moderate negative effects are possible.

Growth and associated effects in Newport under this approach would be expected to be aligned with that set out under Option 3.1. (i.e. neutral).

Housing delivery under this approach would place considerable pressure on allocating sites within rural areas. This would be expected to lead to negative impacts on landscape and visual assets in these areas, which could be a more pronounced in sensitive locations such

as Lilleshall and Edgmond. Though sensitivities around other rural settlements are lower, the higher cumulative growth would change the settlement character, which is potentially moderately negative.

Overall, due to pressures around Telford as well as in rural areas, **moderate negative effects** are predicted.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Growth and associated effects in Telford under this approach would be expected to mimic that set out under Option 3.2 (i.e. moderate negative effects)

This approach would maximise housing growth in Newport, leading to a substantial proportion of sites needing to be allocated in order to meet the housing need. This would mostly omit the ability to avoid more sensitive sites; whilst Newport's peripheral land is not identified as being sensitive in terms of its visual and landscape characteristics some more granular assessments may reveal further details of particular sensitivities. There is also a likelihood that capacities would need to be maximised, leading to denser developments, and there may be increased risks of coalescence with surrounding villages. Moderate negative effects are possible, though mitigation measures could possibly help to address these.

Rural growth and its consequential effects would be likely to align with Option 2.3 (i.e. neutral effects.

Whilst there are greater pressures around Newport, pressures around more sensitive land in Telford and Rural areas would be partially eased when compared to Options 3.1 and 3.2. As such, **moderate negative effects** are predicted overall.

Option 3.4: Rural and Newport growth
Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

Growth and associated effects in Telford under this approach would be likely to be aligned with that set out under Option 2.1. (I.e. moderate negative effects).

Growth in Newport would be of a scale slightly higher than that seen under Option 2.3 and slightly lower than Option 3.3. the magnitude and nature of effects would therefore be expected to be of a scale in between those previously set out. This would not be expected to result in development on land identified as most sensitive in terms of its visual and landscape characteristics. However, there would be less flexibility to avoid these locations, and cumulative effects of clustered growth would also be more of an issue.

Rural growth and its associated effects would be expected to align broadly with Option 3.2, with some anticipated negative effects relating to allocating sites which are more sensitive. The cumulative effects of increased growth could also change the character and built form of some villages and their townscapes.

Overall, **moderate negative effects** are predicted.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
								?			

Historic Environment

Conserve and enhance heritage assets (including their setting), cultural heritage and natural history.

Growth Scenario 1: Extending existing Local Plan growth- 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

In general, the site options within the existing built-up areas of Telford and Newport are not especially sensitive in terms of heritage assets and the historic environment. Where there are a number of these sites which are 'constrained' by nearby listed buildings, it would be expected that development design considerations would take account of heritage assets and facilitate growth which is sympathetic to local character. Much of the urban area is also of mixed character with some brownfield sites contributing negatively towards a sense of historic character. As such, well-designed developments could contribute positively towards maintaining and better revealing the significance of heritage assets. It would be likely that, with the exception of sites which are significantly constrained, the majority of urban sites would come forward under all options. As such, the broadly neutral effects on the historical environment associated with these sites applies to all options.

Where the world heritage site is located in the south of Telford's urban area, there are a number of smaller potential site options within or close by to the area of historic significance, it would be assumed that where development requirements permit, first and foremost these sites would be omitted from allocation due to their heightened sensitivity.

This scale of growth would be expected to require some release of greenfield land on the periphery of Telford. This land is generally unconstrained aside from some scattered listed buildings. The majority of the listed buildings which intersect with, or are nearby to site options are Grade II and sensitive design alongside screening would be expected to mitigate significant effects. The scale of growth proposed under this option would be likely to permit some site selection which avoids the more sensitive sites which either overlap with multiple heritage assets or are in close proximity to higher sensitivity land, and likely to affect the setting of the historic environment. However, the open countryside setting of listed buildings at the urban periphery is likely to be negatively affected to some extent. As a result, at least minor negative effects are predicted in this respect. Should sites be involved that overlap with listed buildings or scheduled monuments (in particular to the north and the west of Telford urban area), then the effects could be of a greater significance. Hence, an uncertain effect is recorded.

Similarly in Newport, the majority of sites are not constrained by the local historic environment, meaning that this small scale of growth proposed for the area would be unlikely to result in significant effects. At this scale of growth, sites where potential effects exist should either be possible to avoid or suitable screening and mitigation measures implemented (such as lower density, smaller height and massing, sensitive use of building materials and so on).

Rural site areas which contain site options are generally fairly sensitive in terms of their historic character. Many areas are characterised by the presence of multiple listed buildings with some areas being designated conservation areas alongside the presence of some scheduled monuments. Development proposals would be expected to consider the historic

environment throughout the design of housing schemes and provide suitable screening to mitigate any potential negative effects on local heritage assets. That said, development could be expected to lead to effects on the settings of heritage assets, including through impacts on views and general character any heritage assets and their settings. Under this approach rural growth would be of a low scale and hence, it would be likely that the most sensitive sites could be avoided. The cumulative pressures would also be fairly low at this scale of development, and thus neutral effects are predicted.

Overall, uncertain **minor negative effects** are predicted, mainly related to the potential for urban periphery sites in Telford and (to a lesser extent) Newport to negatively affect the setting of heritage assets.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This approach would place a reduced level of pressure on development within Telford's urban periphery, making it more likely that sensitive sites could be avoided in the site allocation process. In addition, the cumulative effects of growth would likely be reduced. However, it is difficult to say with certainty that no negative effects will arise, as this depends upon the sites that ultimately are chosen.

Growth and associated effects in Newport would be expected to be broadly aligned with that set out under Option 1.1 (i.e. neutral effects).

The rural housing focus under this approach would be expected to lead to sites being allocated within, adjacent to or nearby to conservation areas as well as within the vicinity of other heritage assets. It would be expected that the most sensitive sites could be omitted from allocation, however due to the broadly more constrained nature of the rural site options when compared to options in Telford and Newport, negative effects are anticipated, especially to the settings of existing heritage assets. In particular, the cumulative effects of multiple sites being developed in the same rural settlements could permanently alter the character of the urban fringes and settlement form.

Overall, **minor negative effects** are predicted, taking account of the potential for negative effects in both the rural areas and Telford.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

Growth in Telford under this approach would likely be aligned with the scale and distribution of housing set out under Option 1.2, as such the ability to select sites which are less constrained would be expected to be retained, promoting similar anticipated effects.

This option would promote a greater proportion of growth being allocated to Newport, with site options meaning that most of the growth would need to come forward to the south of the town on broadly unconstrained sites. This scale of development would be expected to mean that a substantial proportion of sites would need to be allocated, however where many of the options are unconstrained, those which are more sensitive (due to proximity to listed buildings or the large historic park and garden to the north of the town), could be omitted from allocation. Nevertheless, increased pressure for growth could mean that the potential for mitigation and avoidance is lower and thus minor negative effects are predicted.

Rural growth and associated effects under this approach are likely to be slightly higher compared to lower growth options, and it could be more difficult to avoid negative effects upon the setting of heritage assets.

Overall, **minor negative effects** are predicted.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This option would further reduce the pressures on housing delivery on Telford's urban periphery, increasing the potential to avoid more sensitive sites and permitting development to be located in areas which would reduce the potential for local character to be affected.

Growth in Newport under this approach would be slightly lower than that set out under Option 1.3. Whilst there would be a slight reduction in the amount of land required to be allocated, the broadly unconstrained site options in relation to heritage assets should mean that effects should be aligned with those set out under Option 1.3 (i.e. minor negative effects).

Rural growth and associated effects under this approach would be similar to those set out under Option 1.2 (i.e. minor negative effects), but there would be a greater degree of flexibility in site selection and cumulative pressures would be lower.

Potential **minor negative effects** are predicted overall, reflecting the issues described above. The uncertainty relates to the relatively good potential to avoid negative effects through the site selection process.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy
Growth in Telford: 7,921,
Growth in Newport: 517
Growth in Rural Areas: 385

This growth scenario would deliver an inflated scale of housing when compared to scenario 1. This would lead to some additional pressures being placed on Telford's urban periphery. This could reasonably be expected to reduce the potential for the most constrained sites to be omitted from allocation or for lower capacities / smaller deliverable areas. At this scale of growth, sites to the south of the urban area in more sensitive land (in and around Ironbridge Gorge World Heritage Site) could still be avoided due to their sensitivity. However, there may be the need to allocate some sites to the west, north and north east which may result in negative effects on the setting of listed buildings which are either close to or within sites which could be allocated. The cumulative effects could be moderately negative.

Growth in Newport would be expected to be marginally higher than that outlined under Option 1.1. Though this would require an increased amount of land to be allocated, the availability of broadly unconstrained sites should mean that effects are likely to be aligned with those under Option 1.1 (i.e. broadly neutral).

Rural growth under this option would still be relatively low, permitting allocation on sites which avoid the most constrained ones in relation to heritage assets. The cumulative pressure on any one settlement would also likely be limited.

On balance, potential / uncertain **moderate negative effects** are predicted, associated with the cumulative effects of growth on the setting of heritage assets on the urban fringes of telford.

Option 2.2: Rural growth
Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This option would see a scale of housing delivery roughly in between Options 1.1 and 2.1 for Telford. This would alleviate some of the pressures (outlined under Option 3.1) to allocate sites which may be more constrained in relation to the presence of listed buildings, especially to the north and north east of the town. As such, this reduced scale of growth would be expected to result in effects which are more aligned with option 1.1, due to the strategy's ability to avoid potential heritage constraints (i.e. minor negative effects)

Growth and associated effects in Newport would be expected to mimic those set out under Option 2.1, which involves similar levels of growth (i.e neutral effects).

The inflated rural housing growth under this approach would be expected to lead to sites being allocated within, adjacent to or nearby to conservation areas as well as within the vicinity of other heritage assets. It would be expected that the very most sensitive sites could be omitted from allocation, though some more sensitive sites are likely to be required to be allocated due to the scale of housing delivery required. Due to the broadly more constrained nature of the rural site options when compared to options in Telford and Newport, effects are anticipated to be negative, especially to the settings of existing heritage assets and the settlement character overall.

Overall, **moderate negative effects** are predicted. Minor negative effects in Telford are likely to occur in several locations around the urban periphery, whilst there is also potential for more notable effects on rural settlements.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Growth and associated effects in Telford under this approach would be expected to replicate those outlined for the area under Option 2.2 (i.e. minor negative effects).

This approach would focus more housing delivery in Newport. Whilst this would be expected to place greater pressures on allocating sites in the area in order to meet the housing requirement, the availability of broadly unconstrained sites should mean that for the most part effects are minor. Where there are some more constrained sites, this higher scale of growth could necessitate their inclusion, which could have more significant negative effects. Alternatively, site developable areas and densities would need to be maximised, which could lead to less sympathetic development.

Rural growth and its consequential effects under this approach would be expected to be aligned with that set out under Option 2.1.

The greater emphasis on growth in the more unconstrained area of Newport, and reduced growth in the more constrained rural areas should, on balance, reduce pressure on heritage assets. However, minor negative effects are still likely at Telford, and there is potential for more significant negative effects at Newport should certain constrained sites be involved. With this in mind, uncertain **moderate negative effects** are predicted overall.

Option 2.4: Rural and Newport growth

Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

This approach would see housing growth in Telford and its associated effects broadly aligned to those set out under Option 1.1 (minor negative effects). Likewise, the growth in Newport under this approach would be marginally higher than Option 1.3. The slightly higher delivery of housing in both areas would be unlikely to lead to any significant differences to the magnitude and broad threshold of likely effects.

Rural growth under this approach could potentially involve sites with greater sensitivities, and / or put cumulative pressures on settlement character. These are uncertain moderate negative effects.

Though there is some potential for moderate negative effects in the rural areas, the level of growth in Telford and Newport ought to mean that effects can be limited to minor. This accounts for the majority of development and therefore overall **minor negative effects** are predicted from a Borough-wide perspective.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This growth scenario involves a heightened level of growth overall when compared to the previously discussed scenarios.

Under this option, Telford would see the greatest delivery of homes out of all discussed options, placing additional pressures on the peripheral areas of the town. This would be expected to magnify previously discussed effects and reduce the potential for site allocation to avoid the most sensitive sites. Whilst some mitigation measures such as screening and locally sensitive design which incorporates the historic character of the vicinity of development are likely to be features of new development, effects would still be likely to negatively impact the setting of heritage assets and more sensitive areas of land. At the scale of growth involved, it is more likely that sites directly adjacent to or overlapping heritage sites could be involved, including some to the south of the urban area close to the world heritage site. As such, potential major negative effects are recorded.

Growth in Newport would be of a scale roughly between that set out under Option 1.4 and 2.1. Whilst this would lead to a greater amount of land release to facilitate the housing growth, it would be expected that this could still be met on sites which are generally unconstrained in relation to heritage assets (i.e. neutral effects).

Rural growth would still be expected to be of a broadly small scale under this approach. This might lead to some sites within the vicinity of heritage assets to be allocated. Whilst this may impact the heritage assets setting, onsite mitigation measures and sensitive design should help to avoid any significant effects. Therefore, only minor negative effects are predicted.

Overall, due to pressures associated with growth in Telford as well as some minor pressures in rural areas and Newport, **moderate negative effects** are likely.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

The magnitude of growth and associated effects in Telford under this approach would be roughly of a scale in between Options 2.1 and 3.1. This should permit the very most sensitive sites to be omitted from allocation, which is particularly beneficial for alleviating potential effects on the World Heritage Site to the south of the urban area. However, the flexibility in site choice would be much reduced, and the potential for cumulative effects upon the setting of heritage assets are greater. This could lead to moderate negative effects.

Growth and associated effects in Newport under this option would be likely to replicate those outlined under Option 3.1 (i.e. neutral effects).

Rural growth under this approach would be at a relatively high scale. This would be expected to lead to sites being allocated within and adjacent to areas of historical significance, including conservations areas. Sensitive design and mitigation measures such as screening may go some way to reducing the potential for these effects to be of major significance, but the settings of nearby heritage assets are likely to be affected regardless. Consequently, moderate negative effects are predicted.

Overall, **moderate negative effects** are predicted from a borough-wide perspective.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Growth and associated effects in Telford would be likely to mimic those set out under Option 3.2. (i.e. moderate negative effects overall).

Newport would see the greatest scale of housing delivery out of all discussed options under this approach. This would be largely on less sensitive land, aside from the small amount of land/sites which are adjacent to, or in close proximity to historically sensitive land or buildings. At this scale of growth, development pressures would be expected to result in the development of these sites. Whilst some mitigation measures such as screening and locally sensitive design which incorporates the historic character of the vicinity of development are likely to be features of new development, effects would still be likely to negatively impact the setting of heritage assets and more sensitive areas of land. In particular, there could be development adjacent to a registered park and garden, and growth to the south might be of a greater scale, leading to coalescence concerns with nearby villages. Is this respect, potential major negative effects are recorded.

Rural growth and effects under this approach would align with that set out under Option 3.1.

Overall, uncertain **major negative effects** are recorded. Whilst neutral or minor negative effects would be anticipated in most locations, the potential for major negative effects exist in Newport and Telford (depending on the combination of sites allocated).

Option 3.4: Rural and Newport growth
Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

The scale of growth in Telford under this approach would be broadly similar to that set out under Option 2.1; as such, the effects would be likely to be broadly aligned with some potential to avoid the most constrained sites, however some land with smaller scale sensitivities may be required to be allocated to meet the housing target. This represents moderate negative effects.

The magnitude of growth and associated effects in Newport would sit roughly in between the scales set out in Options 2.3 and 3.3. It is likely that moderate negative effects would occur, as cumulative growth would mean less potential to avoid sensitive sites and the need for increased densities / developable land.

Rural growth under this approach would place some pressures on rural site allocations and to a small degree increase the likely magnitude of effects on the historic environment in rural areas. In some locations, it is possible that the character of settlements would be affected, and thus moderate negative effects are predicted.

Overall, **moderate negative effects** are predicted.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
				?		?				?	

Waste

Minimise waste generation and support the circular economy by implementing the waste hierarchy.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

Sites within the urban boundaries of Telford and Newport are expected to be well connected to existing waste collection routes, meaning that it is unlikely that new routes would have to be set up to cater for the population growth, although it may be that existing routes have to be scaled up in terms of their collection capacity to deal with the increased demand and volume of waste to be collected. When looking at access to household waste recycling centres (HWRC), the majority (with the exception of a small number) of sites in Telford have access within 3 miles, whereas none of the sites in and around Newport have access to a HWRC within 3 miles. Some anticipated neutral effects would be expected to be associated with the growth within Telford's urban area, whereas in Newport some negligible negative effects are anticipated due to the lack of accessible HWRC, potentially reducing the propensity for residents to recycle some items of waste that are not collected at kerbside. These urban area sites would be expected to come forward under any approach, meaning that their effects are expected to be relatively constant across all options.

This approach would seek to focus the majority of residual growth in and around Telford, meaning that some sites on the town's urban periphery would be required to be allocated.

Areas of peripheral growth along the town's northern periphery would locate new housing within a 3 mile drive from the nearest HWRC, supporting the ability to recycle excess materials that are not picked up at kerbside. The approach would permit a clustering of site allocations in this northern peripheral area, meaning that extended waste collection routes could be more efficiently managed than an approach which spread out the growth across a range of areas.

A small number of peripheral sites in/around Newport are within 5 miles of the nearest HWRC. This is not an optimum distance, however given that some growth would be delivered in and around Newport in any circumstance, sites towards the south west of the urban area would be more accessible to the nearest HWRC. The site options are broadly clustered to the south of the town as well as some peripheral ones to the north and east which are well connected to the existing urban area, and hence existing waste collection routes. This scale of growth within Newport would be unlikely to require entirely new waste collections routes and could be facilitated on sites which maximise accessibility to the nearest HWRC.

Aside from rural areas nearby to Telford (Lilleshall and Wrockwardine), all rural locations are broadly poorly situated in terms of accessibility within 5 miles of a HWRC. The small scale of growth under this approach in rural areas would be likely to facilitate some fairly efficient extensions of existing waste collection routes. Therefore, neutral effects are predicted.

Neutral effects are predicted overall.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This approach would alleviate pressures for housing on Telford's urban periphery compared to Option 1.1. It is likely that new collection routes will be required that are clustered around locations of growth, and this could make new routes efficient.

The majority of development could be allocated within 3 miles of the nearest HWRC, which ought to support recycling of excess materials.

Housing growth and associated effects in Newport would be expected to be aligned with that set out under Option 1.1 (i.e. neutral effects)

A greater emphasis on housing in rural areas under this approach would place a greater proportion of prospective residents in areas with poorer accessibility to a HWRC. The inflated housing delivery would also be likely to lead to some increased need for additional waste management services to collect from rural areas as current route capacity may be unable to cater for the large increase in waste.

Minor negative effects are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This approach would see the same level of growth and associated effects as those set out under Option 1.2 for Telford.

A greater focus of housing in Newport would be seen under this approach. This would be expected to mean that a greater number of residential properties would be located in relatively inaccessible locations to the nearest HWRC, potentially reducing the propensity for people to recycle excess household materials. The option could also mean that waste collection routes would have to be expanded to cater for the additional growth; the site options would permit a clustering of sites which would aid efficiency in this respect.

Rural growth and its associated effects under this approach would be limited, given the small scale of growth involved.

Whilst the growth in Newport could be deemed negative in relation to waste, on balance, when considering the Borough as a whole, **neutral effects** are likely.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This option would require the lowest amount of residual housing delivery on Telford's periphery. This is likely to exaggerate effects outlined under Option 1.2, meaning that sites would be likely to be within 3 miles of a HWRC as well as increasing the likelihood of sites being clustered in a small area which would assist with efficiency in the expansion of waste collection services.

Growth in Newport under this approach would be marginally lower than that seen under Option 1.3, as such effects would be likely to be broadly similar.

Rural growth and consequential effects under this approach would be likely to align with Option 1.2 (despite the level of growth being slightly lower).

Under this approach, a greater proportion of new development would be located in areas that are not within 3miles of a HWRC, and would also require a greater dispersal of collection routes.

Overall, **minor negative effects** are predicted.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This option under a higher growth scenario would focus the majority of housing in and around Telford. This scale of growth would be likely to mean that a fairly substantial proportion of site options on Telford's periphery would require allocation. The approach could permit allocation in peripheral areas to the north and north east of the town. These areas are more accessible to a HWRC than western site options and the clustering would help with efficiency when planning new waste collection routes to cater for the growth.

Growth in Newport would be marginally higher than seen under Option 1.1, as such effects would be likely to be broadly aligned without any differences likely to alter the anticipated threshold of likely effects.

Rural growth and associated defects would be relatively limited, and therefore effects would not be significant in this respect.

This option sees a larger overall amount of housing compared to those under growth scenario 1. This increase is likely to increase the amount of materials required for building activities, and increases the number of homes were waste will be generated. As such, a **minor negative effect** is predicted in this respect.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

Growth in Telford under this approach would be of a scale in between that set out in Option 1.1 and 2.1. It would be likely that the growth could be delivered on sites which are broadly accessible to the nearest HWRC and in a relatively clustered manner helping to make new waste collection routes efficient.

Growth and associated effects in Newport under this option would be expected to mimic that set out under Option 2.1.

A greater emphasis on housing in rural areas under this approach would place a greater proportion of prospective residents in areas with poorer accessibility to a HWRC.

The inflated housing delivery would also be likely to lead to some increased need for additional waste management services to collect from rural areas as current capacity would be unlikely to be able to cater for the large increase in waste.

This option sees a larger overall amount of housing compared to those under growth scenario 1. This increase is likely to increase the amount of materials required for building activities, and increases the number of homes were waste will be generated. As such, a minor negative effect is predicted in this respect.

Overall, **moderate negative effects** are predicted. There will be an overall total increase in homes under this option compared to Growth Scenario 1, whilst also placing a higher proportion of development in locations that a less accessible to HWRCs and result in collection regimes that are more dispersed (and thus less efficient).

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Growth and associated effects in Telford under this approach would be likely to mimic that set out under Option 2.2.

Housing delivery would see a greater focus in Newport under this option. This would be likely to mean that new housing would be delivered on sites with some poor accessibility to the nearest HWRC. Whilst most of the growth could be clustered to the south of the town, it would be likely that some growth would come forward to the north or east of Newport, making new waste collection arrangements a more complicated process with potential inefficiencies.

Rural growth would see an increase when compared to Option 2.1. This would place some additional strain on waste collection services, though the degree to which this growth could be catered for under existing waste management services is uncertain. Should the growth be distributed, it would be expected that services would be expanded, rather that requiring new collection routes to be established. Like previously discussed, this rural growth would be likely to be in area which are not best placed in terms of accessibility to HWRCs. However, the significance of effects is minor.

This option sees a larger overall amount of housing compared to those under growth scenario 1. This increase is likely to increase the amount of materials required for building activities, and increases the number of homes were waste will be generated. As such, a **minor negative effect** is predicted in this respect.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

Growth in Telford under this approach would be broadly similar (albeit slightly lower) to that set out under Options 2.2 and 2.3. As such, the effects would be expected to be aligned.

Growth in Newport and Rural Areas would be high in combination, with both locations being less well served compared to Telford with regards to HWRC access and waste collections.

Overall, **moderate negative effects** are predicted. There will be an overall total increase in homes under this option compared to Growth Scenario 1, whilst also placing a higher proportion of development in locations that are less accessible to HWRCs and result in collection regimes that are more dispersed (and thus less efficient) and further from waste transfer stations (resulting in carrying wastes over longer distances).

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would see the highest level of housing being directed towards Telford out of any approach. It would likely mean that a large amount of site options would require allocation in order to meet the housing target. This would mean that a volume of housing to the west of Telford would have relatively poor access to the nearest HWRC (5+ miles). It would also mean that new waste collection services would be required to manage additional collection routes in multiple locations, although the scale of growth under this approach would likely mean that new routes would be required in any case, rather than extensions of existing routes.

Growth in Newport under this option would be expected to be relatively small. This would mean that some of the growth would be inaccessible to the nearest HWRC. On the flipside, it would be expected to mean that sites could be clustered together, making new/extended waste collection routes efficient.

Rural growth and associated defects would be relatively limited, and therefore effects would not be significant in this respect.

Overall, **moderate negative effects** are predicted. Whilst the distribution of growth ought to enable good access to HWRCs and enable effective collection of waste, there will be an overall total increase in homes under this option compared to Growth Scenarios 1 and 2.

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Growth and associated effects under this option would be likely to be of a magnitude between that set out under Option 2.1 and 3.1. This would be expected to give some potential to locate the majority of housing within areas which are broadly accessible to the nearest HWRC and clustered together. That said, should any of these sites be constrained by other factors, land to the west of Telford may be required to be allocated to meet the housing need. This land is less accessible to HWRCs and whilst it could make new waste collection routes less efficient, it may also be able to be catered for through extensions of existing routes in the area.

Growth and associated effects in Newport under this approach would be aligned with that set out under Option 3.1.

Rural areas would see a high level of housing under this approach. This would be likely to exaggerate effects outlined under Option 2.2, leaving greater numbers of prospective

tenants situated in areas with poor access to a HWRC as well as likely requiring the coordination of new waste collection routes.

Overall, **moderate negative effects** are predicted. Whilst the distribution of most residual growth ought to enable good access to HWRCs and enable effective collection of waste, there will be an overall total increase in homes under this option compared to Growth Scenarios 1 and 2. Some additional growth will also not be optimally located in terms of access to a HWRC.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Growth and associated effects under this approach in Telford would be aligned with that set out under Option 3.2.

This option would maximise housing delivery in Newport, resulting in a likely scenario where the majority of site options would need to be allocated to meet the housing need. Whilst some sites could be clustered together to the south of the town, some sites may have to be served by extensions of existing waste collection routes, potentially leading to inefficiencies. It would also be expected to result in some significant housing delivery in areas which are poorly accessible to HWRCs.

Rural growth and its effects under this approach would be likely to mimic that set out under Option 2.3. A moderate amount of growth would be placed in locations that have poorer accessibility to HWRCs and dispersal of collection routes.

Overall, **moderate negative effects** are predicted. Whilst the distribution of most residual growth ought to enable good access to HWRCs and enable effective collection of waste, there will be an overall total increase in homes under this option compared to Growth Scenarios 1 and 2.

Option 3.4: Rural and Newport growth
Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

Growth and associated effects in Telford under this approach would be likely to be broadly aligned with that set out under Option 2.1 (albeit slightly less).

Growth and associated effects in Newport would be likely to be of a scale between that set out under Options 2.3 and 3.3. The delivery of housing would also see some substantial proportions of units being delivered in areas deemed not very accessible to a HWRC.

Rural growth and consequential effects under this approach are likely to mimic that set out under Option 3.2 (albeit to a lesser extent).

Overall, **moderate negative effects** are predicted. Whilst the distribution of most residual growth ought to enable good access to HWRCs and enable effective collection of waste, there will be an overall total increase in homes under this option compared to Growth Scenarios 1 and 2. In addition, a fairly substantial amount of growth would be located in less than optimal locations with regards to a HWRC and collections.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4

Climate Change Resilience

Adapt and become more resilient to the impacts of climate change, including the effective management of flood risk, and preparing for more extreme weather events.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

Deliverable sites within the urban areas of Telford and Newport would likely be included under any approach, excluding where they may have significant constraints. Broadly speaking, none of these sites are constrained by fluvial flood risk and in this sense their allocation should not lead to adverse effects. The sites, mostly due to their urban nature, may be at a heightened risk of surface water flood risk, a vulnerability made more pronounced during and immediately after extreme rainfall events, which are likely to increase in incidence as a result of climate change. That said, it would be expected that any development would take account of this through design measures which, in the case of brownfield sites (of which there are several within the urban boundaries of Telford and Newport), could actually serve to reduce surface water flooding onsite and in the immediately surrounding areas. The fact that these sites are within the urban boundaries make them more vulnerable to extreme heat conditions. Though the scale of the site options reduces the likely magnitude of the urban heat island effect, it could still be a cause for concern, especially amongst more vulnerable populations (for example elderly people). Design considerations should take account of this through cooling measures on site (tree shading, greenspace and building orientation) and this could be an opportunity to promote urban greening. Telford's widespread provision of greenspace should help to mitigate potential negative effects relating to flooding and heating. Where these sites would be expected to be included under any approach, the above effects would be expected across all options.

Further to the sites considered as 'constants', this approach would be likely to require some release of land on the periphery of Telford. There are a number of sites to the north and north east which are more constrained by areas of Flood Zones (FZ) 2 and 3. However, a sequential approach could be taken to avoid placing new properties at heightened flood risk (given that there is a wider choice of site options around Telford and the scale of growth would permit avoidance).

Though there are some sites involving overlap with areas of Flood Zones 2 and 3, smaller areas of risk as a proportion of the total site areas could be designed into schemes, ensuring that properties would not be placed at unnecessary risk. The sites would also be likely to ensure that onsite design measures (such as SuDS) alleviate pressures relating to surface water flood risk.

Many of these peripheral sites are greenfield in nature, so increased levels of concretisation of sites with existing high infiltration potential would be likely to increase flood risk both onsite and in the surrounding area. Onsite mitigation measures may alleviate some of these pressures but may not be likely to deliver the same level of flood risk mitigation as seen with current greenfield land uses.

Extending the existing urban area of Telford could serve to increase heating in these areas to a minor extent, especially where development is clustered. Some design measures would alleviate these pressures (tree shading, greenspace and building orientation) and the location of this development in peripheral areas nearby to open countryside should mean that any heating effects are not significant and that developments can be supported by green infrastructure.

Development in Newport would be likely to be met on sites which are unconstrained by fluvial flood risk. Effects relating to potential surface water flood risk and heating are likely to mimic those set out above, in reference to growth on Telford's periphery, though to a much smaller scale and local to the areas allocated for housing delivery. As such, neutral effects are predicted.

Rural site options are, for the most part, largely unconstrained by fluvial and surface water flood risk (excluding a minority of sites). As such, risk of flooding is likely to be neutral with regards to fluvial sources. Potential effects beyond this are likely to be related to the development of greenfield sites, which can decrease rates of infiltration and lead to faster surface water flows and have downstream implications. However, the scale of growth involved is unlikely to lead to significant effects, especially when there will be a requirement to implement SuDS and green infrastructure alongside new schemes. A loss of greenfield land and replacement with buildings can also be negative in terms of contributing to the urban heat island effect. However, in the rural areas, this is not a critical issue.

Overall, **neutral effects** are predicted for Option 1.1 with regards to climate change resilience. The scale of growth involved across the different settlements can be accommodated without putting new homes at risk of flooding, and the scale of growth should also be possible to manage presuming the use of SuDs and appropriate green infrastructure.

Option 1.2: Rural growth

Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This approach would alleviate pressures on delivering housing on the periphery of Telford due to the reduced level of growth in this area. It would be expected to lead to broadly similar effects in relation to potential small-scale urban heating and retaining the ability to avoid areas of heightened fluvial flood risk. The reduced amount of land required to meet the housing need around Telford would be expected to reduce to some extent the potential for loss of land with high infiltration potential. This would alleviate the negative effects associated with developing on greenfield land in this respect when compared to higher growth options.

Growth and associated effects in Newport would be likely to be of a magnitude and nature which replicates that set out under Option 1.1 (i.e. neutral effects).

Rural growth under this approach would be of a higher scale. Considering the previous points raised under Option 1.1, this would be expected to result in some potential increased surface water flood risk in rural areas, though only to a small degree and of a dispersed nature.

Overall, **neutral effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

Growth and associated effects in Telford under this approach would be expected to replicate that set out under option 1.2.

This approach would place a greater emphasis on housing delivery in Newport. There is limited risk of fluvial flooding, and so neutral effects are predicted in this respect. That said, the majority of development would come forward on greenfield land, making it likely that the aforementioned effects relating to developing on greenfield land would be realised. This would be expected to lead to some increased heating and surface water flood risk, but it ought to be possible to mitigate effects to a satisfactory degree through the use of SuDs, green infrastructure and design features.

Rural growth under this option would be neutral given the relatively low scale of growth (and flood risk being limited for most of the sites.

Overall, **neutral effects** are predicted. Whilst there would be increased growth in Newport, this would not be in areas at risk of flooding, and there would be potential to mitigate surface water flooding and climate change impacts. There would also be less pressure on the periphery of Telford and the effects in rural areas would be limited.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

Growth on the peripheral areas of Telford under this approach would be reduced compared to earlier options. This would be expected to continue the ability to avoid allocations on areas constrained by fluvial flood risk. It would also be expected to mean that likely effects relating to development on greenfield land (marginal heating increases and potential increased surface water flood risk) would be less widespread and only realised in areas in and around proposed development sites.

Growth in Newport under this approach would be likely to be of a scale slightly under that seen under Option 1.3. This would be expected to result in broadly similar effects to those set out under Option 1.3.

The effects of rural growth under this option would be likely to align with those set out under Option 1.2.

Overall, **neutral effects** are predicted.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy
Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This higher growth scenario would place additional pressures around Telford's periphery. It would still be likely that the most constrained sites in relation to fluvial flood risk could be

avoided. Some sites which contain areas of FZs 2 and 3 might be involved. However, the scale and nature of these sites should afford flexibility to only develop in flood zone 1.

Nevertheless, a higher release of greenfield land around Telford could still lead to secondary impacts related to surface water flooding and urban heating effects. As such, and considering the scale of housing delivery involved, the significance of effects would be amplified according to the greater spread of effects, rather than severity. It should still be possible to secure mitigation measures such as SuDs, layout and design features to become resilient to climate change. However, the higher scale of growth puts pressure on a wider environmental footprint outside of Telford.

The scale of housing growth in Newport under this approach would be likely to be marginally higher than outlined under Option 1.1. This would be unlikely to be delivered on land identified as at risk of fluvial flooding. Other effects relating to heating and surface water flood risk would be likely to be broadly the same, albeit realised over a slightly greater area, in line with the marginal uptick in growth. Thus, neutral effects are likely in this location.

Rural growth under this option would be neutral given the relatively low scale of growth (and flood risk being limited for most of the sites).

Overall, **minor negative effects** are predicted, due to residual impacts in terms of surface water flood risk and urban heating on the periphery of Telford.

Option 2.2: Rural growth
Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

Housing delivery on Telford's urban periphery under this approach would be of a scale in between that seen under Options 1.1 and 2.1. This would still be expected to avoid the most sensitive land in terms of flooding. Localised effects around areas of growth would be expected in relation to heating and surface water flood risk as seen and discussed under other options.

Growth and associated effects in Newport would be likely to be aligned with that set out under Option 2.1.

Rural housing delivery would be focused upon in this approach. This would lead to more distributed increases in surface water flood risk in and around areas of housing delivery. Negative effects in any particular location ought to be possible to mitigate, and cumulative effects are unlikely to be significant given the dispersed nature of development and less urbanised locations.

Overall, **neutral effects** are predicted.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Growth and associated effects in Telford under this approach would be expected to replicate that set out under option 2.2 (given that the level of growth is the same).

A greater focus on housing delivery in Newport could still be accommodated on Flood Zone 1. The location of site options dictates that some clustering is likely to the south of the town. This could bring cumulative effects in terms of surface water flood risk, changes to infiltration and urban heating. However, clustering may also lead to increased viability of more strategic flood risk management measures and strategic green infrastructure. The extent of heating impacts are likely to be minor given the large amounts of countryside that would remain around Newport and the potential for urban greening. Therefore, neutral effects are predicted.

Rural housing delivery and its effects under this approach would be expected to align with that set out under Option 2.1 (i.e. neutral effects).

Overall, **neutral effects** are predicted.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

Growth and associated effects in Telford under this approach would largely mimic that set out under Options 2.2 and 2,3, albeit with a slight decrease in growth and associated spread of effects.

Growth and associated effects in Newport would be of a lower scale than option 2.3, and therefore, neutral effects are also predicted given that areas of higher flood risk should be possible to avoid, and the wider effects of climate change ought to be possible to manage.

Rural housing delivery and its effects under this approach would be expected to be neutral given the dispersed nature of growth and choice of sites that are not at significant risk of flooding.

Overall, **neutral effects** are predicted. It ought to be possible to place the majority of development in areas that are not at risk of fluvial flooding. Furthermore, the spread of growth should mean that localised surface water flooding can be managed through the use of SuDs.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy
Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would maximise growth in Telford, which would mean less flexibility in the choice of sites. When balancing constraints across multiple topics, it would be possible that some sites with fluvial flood risks would have to be allocated to meet the housing need. Where sites do overlap with Flood Zones 2 and 3, it is possible that such areas could be avoided through layout. There would also be a need to secure SuDS.

Areas of heightened flood risk, especially FZ3 would likely be avoided meaning that valuable and vulnerable receptors are not placed at risk. However the pressure to deliver housing may reduce the ability to avoid developing infrastructure such as roads or open space and amenities on land at risk of flooding. It would likely need some adaptive measures to be taken to reduce potential damaging effects from potential flood events. The growth would

also be likely to see the aforementioned heating and surface water flood risk events across a wider area and / or more dense developments with less areas of open green space.

Housing growth and associated effects relating to fluvial and surface water flood risk as well as heating in Newport would be likely to be of a slightly higher magnitude/more distributed when compared to that set out under Option 2.1. Neutral effects are still likely.

Rural growth under this approach would be slightly higher than seen under Options 1.1 and 2.1, making it likely that some more distributed surface water flood risk would be seen. However, neutral effects are still likely.

Overall and on balance, considering the larger scale of growth overall and particularly in the main town of Telford, minor negative effects are predicted. Whilst the majority of new development would likely be in Flood Zone 1, there would be a large amount of greenfield land lost, and despite mitigation measures, there could be disturbances in terms of drainage and urban heating. There would also be less choice in Telford to enable a sequential approach to flood risk that avoids all areas of FZ2 and 3. Overall, potential **moderate negative effects** are predicted.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Growth and associated effects in Telford under this approach would be likely to be of a scale, distribution and magnitude in between that set out under Options 2.1 and 3.1. Some land identified as being vulnerable to fluvial flooding may need to be allocated, however this may be able to be incorporated into scheme designs, reducing the risk to valuable assets. Effects relating to urban heating and surface water flood risk would be expected to be realised in areas proposed for growth.

Growth and associated effects in Newport would be likely to mimic that set out under Option 3.1 (i.e. neutral effects).

Rural housing delivery would be focused upon in this approach. This would be likely to lead to more distributed increases in surface water flood risk in and around areas of housing delivery. There should be sufficient land within Flood Zone 1 to avoid increased flood risk.

Overall, **minor negative effects** are predicted.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Growth and associated effects in Telford under this approach would be expected to replicate that set out under option 3.2 (i.e. minor negative effects).

This approach would maximise housing delivery in Newport, meaning that when considering other constraints, it would be difficult to avoid allocating on some land which is fairly significantly constrained by flood risk. This risk is restricted to one site option and some measures previously mentioned to minimise risk would be likely to be required and considered during the design phase. Nonetheless, some flooding of the site would be expected, with potential secondary implications in relation to damaged infrastructure on site

(including facilities, amenities and assets such as roads). Other effects relating to heating and surface water flood risk would be likely to be seen more widely in line with the heightened growth.

Rural housing delivery and its effects under this approach is predicted to have neutral effects.

Overall, **minor negative effects** are predicted.

Option 3.4: Rural and Newport growth
Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

This approach would see growth and associated effects in Telford broadly aligned with that set out under Option 2.1, albeit to a slightly higher level with consequential implications for the distribution of effects.

Growth in Newport would be of a magnitude in between Options 2.3 and 3.3. This would likely permit the avoidance of allocating sites identified as significantly at risk of fluvial flooding. It would also be expected to result in previously discussed effects relating to heating and surface water flood risk in areas on and around new housing delivery.

Rural housing delivery and its effects under this approach would be expected to align with that set out under Option 3.2. Overall, **minor negative effects** are likely.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
								?			

Climate Change Mitigation

Facilitate and contribute to the move towards a carbon neutral Telford and Wrekin whilst improving social equity of access to energy.

Growth Scenario 1: Extending existing Local Plan growth- 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

This approach would focus housing growth in Telford, with limited housing being delivered in Newport and Rural Areas.

There are a number of factors at play when focusing on efforts to drive down greenhouse gas (GHG) emissions in order to mitigate the severity of climate change. When looking at the household scale, the design of buildings to be energy efficient and provision of household energy generating capabilities are the key factors to consider. However, when appraising options in this context, it is impossible to determine effects at the household scale due to any development offering the opportunity to pursue such measures. Hence, a more strategic focus must be adopted. This relates to the potential for new development to encourage sustainable forms of transport use (mostly active travel and public transport), reducing the frequency of the need to travel and shortening distances where possible as well as the potential for sites to offer site-wide energy efficiency and generation schemes. In relation to travel, housing growth generally leads to an increase in car use. Whilst this is a short to medium-term problem in terms of GHG emissions for the Borough, the anticipated rapid policy and market driven introduction of electric vehicles is likely to mean that the day-to-day running of cars in the longer-term should not be a major contributing factor to GHG emissions (providing, as expected, that the National grid see's corresponding decarbonisation). Carbon sequestration through tree planting and retention as well as protecting carbon sinks is a proven and potentially low-cost solution to reducing CO2 levels in the atmosphere; though, it must be accepted that at the scale of housing development in Telford and Wrekin, substantial reductions in CO2 in the atmosphere through these efforts would not be expected. Whilst any form and mix of housing could come forward regardless of location, it is considered more likely that rural and urban periphery sites would be lower density schemes with larger homes. Generally speaking, this will lead to increased emissions per capita when compared to high density development in urban areas.

Where this approach aims to focus the majority of growth in Telford, the town's high concentration of shops, services and employment means that the need to travel longer distances would be reduced. The concentration of growth in Telford should increase the viability of sustainable transport schemes to cater for the population growth and reduce the need to travel by GHG emitting vehicles. Clustering sites in very close proximity or large-scale developments can also help to increase the viability of energy efficiency schemes such as district heating networks as well as generation schemes such as onsite solar farms. This pattern of development can also serve to increase the viability of tree retention and planting schemes, helping to absorb CO2. A greater amount of growth throughout Telford ought to result in lower per capita emissions compared to similar growth in the rural areas. Therefore, in this respect, positive effects are likely.

The small scale growth in Newport and Rural Areas would not be likely to offer substantial opportunities to deliver energy generation and efficiency schemes, nor would it be as likely that tree planting would be achieved on a substantial scale.

There would be some expected small scale improvements to sustainable transport provisions, but not enough to significantly alter behavioural norms in terms of transport modal choices.

Whilst the development under this approach would offer opportunities relating to carbon sequestration, energy generation and efficiency and sustainable transport options, it would still be expected that there would be an increase in car use as more households are formed. This would be expected to result in short to medium-term increases in GHG emissions for the Borough, leading to negative effects.

On balance, there would be opportunities to reduce GHG emissions through transport related measures as well as energy efficiency and generation schemes and some small scale carbon sequestration efforts. There would also be an anticipated short to medium-term increase GHG emissions related to an increase in car journeys in the Borough. The overall scale and distribution of growth involved is in-line with the current policy position, and therefore **neutral effects** are predicted on balance.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

Compared to Option 1.1, this approach would see approximately 1400 fewer dwellings in Telford, with the reduction being assigned to rural areas and Newport seeing the same growth figure. As such, the nature of effects experienced in Telford would be broadly similar to those outlined under Option 1.1 however, aligned with the reduction in growth, the magnitude of effects would be expected to be slightly lower.

Growth in Newport would be the same as Option 1.1, with effects likely being neutral.

The delivery of close to 1,700 additional dwellings in rural areas in the Borough would be expected to have mixed effects. Without stipulating the main causes of the trend, it is evident that rural areas have higher energy demands per metre than urban counterparts. The more isolated nature of rural settlements means that people are more likely to have to travel greater distances to access shops, services and employment. This would be expected to result in an increase in car dependency, resulting in some increased GHG emissions in the short to medium-term. Where rural development would be expected to be in keeping with local character, development densities and scales would be likely to be lower, meaning that there would be a reduced likelihood of larger sites; thereby reducing the viability of energy efficiency and generation schemes.

Overall, whilst there would still be some positive effects associated with this approach, the greater focus on rural development is generally less well suited to efforts to mitigate climate change. As such, whilst some of the beneficial factors of growth in Telford would be expected to come into play, the greater emphasis on rural development would promote increased negative effects associated with higher energy use and car dependency. Given that this is a departure from the baseline policy position, **minor negative effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This option would see a greater focus of housing growth in Newport, where housing delivery would be more than 3 times higher than under Options 1.1 and 1.2.

Growth and associated effects in Telford would mimic that set out under Option 1.2.

Growth and associated effects in Rural Areas would be relatively low, and so effects would be more limited.

The delivery of 1,425 dwellings in Newport would be likely to broadly deliver effects aligned with those associated with growth in Telford, though to a slightly reduced magnitude. Newport would be expected to see some improvements to sustainable transport, helping to reduce journeys made by GHG emitting cars from existing and future populations in the area. Should growth be clustered close together or on a small number of larger sites, then onsite low carbon schemes could be increased in terms of their viability. This pattern of development would also be likely to facilitate some tree planting and retention schemes, helping to some extent with carbon sequestration. Despite sustainable transport improvements in the area, it would be likely that car journeys would increase in the short to medium-term.

Overall, the Borough would be expected to see **neutral effects**. The overall scale of growth would be in keeping with the current policy position, whilst the distribution of growth would not be likely to lead to major changes with regards to overall emissions.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This approach would see a reduced focus on housing growth in Telford, in favour of delivering more dwellings in Newport and Rural Areas.

Though Telford's lower level of growth would reduce the magnitude of the aforementioned effects, there would still be a substantial number of homes being delivered leading to improvements to access to sustainable forms of transport in the area alongside increased viability of energy generation and efficiency schemes and efforts to sequester carbon through natural means (commonly tree planting at this scale). The growth would also be expected to increase car journeys in the Borough, leading to short to medium-term transport related emissions increases.

Growth in Newport would be lower than Option 1.3. That said, it would still be expected to promote the positive effects as outlined under Option 1.3, but at a reduced magnitude.

Growth in Rural Areas would be slightly lower than outlined under Option 1.2, bringing with it reduced significance of the effects in these areas.

In general it is less sustainable and more carbon intensive to spread out development across a wider area with lower density and more energy intensive developments (compared to opting for a more concentrated approach). In this respect, a potential **minor negative effect** is predicted, as it is somewhat of a departure from the current policy position.

Growth Scenario 2: Re-based population led growth - 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

The distribution of growth under this approach replicates that set out under Option 1.1, however the scale of growth is magnified in each settlement type.

Telford would see almost 8,000 additional new homes; this would be expected to magnify those effects set out under Option 1.1. The town's concentration of shops, services and employment alongside the housing growth's delivery of sustainable transport infrastructure would be expected to reduce the need to travel long distances and increase the rates of people using sustainable forms of transport. The large scale of growth would be likely to increase viability of some energy efficiency and generation schemes as well as some small-scale carbon sequestration.

Development would be relatively small scale in Newport and Rural areas, whilst this would increase the magnitude of effects compared to Option 1.1, the small-scale increase in growth would not be likely to significantly alter the likely effects.

The overall increase in population in the Borough would be expected to lead to an increase in car journeys, driving up GHG emissions in the short to medium-term. In the longer term it is expected that buildings will be of a higher quality in terms of sustainability, and therefore per capita emissions may start to reduce.

The increased level of growth compared to the current policy position, could be seen as negative in respect of greater emissions generation. However, this reflects past delivery rates, and is therefore unlikely to represent a significant change in the effects.

Overall, there would be opportunities to reduce GHG emissions through sustainable transport related measures as well as energy efficiency and generation schemes and some small scale carbon sequestration efforts. There would also be an anticipated short to medium-term increase in GHG emissions related to an increase in car journeys in the Borough. Over the Plan period, it is anticipated that there would be a **neutral effect** with regards to carbon emissions. On one hand, the increased growth will drive up emissions, but on the other, increased development could help to drive down per capita emissions by enabling improvements to sustainable travel, funding carbon sequestration through development, and making low carbon generation schemes more viable.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

The distribution of growth under this approach replicates that set out under Option 1.2, however the scale of growth is magnified in each settlement type.

Housing growth of 6,305 dwellings in Telford would be likely to result in a similar nature of effects to that set out under Option 2.1, however where growth would be reduced, effects would be likely to be of a lower magnitude.

Growth and associated effects for the housing in Newport would be expected to be the same as that set out under Option 2.1.

Where this option focuses a greater amount of housing in Rural Areas, mixed effects are likely. Without stipulating the main causes of the trend, it is evident that rural areas have higher energy demands per metre than urban counterparts. The more isolated nature of rural settlements means that people are more likely to have to travel greater distances to access shops, services and employment. This would be expected to result in an increase in car dependency, resulting in some increased GHG emissions in the short to medium-term. That said, where this approach offers higher rural growth than that outlined under Option 1.2, there could be some increased provisions of local shops, services and sustainable transport schemes, potentially serving to marginally decrease car dependencies associated with the new rural housing growth. Where rural development would be expected to be in keeping with local character, development densities and scales would be likely to be lower, meaning that there would be a reduced likelihood of larger sites, thereby reducing the viability of energy efficiency and generation schemes.

Overall, mixed effects would be likely as a result of this option's scale and distribution of housing growth. On one hand, there would be an overall increase in housing development planned for, which will lead to an overall increase in emissions. This trend would be heightened by directing more growth to the rural areas as well. However, the higher scales of growth involved could increase the viability of sustainable transport schemes to support future and existing resident's mobility and where larger sites are available, some energy efficiency and generating schemes may be delivered. This offsets the negative effects of growth somewhat, and so a residual **minor negative effect** is predicted overall.

Option 2.3: Newport growth

Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

This approach would focus additional growth in Newport. Telford would see the same growth and associated effects as outlined under Option 2.2 and Rural Areas would be expected to see similar growth and effects as outlined under Option 2.1.

The delivery of 1,972 dwellings in Newport would be likely to broadly deliver effects of a nature which is aligned with those associated with growth in Telford, though to a reduced magnitude. Newport would be expected to see some improvements to sustainable transport, helping to reduce journeys made by GHG emitting cars from existing and future populations in the area. Should growth be clustered close together or on a small number of larger sites, then onsite energy efficiency schemes would be increased in terms of their viability. This pattern of development would also be likely to facilitate some tree planting and retention schemes, helping to some extent with carbon sequestration. Despite sustainable transport improvements in the area, it would be likely that car journeys would increase, resulting in GHG emission increases in the short to medium-term.

Telford and Wrekin would be likely to see effects as a whole which are mixed. On one hand, there would be an overall increase in housing development planned for, which will lead to an overall increase in emissions. However, the higher scales of growth involved could increase the viability of sustainable transport schemes to support future and existing resident's mobility and where larger sites are available, some energy efficiency and generating schemes may be delivered. This offsets the negative effects of growth somewhat, and so a residual **neutral effect** is predicted overall.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

This approach would see a reduced focus on housing growth in Telford, in favour of delivering more dwellings in Newport and Rural Areas.

Despite a decrease in growth at Telford, the majority of new homes would still be placed in this location and should promote efficient development with regards to carbon emissions.

Newport's housing growth would be lower (approximately 300 fewer dwellings) than that outlined under Option 2.3, but effects are anticipated to be similar.

Growth in Rural Areas would be slightly lower than outlined under Option 2.2, and so the effects are likely to be slightly reduced.

Overall, this approach would be expected to result in a residual **minor negative effect.**

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy
Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

The distribution of growth under this approach replicates that set out under Option 1.1 and 2.1, however the scale of growth is magnified further in each settlement type.

Overall, there would be opportunities to reduce GHG emissions through sustainable transport related measures as well as energy efficiency and generation schemes and some small-scale carbon sequestration efforts. This large concentration of housing growth is generally considered to be more sustainable in terms of climate change mitigation than a more dispersed approach. However, planning for a high level of growth is likely to drive an increase in overall emissions. Whilst the positive aspects of growth could help to offset this increase somewhat, it is possible that some residual **minor negative effects** would remain.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

As well as an overall increase in housing across the borough, this approach would place a greater focus of housing growth in Rural Areas.

The rural growth would be likely to improve the viability of sustainable transport schemes. However, the rural housing would also be likely to increase car dependency and deliver housing in areas which generally have higher energy consumption levels. Overall car use would also be expected to increase across the Borough as a result of the high population growth.

Planning for a high level of growth is likely to drive an increase in overall emissions. Whilst the positive aspects of growth could help to offset this increase somewhat, it is possible that some residual **moderate negative effects** would remain (particularly given that there is a

redirection of development to areas that are associated with higher per capita carbon emissions.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Telford would see the same growth and associated effects as outlined under Option 3.2 (i.e. the increase in emissions due to high growth would be offset by promoting a less carbon intense pattern of development).

This approach would focus additional growth in Newport. Despite sustainable transport improvements in the area, and growth being directed to a relatively well-served settlement, it would be likely that car journeys would increase, resulting in GHG emission increases in the short to medium-term. There would also be some elevated growth in the rural areas, further contributing to more carbon intensive developments.

Overall, the spread of growth would be unlikely to lead to a major change in emissions, despite directing growth to some 'less sustainable' locations. However, the overall increase in growth is likely to lead to some **minor negative effects**.

Option 3.4: Rural and Newport growth
Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

Overall, this approach is predicted to have potential **moderate negative effects**, as there is an overall increase in emissions, plus a shift of growth to areas that could generate higher per capital emissions (mainly the rural areas, but to a lesser extent in Newport).

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
			?						?		?

Housing

Support timely delivery of an appropriate mix of housing types and tenures, including a focus on maximising the potential of suitable brownfield opportunities, to ensure delivery of high-quality housing that meets the needs of Telford and Wrekin residents.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

This approach would see the majority of housing being directed towards the currently most sustainable settlement of Telford, with some additional growth found in Newport and a lower amount of housing split between rural areas of the Borough.

Additional housing development is generally regarded as a driving factor behind improved housing affordability in an area which receives growth; strategically considered and locally relevant housing delivery also has an ability to ensure housing types and tenures are of an appropriate mix to meet local housing need within the housing market area. As such, the large amount of growth in Telford would be expected to partially increase housing affordability, though this is not a significant identified issue in the area and hence significant changes to affordability in this area would not be expected. Telford does, however, have some issues relating to low quality housing and hence new development could offer the opportunity to provide housing of a higher standard to the area. The town itself hosts Borough's highest density of shops, services and employment and hence locating the majority of Telford and Wrekin's identified housing need in this area would be beneficial in terms of housing being in sustainable locations, reducing the need to travel longer distances and other issues associated with more isolated settlements.

Housing delivery in Newport would be expected to improve housing affordability in the area, potentially addressing to some extent the current affordability issues in the town. Newport has also been identified as having some issues relating to housing in poor condition; the delivery of new homes would be expected to improve access to high quality homes in the area as well as providing an appropriate mix of housing types and tenures to meet the locally determined requirements. Whilst these effects would be somewhat likely to materialise in Newport, the low scale of additional growth over the plan period (257) would be expected to mean that these effects would progress slowly, and their significance would be limited as a result of the fairly low overall housing provisions.

The way in which this development comes forward could also dictate the way in which effects are realised, should the development be spread over a number of smaller sites, then effects could be felt across the town, however where the low number of houses could be delivered on a small number of sites, the effects could be more isolated.

In terms of housing in rural areas, there would be a low delivery of housing, with 190 homes being split between rural settlements. In general, the more rural areas in the Borough have higher quality housing, however affordability is an issue. This low number of allocations within such areas might serve to provide a small number of homes which are more affordable. That said, as the current threshold for providing affordable housing in the Borough is 11 dwellings, should there be a number of small sites delivering the rural housing supply then it may become more challenging to ensure affordability is improved.

Overall, the concentration of growth in Telford would see the majority of effects under this approach experienced there, with some improvements to housing quality and sustainably located housing nearby to jobs and services leading to positive effects. The level of growth in Newport would go some way towards improving housing quality and affordability, though this low number of additional dwelling would likely mean that these effects are minor. The level of housing in rural areas would potentially improve rural housing affordability, however this would be expected to be dependent upon the nature of the sites and the low overall growth mean these effects are uncertain, but still minor.

When considering the overall scale of growth that would be planned for under this scenario, the allocated sites might fall short of market demand (given the evidence of higher delivery rates over the last 10 years). When considered alongside the distribution strategy, this limits the overall effects in terms of housing to **minor positive effects.**

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

Compared to Option 1.1, this approach would see approximately 1400 fewer dwellings in Telford, with the reduction being assigned to rural areas and Newport seeing the same growth figure as option 1.1.

Effects experienced in Telford would be broadly similar to those outlined under Option 1.1 however, aligned with the reduction in growth, the magnitude of effects would be expected to be lower. Growth in Newport would be the same as Option 1.1, likely leading to very minor effects.

Rural areas would see an inflation in growth under this scenario and hence effects would be expected to differ from those set out under Option 1.1. As previously outlined, rural housing growth has the potential to reduce the prevalence of rural affordability issues which have been identified in the Borough. It could be argued that more growth in rural areas which have lower levels of shops, services and employment is unsustainable as it would be unlikely that the needs of the new population could be met with existing provisions. However, this approach's delivery of a 1,547 dwellings in rural areas could improve existing settlements sustainability by providing additional shops, services and facilities; these positive effects could also serve to benefit existing populations.

When considering the overall scale of growth that would be planned for under this scenario, the allocated sites might fall short of market demand (given the evidence of higher delivery rates over the last 10 years). When considered alongside the distribution strategy, this limits the overall effects in terms of housing to **minor positive effects.**

This approach spreads the benefits of growth more widely though and addresses particular issues such as rural affordability. It is therefore slightly more favourable compared to Option 1.1 with regards to a more diverse spread of housing.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This option would see a greater focus of housing growth in Newport, where housing delivery would be more than 3 times higher than under Options 1.1 and 1.2.

Growth and associated effects in Telford would mimic that set out under Option 1.2.

Growth and associated effects in Rural Areas would still be relatively low, albeit higher than Option 1.1. There are some minor positive effects likely by providing affordable housing in these locations.

The greater focus of housing in Newport would be likely to go some way towards improving the town's affordability whilst also potentially providing a better range of high-quality housing types and tenures to meet the locally identified need. Newport is the second largest town in Telford and Wrekin and as such, locating housing there would be beneficial in terms of the housing having sufficient access to local shops, services and employment.

When considering the overall scale of growth that would be planned for under this scenario, the allocated sites might fall short of market demand (given the evidence of higher delivery rates over the last 10 years). When considered alongside the distribution strategy, this limits the overall effects in terms of housing to **minor positive effects.**

This approach spreads the benefits of growth more widely though and addresses particular issues such as rural affordability. It is therefore slightly more favourable compared to Option 1.1 with regards to a more diverse spread of housing (and likely a wider range of site scales).

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This approach would see a reduced focus on housing growth in Telford, in favour of delivering more dwellings in Newport and Rural Areas.

Though Telford's lower level of growth would reduce the magnitude of the aforementioned effects, there would still be a substantial number of homes being delivered, helping to improve the quality (and mix) of housing types and tenures in an area which is broadly considered sustainable in terms of access to shops, services and employment. As such, the positive effects in Telford would be expected to be retained, though to a reduced significance.

Growth in Newport would be higher than outlined under Options 1.1 and 1.2, however marginally lower than Option 1.3. That said, it would still be expected to promote the same positive effects as outlined under Option 1.3, but at a reduced magnitude.

Growth in Rural Areas would be slightly lower than outlined under Option 1.2, bringing with it positive effects of slightly less significance. Nevertheless, it should still help to improve affordability and potentially support new shops and services to cater for the existing and new populations.

When considering the overall scale of growth that would be planned for under this scenario, the allocated sites might fall short of market demand (given the evidence of higher delivery rates over the last 10 years). When considered alongside the distribution strategy, this limits the overall effects in terms of housing. However, this option offers the greatest distribution of positive effects across the Borough (under the low growth scenario), and as such potential / uncertain **moderate positive effects** are predicted.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

The distribution of growth under this approach replicates that set out under Option 1.1, however the scale of growth is magnified in each settlement type.

Telford would receive almost 8,000 new homes and as such this would be likely to significantly increase housing quality across the Town, whilst continuing to ensure there is a locally relevant mix of housing types and tenures located in an area of the Borough which has good access to shops, services and employment.

The delivery of 700 dwellings in Newport would be expected to go some way towards improving local affordability and quality of housing. However, the effects would be relatively minor.

The increased growth in Rural Areas when compared to Option 1.1 would magnify the positive effects associated with improving rural affordability and potentially providing more shops and services to more isolated communities, improving the sustainability of these locations. However, the significance of the effects would still be relatively limited.

Overall, whilst the significant uptick in growth in Telford would ensure significant positive effects, the marginal increase in growth in Newport and Rural Areas would be likely to lead to minor positive effects (though, of a higher significance than those effects set out under Option 1.1). The higher overall delivery, in line with past rates of delivery, would be likely to support ongoing investment and a proactive approach to housing and would also help to provide for some 'unmet needs'. Therefore, **moderate positive effects** are predicted for the borough overall.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

The distribution of growth under this approach replicates that set out under Option 1.2, however the scale of growth is magnified in each settlement type.

The delivery of 6,305 dwellings in Telford would be likely to improve the quality and mix of housing types and tenures in a sustainable location within the Borough leading to positive effects in the area. Newport would see the same level of growth as outlined under Option 2.1, as such, minor positive effects would be likely.

Rural areas would deliver a larger proportion of growth outside of Telford. With this rural housing delivery would be an anticipated improvement of affordability, as well as delivery of a locally appropriate range of housing types and tenures. It would also be expected that this additional growth would be catered for by expanded existing, and some potential additional shops and services, making these rural settlements more sustainable.

The higher overall delivery, in line with past rates of delivery would be likely to support ongoing investment and a proactive approach to housing. Therefore, **moderate positive effects** are predicted for the borough overall.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

This approach would focus additional growth in Newport. Telford would see the same scale of growth as outlined under Option 2.2 and hence would be expected to see moderately positive effects. Rural Areas would be expected to see slightly higher growth compared to Option 2.1, and hence, effects would be likely to be minor positive.

Where this approach would be expected to deliver an increase in housing growth in Newport, it would be expected that the area's affordability and housing quality issues would be improved as well as an expected delivery of a locally relevant mix of housing types and tenures. Newport, as the Borough's second largest town, also offer a generally sustainable location for housing in terms of access to shops, services and employment. This scale of growth and associated effects would be likely to lead to significant positive effects in Newport.

The higher overall delivery, in line with past rates of delivery would be likely to support ongoing investment and a proactive approach to housing. Therefore, **moderate positive effects** are predicted for the borough overall.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

Where this option would involve a reduction in growth in Telford, in favour of a greater focus on housing delivery in Newport and Rural areas, effects would be more distributed across the Borough. This can be seen as more likely to provide a range of housing choice, locations and types of sites across the borough.

It would be expected that the effects outlined in Option 1.4 would be broadly magnified in line with the increased growth. As such, Telford would be expected to see moderate positive effects.

Newport's level of growth would be slightly under that set out in Option 1.3, there would still be expected to be an improvement to the town's housing affordability and a relevant provision of housing types and tenures in a broadly sustainable location in terms of accessibility; however, the reduced growth means that this approach would be likely to promote effects of a magnitude closer aligned to moderate scale of significance.

The scale of rural growth would be approximately 300 dwellings fewer than under Option 2.2; when this is distributed between a number of rural settlements, the differences in growth is very minor and hence effects would be likely to be broadly aligned with moderately positive effects.

The higher overall delivery, in line with past rates of delivery would be likely to support ongoing investment and a proactive approach to housing. In combination with a more distributed approach to housing (whilst still prioritising the most well-served settlements), this could potentially give rise to a **major positive effect** with regards to housing.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This option would see a significant amount of housing growth being focused in Telford. As such, Telford would be expected to see significant improvements to housing quality alongside a locally relevant mix of housing types and tenures. Some pockets of less affordable housing could see some new housing which could, in turn, improve affordability in localised areas which are not considered affordable currently. The addition of over 10,000 additional dwellings (beyond current commitments) in Telford would be well placed to access existing shops, services and employment and the large scale of additional growth would be likely to deliver new facilities to cater for the additional population growth.

Although Newport would not be the focus for growth under this option, this high growth scenario would still be expected to deliver 741 dwellings in the town. This would be likely to improve affordability and housing quality to an extent, whilst delivering an appropriate mix of housing types and tenures in a settlement which is broadly sustainable in terms of its accessibility. Minor to moderate positive effects would be expected in Newport.

Rural areas would not be the focus of growth; however they would see a share of 553 additional dwellings to be allocated to rural areas under this option. It would be expected that this would deliver some minor improvements to housing affordability in these areas, leading to minor positive effects.

Given the proactive approach to housing delivery under this growth scenario, it is likely that major positive effects would arise from a borough-wide perspective. The distribution of growth would focus the benefits of growth into Telford, and would be less likely to tackle affordability issues in the rural areas. Nevertheless, a potential **major positive effect** is predicted.

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

The focus on rural growth under this approach would distribute the positive effects more widely across the borough.

Although growth would be slightly reduced in Telford when compared to Option 3.1, the large scale of additional housing would still be expected to deliver significantly positive effects. Housing in Newport would see the same scale and likely distribution as set out under Option 3.1 and as such, positive effects are likely.

The emphasis of housing growth in rural areas under this option would be likely to provide a significant improvement to the availability of affordable housing in areas which have been identified as being least affordable. The housing would also ensure a locally appropriate mix of housing types and tenures to suit the identified need and it would be likely that the uptick in the scale of growth would deliver additional shops and services, improving the sustainability of rural areas for new and existing residents.

Given the proactive approach to housing delivery under this growth scenario, and the spread of benefits that would be achieved, it is likely that **major positive effects** would arise from a borough-wide perspective.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

This option would see the same level of growth and associated effects for Telford as outlined under Option 3.2. Telford is expected to see significantly positive effects. The rural areas would be expected to experience moderate positive effects by providing a range of homes in different settlements.

Newport would see a significant level of growth under this approach with 2,121 dwellings being delivered in the town. This would be likely to improve affordability and provide a range of high quality housing types and tenures which meet locally identified need. Newport, could also see an increase in shops and services to cater for the population growth. Significant positive effects would be likely.

Given the proactive approach to housing delivery under this growth scenario, it is likely that **major positive effects** would arise from a borough-wide perspective.

Option 3.4: Rural and Newport growth
Growth in Telford: 9,054
Growth in Newport: 1,948
Growth in Rural Areas: 2,220

This approach would spread housing benefits across the borough, whilst still focusing a majority of growth in Telford.

Telford would be likely to see improved housing quality as well as a large amount of housing delivered in the Borough's most sustainable built-up area in relation to accessibility to shops, services and employment. Significant positive effects would be likely in Telford.

Effects in Newport would be likely to be broadly similar to those set out under Option 3.3; though they would be to a lesser extent, significant positive effects would still be likely.

Rural housing growth would be slightly lower than under Option 3.2, but effects would likely still be significantly positive.

Overall, significant positive effects would be likely to be seen under this option. It should be noted that, where this option provides the greatest distribution of housing growth, the positive effects are likely to be experienced more widely, across a range of settlement types in the Borough; hence. Given the proactive approach to housing delivery under this growth scenario, it is likely that **major positive effects** would arise from a borough-wide perspective.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
			?				?	?			

Health and Wellbeing

Support healthy, safe lifestyles and environments for all community groups; whilst seeking to close 'inequality gaps' and improve resilience to health issues.

Growth Scenario 1: Extending existing Local Plan growth – 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

Sites within the urban boundaries of Telford and Newport would be expected to come forward under any approach, where they are not significantly constrained. These sites are broadly accessible to sports and recreation facilities as well as open, greenspace which, in terms of the built environment's potential contributions, are both beneficial for physical and mental health through encouraging exercise and ensuring access to nature. It is noted that Telford has a good level of greenspace across the urban area. These sites are also broadly located in areas which are well connected to GP surgeries, making existing heath care provision accessible. The site options across both towns are also broadly well located to access shops and services, as well as the active travel network, increasing the potential for residents to travel by active means; further boosting physical and mental health outcomes.

This option would require some peripheral housing delivery around Telford. The peripheral locations are generally slightly less well connected to formalised green infrastructure and play areas. However their location within open countryside would be expected to have some benefits associated with increasing access to space for outdoor recreation and access to natural greenspace. Broadly speaking, there should be good access to schools and a GP surgery, and the hospital is also located to the north of the urban area. The sites are also larger, meaning that concentrated areas of growth would be expected to deliver new, onsite greenspaces, recreation facilities, shops, services and potentially GP surgeries if sufficient demand is generated. This would be likely to increase the propensity for residents to travel by active means whilst utilising local facilities. The additional facilities delivered as a result of this housing growth could help to boost access to active travel routes, green and open space and recreation facilities for residents living nearby to growth, leading to associated potential boosts to mental and physical health outcomes. Should an approach be adopted where a more dispersed selection of peripheral sites was allocated, then it would be more challenging to deliver such infrastructure benefits and these later associated effects would be less likely to be realised, leaving new developments more isolated and less active, with potential negative implications for mental and physical health outcomes. It should be noted that, due to constraints and consideration of all themes of sustainability, it is considered more likely that sites would be allocated in a more clustered approach.

Newport has a slightly reduced density of formalised greenspace and recreation facilities when compared to Telford. The site options to the north are better connected to substantially sized greenspaces, whereas the site options to the south closer to some smaller spaces which would likely be insufficient to cater for additional growth of housing in the area. Conversely, the southern areas of potential growth are far better connected to GP surgeries. This approach would offer the potential to selectively allocate sites. If an approach were to cluster these sites towards the south of the town then strategic considerations could lead to some additional greenspace and recreation facilities being delivered to the area, though due to the low scale of growth these would be unlikely to be substantial and hence may not

benefit the wider community. A more spread out approach to site allocations would be unlikely to lead to additional facilities to aid physical recreation and as such new developments may be more isolated / less well served by health and active travel infrastructure.

Rural areas are broadly less accessible to existing healthcare facilities, as well as formalised infrastructures (sports facilities, active travel network) which may make it more difficult to encourage healthy and active lifestyles. They may also be less accessible to formalised green and open space. Although, this would be most likely offset by the availability of an increased number of public rights of way as well as less formal green and open space which is widely available in more rural areas. Where some prospective residents may have poorer levels of accessibility, isolation associated with rural dwellings may lead to some negative implications. Access to GP services is also poorer in rural areas, so there would likely be a requirement for residents to travel by car to access services. The small scale of growth under this approach would be unlikely to lead to significant effects.

With regards to the overall level of growth, this is lower than past trends, and therefore this approach may be less positive with regards to addressing affordability issues.

Overall, this approach would be expected to lead to **minor positive effects**, largely related to the ability to concentrate growth around Telford's periphery. This would bring forward locations that are broadly accessible to health, education and open space facilities. There are adjacent communities at the Telford periphery that are experiencing higher levels of deprivation, and therefore, a coordinated approach to growth could lead to spill-over benefits to these areas (for example access to new services, higher quality housing and improved open space).

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This option would deliver a reduced scale of growth in Telford's periphery when compared to Option 1.1. The anticipated implications of this would be reduced delivery of social infrastructure. That being said, most new growth ought to be in locations that are accessible to a school, GP and recreation opportunities. The benefits of new growth could be slightly reduced though.

Growth and associated effects in Newport under this approach would be expected to be aligned with that set out under Option 1.1. (i.e. minor / neutral effects).

Rural areas would see some more focused growth under this approach. Whilst the population would be expected to be able to make use of green, open and natural space, they would be likely to see some relative deprivation in terms of access to sports and healthcare facilities, a local GP and public transport. The scale of this growth would be expected to be distributed across settlements and as such, infrastructure deliveries to support the growth would not be expected to be as significant as a more clustered approach. Development on the edge of rural communities may also be seen as intrusive, which could be perceived as negative in terms of amenity. These are minor negative effects.

Overall, a combination of **minor positive effects** and **minor negative effects** are predicted reflecting the focus on Telford, but some rural growth in less accessible locations.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

Growth and associated effects in Telford under this option would be aligned with that set out under Option 1.2 (i.e. minor positive effects).

This option would place a greater focus of housing growth in Newport. Although this could place more housing in areas which are less well connected to open greenspace, the scale of delivery in a likely relatively concentrated area to the south of the town would be likely to lead to some additional infrastructure deliveries. This may improve access to open and green space, recreation facilities and healthcare provision for prospective tenants as well as existing residents in the area. There may also be some improved active travel facilities, potentially boosting people's propensity to travel by active means, with beneficial health outcomes.

Rural growth and its associated effects would be relatively limited given the small scale of growth involved. Despite there being a slightly higher level of overall growth compared to option 1.1, the numbers are still small when distributed across the borough.

Minor positive effects are predicted overall.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

Growth in Telford's periphery under this approach would be reduced when compared to earlier options, however it would still deliver the opportunity to cluster housing growth. It is expected that this would result in a more limited delivery of additional green/open spaces and recreation facilities, though the scale of growth would still be likely to result in facilities adequate to cater for the additional growth. However, this may not be as likely to benefit the wider communities surrounding housing growth. It would be likely that, where this growth could be clustered, there may be the delivery of additional healthcare facilities (or expansion of existing facilities).

Growth and effects in Newport under this approach would be marginally lower and of reduced magnitude to that set out under Option 1.3, in line with the slightly reduced level of housing growth.

Rural growth and consequential effects under this approach are likely to be aligned with that set out under Option 1.2.

Overall, mixed effects are likely, with some predicted **minor negative effects** and **minor positive effects**.

Growth Scenario 2: Re-based population led growth - 8,822

Option 2.1: Maintain current strategy
Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This scenario would see an uplift in housing delivery, with this specific option continuing to focus growth in and around Telford. This scale of growth would be expected to require a fairly substantial proportion of the peripheral site options to be allocated to meet the housing need. This would be expected to deliver some additional formalised green and open spaces around Telford as a part of onsite infrastructure delivery programmes. The scale of this growth should mean that this benefits the new areas of housing as well as existing communities which may have poorer access. It would also be likely that some existing healthcare facilities could see expansions as well as the delivery of new centres to cater for the growth. Further improvements to the availability of shops, services and active travel infrastructure to cater for the housing growth would likely improve accessibility of these areas, potentially increasing the propensity for people to travel by active means and leading to associated health benefits. There could be some amenity concerns and opposition to the loss of greenfield sites, especially at a heightened scale of growth.

Growth and associated effects in Newport under this approach would be likely to be of a magnitude slightly above that set out under Option 1.1. This would be likely to lead to some housing delivery in areas poorly connected to large existing green and open spaces. Whilst the sites would be expected to deliver some onsite greenspace and recreation facilities, this would not be likely to be of a scale which benefits the wider community surrounding the areas of growth. The areas of potential growth to the south are relatively well connected to healthcare facilities, though the scale of proposed growth may not be sufficient to result in expansions of these facilities.

Rural growth and its associated effects would be relatively limited given the small scale of growth involved. Despite there being a slightly higher level of overall growth compared to option 1.1, the numbers are still small when distributed across the borough.

Moderate positive effects are predicted in relation to health as there ought to be a heightened ability to delivery growth that is supported by social infrastructure, and is mostly in locations that suffer from deprivation (and could potentially benefit from inward investment in housing nearby). Some **minor negative effects** are recorded, as there could be greater opposition (with effects on mental health) to the large scale release of greenfield land around Telford.

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

Growth and associated effects in the peripheral areas of Telford would be likely to be of a character, distribution and magnitude which is in between that set out under Options 2.1 and 1.1. (I.e. minor to moderate positive effects)

Growth and associated effects in Newport would be aligned with that set out under Option 2.1 above.

Rural areas would see some more focused growth under this approach. Whilst the population would be expected to be able to make use of green, open and natural space, they would be likely to see some relative deprivation in terms of access to sports and healthcare facilities. The scale of this growth would be expected to be relatively distributed and as such, infrastructure deliveries to support the growth would not be expected to be as significant as a more clustered approach. Effects would be broadly aligned in character with those set out under Option 1.2, though to a slightly increased magnitude.

Overall, **moderate positive effects** are predicted, as the majority of new development would be in accessible locations in terms of schools, healthcare and open space. The scale of growth is also higher overall and could present better opportunities to address inequalities. However, a sizeable portion of new development would be in rural areas, with the possibility of poorer accessibility for some new communities. There would likely be concern over the loss of amenity due to greenfield development on the periphery of Telford, Newport and the rural areas in particular. These are **minor negative effects**.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1729
Growth in Rural Areas: 789

Growth and associated effects in Telford under this option would be aligned with those set out under Option 2.2.

This option would place a greater focus of housing growth in Newport. Although this could place more housing in areas which are less well connected to open greenspace, the scale of delivery in a likely relatively concentrated area to the south of the town would be likely to lead to some additional infrastructure deliveries. This would be likely to improve access to open and green space, recreation facilities and healthcare provision for prospective tenants as well as existing residents in the area. There may also be some improved active travel facilities, potentially boosting people's propensity to travel by active means, with beneficial health outcomes. Further development may be required on sites more segregated from the southern area of potential growth; whilst this may offer opportunities to be connected to large open and green spaces, the growth may have relatively poor access to healthcare facilities (unless new facilities can be secured). An increase in the release of greenfield land might also lead to some opposition from existing residents.

Rural growth and its associated effects under this approach would be expected to align broadly with that set out under Option 2.1.

Overall, **moderate positive effects** are predicted, as the majority of new development would be in accessible locations in terms of schools, healthcare and open space (both in Telford and Newport). The scale of growth is also higher overall and could present better opportunities to address inequalities in Telford. However, there would likely be concern over the loss of amenity due to greenfield development on the periphery of Telford and Newport in particular. These are **minor negative effects**.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

Growth in Telford's urban periphery under this approach would be expected to be broadly aligned with that set out under Option 1.1 Growth and associated effects in Newport would be broadly aligned with that set out under Option 1.3. Where these options offer very marginally increased levels of housing delivery in comparison to their referenced aligned options, this may increase the viability of delivering additional infrastructures which support more positive health and wellbeing outcomes.

Rural growth and consequential effects under this approach are likely to be aligned with that set out under Option 2.2. (i.e. minor negative effects).

Overall, mixed effects are likely, with some predicted **minor negative effects** and **moderate positive effects**.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would maximise growth in and around Telford. Where many of the sites are in relatively concentrated areas around the western, northern and north-eastern periphery of Telford, it would be likely that infrastructure delivery alongside the housing growth would increase the availability of sports and recreation facilities and open greenspace in these areas, benefitting prospective residents as well as existing communities (Some of which are experiencing high levels of deprivation). This scale of growth would also be expected to lead to the delivery of improved or additional healthcare facilities to support the growth in population. Whilst there is a current relative dearth of facilities (shops, services etc) in the area, the population growth would be likely to support additional provision, which, alongside some anticipated improvements to active travel opportunities in the area, may increase the potential for people to travel by active means, leading to improved health outcomes. The overall increase in growth could also attract businesses and an increased number of jobs overall into the Borough.

Growth in Newport under this option would be of a scale marginally greater than Option 2.1. This could permit the allocation of a cluster of sites to the south of the town. The infrastructure delivery alongside the growth would be likely to improve the availability of sports and recreation facilities and open greenspace in the area benefitting existing residents as well as prospective tenants. The clustering of development may also result in some improvements to active travel infrastructure in the area (such as junction improvements), potentially increasing the propensity for residents to travel by active means. Sites in the likely cluster of development to the south would have good access to existing healthcare facilities and some minor extensions to existing services may be seen to accommodate the growth.

Rural growth and its associated effects would be relatively limited given the small scale of growth involved. Despite there being a slightly higher level of overall growth compared to option 2.1, the numbers are still small when distributed across the borough.

Major positive effects are predicted alongside **minor negative effects** (associated with amenity concerns and a large scale release of greenfield land).

Option 3.2: Rural growth

Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

This approach would see growth and associated effects in Telford of a magnitude in between that set out under Options 2.1 and 3.1. This would be expected to lead to some improvements to social infrastructure in the areas of growth which have the potential to improve health and wellbeing outcomes (space for outdoor exercise, active travel supporting infrastructure and healthcare provisions). There may be some limited benefits for existing residents living nearby to the growth. Moderate to major positive effects are predicted in this respect.

Growth and associated effects in Newport would be aligned with that seen under Option 3.1.(i.e. minor positive effects)

Rural areas would see some more focused growth under this approach. Whilst the population would be expected to be able to make use of green, open and natural space, they would be likely to see some relative deprivation in terms of access to sports and healthcare facilities. The scale of this growth would be expected to lead to some infrastructure deliveries which support positive mental and physical health outcomes, however more substantial facilities such as sports centres or healthcare centres would not be expected due to the dispersed spread of the sites. Effects would be broadly aligned in character with those set out under Option 2.2, though to a slightly increased magnitude

As per option 3.1 and 3.2, it could be expected that there might be opposition to large releases of greenfield land, and this could lead to amenity concerns, and impacts on community identity. This is particularly the case for the rural areas, which are more sensitive to change given their small scale, as well as Telford, which sees the bulk of new growth.

Overall, potential **major positive effects** are predicted, due to most growth being located in areas where access to healthcare and other social infrastructure is good. There are also benefits to be seen from a dispersal of growth to rural areas and Newport, as a higher scale of growth could help to improve social infrastructure, rather than putting undue pressure on it. The overall increase in growth could also attract businesses and an increased number of jobs overall into the Borough.

The higher scale of growth in rural areas places a larger amount of growth in less accessible locations, and it could affect community identity and amenity more notably. There is also likely to be some amenity concerns and opposition to higher levels of growth on greenfield land across the Telford urban periphery. These are potential **moderate negative effects**.

Option 3.3: Newport growth

Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Growth and associated effects in Telford would be likely to be aligned with that set out under Option 3.2.

This approach would place a greater emphasis on housing delivery in Newport. This would be expected to involve the allocation of the majority of site options, aside from those which are identified as significantly constrained. The effects relating to growth to the south of the urban area would be likely to be similar to that set out under Option 2.3. However it would also be likely that some land would need to be allocated to the north and east of the town in areas which are more isolated in terms of accessibility to healthcare and sports and recreation facilities. The scale of this growth in these areas would also not be expected to lead to the delivery of substantial infrastructures which may help to promote positive health and wellbeing outcomes.

Rural growth and its associated effects under this approach would be expected to align with that set out under Option 3.1 (albeit to a slightly greater extent).

As per the other options at this scale of growth, mixed effects are likely.

On one hand, the majority of growth would be located in accessible locations and could support new and improved facilities in areas of need. Given that more growth is focused in Newport, which is less deprived than parts of Telford, the potential for **major positive effects** is slightly less certain in this respect.

The overall increase in growth could also attract businesses and an increased number of jobs overall into the Borough.

Negative effects are likely to include resistance to large scale release of greenfield land, and a small minority of growth being located in areas that do not have good access to healthcare and open space. As such, potential **moderate negative effects** are predicted too.

Option 3.4: Rural and Newport growth

Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

This approach would see growth and associated effects in Telford which are broadly aligned to that set out in Option 3.2 and 3.3, albeit with a slightly lower level of growth.

Growth and associated effects in Newport would be expected to be of a magnitude approximately in between that set out in Options 2.3 and 3.3. Minor to moderate positive effects are likely.

Rural growth and consequential effects under this approach are likely to be aligned with that set out under Option 2.2. (some minor positive effects and moderate negative effects).

Overall, mixed effects are likely, with **moderate negative effects** and potential / uncertain **major positive effects**.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
									? ?	? ?	?

Economy and Infrastructure

Build upon key industries and support growth, timely investment in infrastructure and economic diversification that has tangible benefits to the lives of local residents whilst addressing social inequalities.

Growth Scenario 1: Extending existing Local Plan growth- 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

This approach would continue to focus housing growth within the town of Telford, with limited additional housing in Newport and Rural Areas.

Housing development usually affects local and wider economic structures through a variety of factors. Additional housing tends to lead to an increase in footfall in local centres, boosting the viability of existing shops and services as well as in cases of high growth, leading to the provision of new shops and services (this is more likely with an increase in population, rather than where housing is meeting supressed needs). Wider footfall related benefits of population growth can be seen in more significant built-up centres, for example in Telford and Newport. Larger housing development sites often provide onsite shops and services. Infrastructure (such as improved transport or digital connectivity) which often comes alongside housing development can attract investment which goes on to boost employment, local GVA and acts as a pull factor in attracting additional investment. Local improvements which stem from housing delivery can also contribute towards reductions in local pockets of deprivation, potentially helping towards making areas more equal with more dispersed positive spatial outcomes. Well targeted housing delivery of appropriate types and tenures can act to attract specific demographics which can help to plug skills gaps in an area. Strategically considered housing delivery in areas which have been identified as key employment centres can also to reduce commuting distances and improve cross-cutting sustainability outcomes.

This option would be expected to deliver the most pronounced effects in Telford, the town would be expected to see benefits from the additional footfall associated with the population growth; this would be likely to manifest itself in smaller local service centres as well as the commercial and retail centres. Targeted and strategically considered site selection should also help to reduce the locally polarised areas of deprivation but providing increased viability of existing shops and services and in some cases new shops and services; both of which would be expected to boost employment. As the Borough's key employment area, focusing housing growth in in Telford would be more likely to reduce long-distance commuting and improve rates of sustainable modes of transport use by ensuring that housing is located near to employment. Considering Telford is the best-connected area (in terms of sustainable transport) in the Borough in terms of accessing built-up centres outside of Telford and Wrekin, locating additional housing here is likely to boost cross-boundary sustainable commuting. Well targeted housing delivery may also serve to improve the skills shortage in the Borough and potentially increase the number of high-skilled occupations.

There are a range of site options available around Telford, and so the precise effects will depend upon which locations are involved. Overall though, some kind of benefits would arise in relation to house building in the key economic centre of the Town.

Growth of 257 dwellings in Newport would be expected to lead to some minor benefits associated with increased footfall in local service centres. Newport, as the second largest town in the Borough would also be a beneficial host for additional housing due to its high employment density, therefore housing would be located in relative close proximity to jobs and targeted housing types and tenures may attract particular demographics to plug the Borough's skills gap. The low scale of growth would be unlikely to deliver significant additional effects though.

Housing growth of 190 dwellings across Rural Areas would not be likely to lead to any significant effects beyond some very minor increased in footfall in local shops due to the low level of growth. These locations are also more likely to encourage longer distance commuting.

Overall, **minor positive effects** are predicted with regards to housing delivery. The overall level of growth would be lower than past rates, which somewhat restricts economic activity (in the form of construction) and may not support a growing workforce. Nevertheless, the majority of development is focused into Telford, which is where the majority of accessible employment opportunities exist (and where further opportunities for employment growth have been proposed).

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This option would deliver a reduction in growth of circa 1400 dwellings in Telford when compared to Option 1.1, with the housing reallocated to Rural Areas. Newport would be expected to see the same level of growth and associated effects as outlined under Option 1.1. Although Telford would see a reduction in growth when compared to Option 1.1, the effects would still likely be positive, though to a slightly reduced magnitude.

The increase in rural housing growth under this approach would be likely to lead to some relatively small scale positive effects in the Rural Areas receiving growth. The effects would be expected to relate to an increase in footfall in the local areas, boosting the viability of existing shops and services. This would be likely to be most pronounced for convenience shops and hospitality venues such as pubs, restaurants and cafes. The housing growth may serve to provide some improvements in terms of rural transport and digital connectivity, which could in turn attract some small scale investments or multi-functional live-work housing units. This would potentially provide some very small-scale employment boosts to rural areas. However, where this growth would be a relatively long way from key employment centres in the Borough, it could be argued that some negative effects could occur as a result of driving up the need to commute longer than necessary distances.

Overall, considering and balancing out the above, where the distribution of growth and its broadly positive effects would be spread across Telford and to some extent Rural Areas, **minor positive effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This approach would focus a greater amount of growth in Newport; growth and effects for Telford would be aligned with Option 1.2. Rural growth and its associated effects would be

relatively limited given the small scale of growth involved. Despite there being a slightly higher level of overall growth compared to option 1.1, the numbers are still small when distributed across the borough.

The additional growth and focus on Newport would be expected to deliver a number of positive effects. Firstly, an increase in footfall would benefit the viability of shops and services within localised service centres, nearby to growth as well as in Newport's town centre. The greater focus on housing in Newport could lead to some strategically considered supporting infrastructures for the town, such as improved digital connectivity, transport enhancements and public realm developments; each of which could serve to attract further investment and business development within the area (there are also potential employment site opportunities near to Newport). An appropriate mix of locally determined housing types and tenures could also attract targeted demographics in order to reduce the skills shortage both locally as well as in the wider context of the Borough.

Overall, considering and balancing out the above, where the distribution of growth and its broadly positive effects would be more focused in areas seeing higher growth across Telford and Newport, **minor positive effects** are predicted.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This option would aim to deliver a slightly reduced level of growth in Telford and locate a greater share of development in Newport and Rural Areas.

In Telford, whilst the growth would be reduced compared to the previous options, the substantial amount of growth additional dwellings in the town would still be expected to lead to the aforementioned positive effects (albeit at a reduced magnitude). Newport's housing growth would be expected to see positive effects as described above for Option 1.3, though, the magnitude of effects would expected to be slightly reduced. Rural areas would see growth at a level that still ought to bring some positive implications for rural settlements and economies.

Overall, this approach would be expected to lead to a more even distribution of the benefits associated with housing delivery. Whilst this is positive in terms of supporting local centres, it would likely lead to a greater level of commuting.

As per all of the options at this level of growth, given the overall level of growth is lower than recent trends, this may not be fully aligned with anticipated economic growth. Therefore, only **minor positive effects** are predicted.

Growth Scenario 2: Re-based population led growth - 8,882

Option 2.1: Maintain current strategy
Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This approach would be likely to deliver the majority of growth in Telford; the distribution of housing would mimic that set out under Option 1.1, however the scale would be aligned with this higher growth scenario.

Although the housing delivery under this approach would be higher in Newport and Rural Areas, the increase is small and would not be expected to significantly alter the anticipated effects associated with these areas of the Borough outlined under Option 1.1.

Telford would be likely to see an increase in housing with around 2800 additional dwellings when compared to Option 1.1. This would be likely to enhance the previously discussed effects. It would be expected that this level of growth would deliver improvements to existing, as well as additional shops and services, boosting GVA and employment within the town and beyond. The supporting infrastructure for the housing would be expected to potentially attract additional investment to the area, making it a more attractive place to locate business. The large scale of housing development would enhance the previously discussed positive effects relating to locating housing in areas well connected to employment (both at a local and regional scale). A considered and targeted approach to ensuring a locally determined mix of housing types and tenures will also be likely to attract specific demographics who could help to reduce the Borough's skills shortage. The presence of more deprived locations within Telford compared to the rest of borough means that growth here could better help to address inequalities through provision of homes, increased investment and access to jobs.

Overall, **moderate positive effects** are predicted. The level of growth would be broadly in-line with past rates of housing development, and would therefore encourage continued growth, which should help to support the economy. The majority of growth would be in Telford, making best use of existing infrastructure and minimising the need to commute (presuming a commensurate increase in jobs to support the population).

Option 2.2: Rural growth
Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This approach would deliver a reduced level of growth in Telford when compared to Option 2.1 with the housing being directed towards rural areas instead.

Whilst Telford would receive a lower level of growth than outlined under Option 2.1, it would still be expected to deliver economic benefits related to construction, infrastructure improvement, homes for a workforce and minimising the need to commute.

Growth and its associated effects in Newport would be aligned with that set out under Option 2.1, which involves the same level of growth.

Rural areas under this approach would be likely to see some moderately positive effects. Existing shops and services in these areas would be expected to see a substantial increase in footfall and services which are linked (e.g. transport) would be likely to see additional provisions to cater for the housing growth, leading to boosts to local GVA and employment. Digital connectivity within rural areas in Telford and Wrekin is not as good as urban areas and the additional development would be expected to deliver upgrades to this infrastructure which could further serve to improve rural employment opportunities or serve hybrid live-work units; something which is increasingly relevant in the current economic climate. Locating housing further from key employment centres within the Borough could have mixed effects. It might be more challenging to appropriately target an identified skills shortage across the Borough by providing specific housing types and tenures due to rural living being more of a niche which attracts certain demographics. That said, those people in higher level professional occupations may be more likely to be attracted to rural living and hence the Borough's rates of people in such occupations could increase.

These assertions are uncertain and hence do not bear significant influence on the outcome of predicted effects, but they are important to consider.

Overall, where high housing delivery would be expected to deliver beneficial economic effects in Telford and Rural Areas and to a lesser extent in Newport, effects would be likely to be **moderately positive** for the Borough as a whole.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

This approach would place an emphasis of additional growth outside of Telford in Newport. Telford itself would see growth and effects aligned with Option 2.2 whilst Rural areas would see some more minor effects.

Newport's housing growth of 1,729 dwellings would be expected to increase the effects outlined under Option 1.3. The additional homes would be likely to offer a more evenly distributed set of effects, with increased footfalls in local shops and services, new infrastructures making the town a more attractive climate to invest in as well as some increased likelihood of housing types and tenures attracting people who could help to reduce the Borough's identified skills gap.

Overall, **moderate positive effects** are predicted.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

This approach would see a slightly reduced scale of growth in Telford, in favour of delivering greater volumes of homes in Newport and Rural Areas.

Growth in Telford would still garner positive effects on the economy, as described previously (i.e. infrastructure improvement, increased footfall, investment and balancing economic and housing growth).

Growth in Newport would be approximately 300 homes fewer than that outlined in Option 2.3. This may slightly reduce the positive effects on the economy, but nevertheless, there ought to be benefits arising in the town.

Housing growth in Rural Areas would be lower than outlined under Option 2.2, but still at a level that could help to provide rural economies a boost, and to attract workers with higher skills levels.

Overall, this approach would offer a well distributed delivery of housing growth and associated effects across the Borough. The focus on Telford should help reinforce economic growth and improvements to supporting infrastructure, whilst the level of development Newport and the rural areas is also sufficient enough to support improvements to the economy in these locations, whilst providing homes for a wider range of workers. Overall, potential **major positive effects** are predicted.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would see distribution of housing growth aligned with Options 1.1 and 2.1, however where this is a higher growth scenario, the scale of overall growth would be greater (particularly in Telford). Telford would see the majority of growth, continuing the development pattern of recent years; Newport would see a modest increase of 741 dwellings and Rural Areas would see growth of 553 homes.

The addition of 10,329 dwellings in Telford would be likely to lead to some significant boosts to the local economy in the town. Existing shops and services in local service centres as well as the main town centre would be likely to benefit from increased footfall, in turn boosting viability and preserving employment. Additional shops and services would be likely to be delivered to cater for the population growth. The infrastructure being delivered to support the housing growth in the town would be expected to have benefits including better digital and mobility based connectivity, public realm improvements and new educational facilities. These would be likely to attract new investment to the area as it makes it a more favourable and attractive location for organisations to operate in. The large number of homes would be expected to provide appropriate housing types and tenures aimed at attracting specific demographics which could help to reduce the skills shortage in the area, whilst also tackling deprivation. The concentration of economic activity and employment in Telford as well as its position as a relatively well-connected town to other urban conurbations in the region means that locating housing here is positive in terms of reducing the need to commute, or offering housing which is broadly accessible to employment by sustainable means of transport.

Growth in Newport would be 741 dwellings. Whilst it would not be likely that new shops and services would be delivered to cater for the growth in population, it would be expected that existing shops and services would benefit from increased footfall. It would also be likely that, as previously discussed, the supporting infrastructure for the housing development could act as a pull factor to attract new investment into the town.

Rural Areas would see a share of 553 dwellings; this would not amount to a significant amount of housing in any one settlement. However, the associated population increase would be likely to lead to increased footfall within existing shops and services. Some supporting infrastructure such as digital connectivity could also serve to provide some minor increased in rural employment, particularly through live-work units which support the current increase in working-from-home behavioural patterns. The effects are unlikely to be significant for rural communities though.

Overall, where housing delivery in the Borough would be higher, the focus of growth in Telford would likely concentrate the most positive effects in the area's core settlement. The more modest housing growth in Rural Areas and Newport would be expected to deliver positive effects, mostly surrounding boosts to the viability of existing shops and services. Given that this scale of housing growth supports a high economic performance scenario, a potential **major positive effects** would be realised. There is sufficient land to support housing and employment opportunities, and so it is considered unlikely that there would be major conflicts in terms of competing land use.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

This approach would offer a reduced level of growth in Telford (though the town would still see a significant number of additional dwellings) in favour of allocating a larger share of housing in Rural Areas.

Though of a reduced magnitude, the housing growth in Telford would be expected to see effects aligned with those set out under Option 3.1, with significant positive effects being experienced in the area regarding economic factors. Newport would see growth and associated effects of the same scale and distribution as set out under Option 3.1.

Rural areas would see 2,393 additional dwellings spread out between the areas. This would be likely to support existing shops and services as well as deliver some additional provisions to cater for the population growth (partially due to the relative scarcity of existing shops and services in these areas). This would be expected to increase local GVA and employment. As previously discussed, supporting infrastructure would be likely to improve rural employment, including supporting live-work housing. Rural living may be more attractive to certain demographics; appropriate targeted housing types and tenures could help to attract people who would be suited to high-level professional occupations, helping to boost the Borough's employment in these jobs.

Overall, significant positive effects would be likely to be experienced in Telford as well as in Rural areas; Newport would see some positive effects relating to growth, though these would not be as pronounced. Overall, **major positive effects** are predicted.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

This approach would aim to deliver growth in Telford which is aligned with Option 3.2 and growth in Rural Areas which is similar to Option 2.3. There would be a greater emphasis on housing growth in Newport.

Newport would see 2,121 additional dwellings over the plan period. It would be likely that the associated population growth would increase the viability of existing shops and services whilst also potentially supporting the expansion and provision of additional shops and services to cater for demand; this would be expected to boost employment. Supporting infrastructures associated with growth which have been previously outlined would be likely to make the town more attractive to investors. As Telford and Wrekin's second largest town, it would be likely that locating significant housing growth nearby to employment would be beneficial in terms of reducing the need to commute. It could also, alongside the provision of appropriately targeted housing types and tenures, be expected to attract specific demographics to plug the skills gap identified in the area and fill higher level occupation groupings.

Overall, this approach would offer the most pronounced effects in Telford and Newport, the Borough's two largest towns. Fewer benefits would be directed towards Rural areas, though these areas would still be likely to see some minor benefits. **Major positive effects** are predicted

Option 3.4: Rural and Newport growth

Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

This approach would offer a broadly similar distribution of growth as outlined in Option 1.4 and 2.4, however the level of growth would be higher in each settlement. This approach would offer a distributed approach to housing growth across the Borough, whilst respecting the current settlement hierarchy and building upon existing infrastructure.

The large-scale growth in Telford would be expected to broadly mimic those effects outlined under Option 2.1. Growth in Newport should be sufficient to support increased footfall, infrastructure improvements and provide homes that are attractive to a skilled workforce. Though rural growth would be distributed across several settlements, it could lead to some incremental improvements in these areas that contribute to positive effects for rural economies.

Overall, **major positive effects** are predicted.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
							?	?			

Transportation

Ensure that provision of transport infrastructure reflects local population and demographic needs, promotes sustainable modes of travel, connects new housing to employment, education, health and local services and maximises accessibility for all.

Growth Scenario 1: Extending existing Local Plan growth- 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

In relation to transportation, housing delivery can have mixed effects. On the positive side, current policy helps to ensure than connectivity within development sites is broadly favourable for active modes of transport; which is particularly relevant for larger sites. Developer contributions help to fund improvements to sustainable transport to connect housing growth with shops, services and employment; this may come in the form of new of improved active travel infrastructure or public transport services. Active travel infrastructure may include junction safety improvements, increased signage and locking facilities; larger sites may help to fund new segregated walking and cycling routes. Developer contributions and population growth can lead to expansions of existing bus routes, or in some cases, where housing volumes are greater, new routes being provided. In terms of railway improvements, new infrastructure would be unlikely at this scale of planning, however provisions such as timetable improvements and extra carriages may help to cater for population growth. In all cases it is important to ensure a networked approach to the delivery of sustainable transport provisions, focusing on multi-modal interchanges at a multitude of scales is delivered to maximise behavioural effects (for example, bicycle locking facilities at bus stops, up to railway and bus station facilities being focused together). Despite efforts to provide sustainable modes of transport, current behavioural norms mean that car use is the predominant form of day-to-day travel. As such, housing development often provides upgrades to the road network to cater for additional growth and hence greater volumes of traffic using the road network. Smaller scale developments might be more likely to provide work such as junction improvements, whilst larger sites may warrant the delivery of new, strategic transport routes such as link roads and bypasses. Such larger scale improvements may benefit an area's economic growth and favourability as an area to invest in. More negative implications associated with housing growth relates to their associated increase in traffic volumes using the road network. This can result in significant increases in congestion, especially at peak times and at traffic pinch points.

The location of new development could vary widely around Telford, depending upon which sites are involved on the urban periphery. However, broadly speaking, locating the majority of growth within Telford would maximise the potential for the additional journeys to make the most of existing infrastructure relating to sustainable modes of transport. The high density of shops, services and employment within Telford would reduce the need to travel longer distances for the occupants of the additional housing, making active travel a more viable modal choice for day-to-day journeys. The concentration of growth would also be likely to lead to some strategic pooling of developer contributions in order to help to fund infrastructure such as segregated cycle lanes. There would be the potential for the significantly increased population to drive up viability for expanding public transport services to and from key areas of population growth, connecting to areas of high shop, service and employment densities (such as Telford and Newport town centres). To the east of the urban area, National Cycle Route 55 runs adjacent to the urban periphery.

This could potentially provide opportunities to ensure good links from new development in this location to sustainable modes of travel for recreation and movement. Likewise, the strategic cycle network for the borough connects with Route 55 and is also well connected to the northern parts of the Telford urban area.

Locating growth in Telford which is relatively well connected (via bus and train) to conurbations outside of the Borough has the potential to drive up sustainable forms of cross boundary commuting. Whilst these effects are positive, the large amount of housing growth would be likely to result in a significant increase in cars on the road, driving up congestion in Telford itself. This would be expected to be more prevalent as an issue at peak journey times and at traffic pinch points. The location of growth will be important to determine effects, but the overall level of growth is likely to generate effects regardless of location.

The small amount of growth within Rural Areas would not be expected to result in any significant infrastructure improvements beyond potentially some additional local bicycle locking facilities and junction safety improvements (including priority signals). It would not be expected that existing public transport services would see any extensions to services, though some very minor improvements to the viability of peak time services may be seen. Whilst the low scale of growth would be unlikely to lead to significant traffic volume related problems as a result of the relatively low population density in these areas, the lower level of local shops, services and employment may lead to an increase in car dependency.

Growth in Newport would also be of a small scale and hence effects would be minor. It would be likely that the population growth would increase traffic volumes on the roads, especially at peak times, creating potential issues at pinch points. There is limited sustainable transport services and infrastructure in Newport compared to Telford and the low scale of growth would not be likely to lead to any additional services, but may provide some small scale active travel facilities (such as locking facilities or junction improvements).

Overall, the majority of growth and associated effects would be expected to be seen in Telford, with some more minor effects in Rural Areas and Newport. On balance, weighing up the effects across the Borough, it is likely that this approach would promote **moderate positive effects** (with regards to modal shift and good accessibility) and **minor negative effects**, with regards to congestion in the Telford urban area.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This approach would involve a reduced level of growth in Telford, with a greater emphasis on growth in Rural Areas; Newport would see the same level of growth as outlined under Option 1.1.

Effects in Telford would be likely to be broadly aligned with those set out under Option 1.1, though to a slightly lower magnitude. It would still be possible to achieve strategic infrastructure improvements, but there would be a greater element of uncertainty.

In Newport, as growth would be the same as Option 1.1, effects would be replicated.

Rural areas would see additional growth to that set out under Option 1.1. This would be likely to increase the viability of more regular public transport services as well as potentially improving active travel facilities within the rural areas, connecting new housing growth to existing local shops and services; it would not be expected that provisions would be delivered

which lead to significant improvement in the connections between rural settlements and Telford or Newport. Whilst congestion is less likely to be a problem in these rural areas, locating housing growth in areas with a low concentration of shops, services and employment would be expected to drive up car dependency.

Overall, mixed effects are likely. **Minor positive effects** relating to sustainable transport provisions and a reduced need to travel would be likely to be seen in Telford, whilst Rural Areas could see some boosts to local active travel facilities and potentially some improvements to public transport (These are minor positive effects overall). On the flipside, Telford would still be expected to see some congestion related issues and rural areas may see an increase in car dependency, which are **minor negative effects**.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

This approach would involve growth and effects in Telford which are aligned with that outlined under Option 1.2.

Growth and effects in Rural Areas is double that for Option 1.1, but still of a low scale, particularly when distributed across several settlements. As such, effects would remain of minor significance.

This option would offer a greater focus of housing delivery within Newport. The fact that Newport has a relatively high concentration of shops, services and employment means that locating housing here would reduce the need for populations to travel long distances on a day-to-day basis, in turn increasing the potential for journeys to be made by active means. Where there is a relative lack of cycle infrastructure within the town, developer contributions could help to provide additional provisions including locking facilities, junction improvements and potentially some limited segregated routes connecting growth to jobs and services. It would also be likely that the increased population would increase the viability of existing public transport services around the town as well as connecting it to Telford. Despite the improvements to sustainable travel in Newport, it would be likely that the increase in car journeys made as a result of the population growth would lead to some congestion related issues, especially at peak times and at traffic pinch points.

Overall, the most pronounced growth and effects would be likely to be seen in Telford and Newport. Where this would be positive in terms of locating the majority of housing in close proximity to shops, services and growth, as well as offering the potential to improve active transport infrastructure and public transport services, **moderate positive effects** are likely. That said, where this growth would all be directed towards urban areas which are more susceptible to congestion, the expected increase in traffic volumes would be likely to cause some issues in areas nearby to development at peak journey times and especially at traffic pinch points; **minor negative effects** are likely.

Option 1.4: Rural and Newport growth
Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

This option would offer a distributed approach, with effects being realised more widely across Telford, Newport and Rural Areas. Though growth would be at a reduced scale, the effects would be expected to be broadly aligned with Options 1.2 and 1.3 for Telford; whilst these

effects would be likely to come into play, their significance would be expected to be reduced in line with the lower levels of housing.

Growth and effects in Newport would be likely to be at a slightly reduced scale when compared to Option 1.3, though the broad nature of effects would be very similar. When focusing on Rural Areas, this option would distribute fewer dwellings between the settlements receiving growth when compared to Option 1.2. This would mean a fairly small difference in growth and as such, effects are likely to be aligned.

Overall, this approach would be expected to have potential **moderate positive effects** and **minor negative effects** in the Borough. The main benefit would be a more dispersed approach, which should limit congestion in any particular location. However, this is more likely to lead to a continued reliance on car travel, with increased trips to and from settlements. Access to services for communities in rural areas would not be great, and thus a proportion of new development would be less likely to encourage modal shift.

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This option would place the broad emphasis of housing growth in Telford, with small amounts going to Newport and Rural Areas. In this respect, the effects in Telford which are outlined under Option 1.1 would be magnified. Given the overall increased scale of growth, public transport would be likely to see some additional services alongside extensions of existing routes. Active travel infrastructure would be likely to be delivered, connecting housing growth to the centre of Telford with some segregated cycle routes, junction improvements, better legibility of routes and more frequent locking facilities. The fact that Telford has a high density of shops, services and employment means that housing is likely to be broadly accessible to a range of facilities, increasing the potential for active and sustainable travel. The increase in growth would be expected to lead to result in congestion related issues in the town, especially nearby to development at peak travel times.

Growth and effects in both Newport and Rural Areas would be slightly higher than that outlined under Option 1.1 for both areas. Where the scale of growth would be not significantly different from Option 1.1, effects are anticipated to be broadly aligned.

This option is predicted to have potentially **major positive effects** (with regards to the majority of growth being located in Telford, which has excellent accessibility and could be improved) and **moderate negative effects** (relating to increased congestion possibilities in Telford in particular).

Option 2.2: Rural growth

Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

This approach would be expected to see a reduced level of growth in Telford when compared to Option 2.1, in favour of delivering more homes in Rural areas. Though the scale of growth in Telford would be reduced, the nature of positive effects would be broadly aligned, though to a slightly reduced magnitude to account for the reduced housing delivery. Newport would

see the same housing growth, distribution and associated effects that are outlined under Option 2.1.

Where this approach would offer some more pronounced differences to Option 2.1 would be in rural areas which would see a greater concentration of housing delivery. 2,001 additional dwellings would be distributed between the areas identified as suitable for growth. As such, each settlement may see approximately 400 additional dwellings (assuming a relatively even distribution). It would not be likely that this would deliver large scale improvements to sustainable transport, instead it might be likely that some expansions to existing bus routes and timetables may cater for the additional growth as well as the likelihood of some new active travel infrastructure such as improved junctions and locking facilities. As rural areas are generally relatively small, accessing local shops and services by active means should be viable. Whilst rural areas are less likely to experience congestion related issues, the more isolated nature of these settlements and their low density of shops, services and employment mean that this may have some consequences relating to increases in car dependencies.

Overall, **moderate positive effects** and **moderate negative effects** are predicted reflecting the issues discussed above.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

This option would offer growth in Telford which aligns with Option 2.2, however the emphasis of growth elsewhere would be in Newport. As such, growth and associated effects in Telford would be likely to be aligned with that set out under Option 2.2 and growth and associated effects in Rural Areas would be expected to be broadly the same as set out in Option 2.1.

Newport would see some more substantial housing growth which could serve to have mixed effects in the town. The scale of development would be likely to magnify the effects outlined under Option 1.3. This increase in significance of effects could relate to an increased viability of delivering improved sustainable transport provisions, connecting housing to employment, shops and services as well as other settlements. The fact that Newport has a concentration of employment, shops and services within the Borough means that housing is likely to be relatively well connected, increasing the potential for an increase in active travel. That said, the increased scale of growth would be likely to lead to worsened congestion issues, especially at peak journey times nearby to development.

Overall, this approach would be likely to distribute the more pronounced effects between Telford and Newport, with some less significant effects in Rural Areas. **Moderate positive effects** and **moderate negative effects** are predicted for the Borough.

Option 2.4: Rural and Newport growth
Growth in Telford: 5,699
Growth in Newport: 1,426
Growth in Rural Areas: 1,698

This option would offer a more distributed approach, with effects being realised more evenly and widely across Telford, Newport and Rural Areas. Though growth would be at a reduced scale, the effects would be expected to be broadly aligned with Options 2.2 and 2.3 for Telford; whilst these effects would be likely to come into play, their significance would be expected to be reduced in line with the lower levels of housing.

Growth and effects in Newport would be likely to be at a slightly reduced scale when compared to Option 2.3, though the broad nature of effects would be very similar. When focusing on Rural Areas, the effects are likely to be mixed, with some benefits brought in terms of infrastructure enhancement and improved viability of services, whilst at the same time potentially leading to greater car reliance / longer trips.

Overall, the distribution of growth across Telford and Wrekin would mean that benefits and drawbacks associated with housing growth would be seen in a greater number of areas, rather than just focusing on one or two settlement types. This approach would be expected to have **major positive effects** (with the majority of growth being focused in accessible locations and / or being able to contribute towards improved infrastructure) and **moderate negative effects** (related to increased congestion in Telford and Newport and some increased car dependencies in rural areas) in the Borough.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This high growth option would focus a significant majority of housing growth in Telford, with smaller amounts in Newport and Rural Areas. The large amount of housing in Telford would be likely to magnify the previously outlined effects for the town in relation to transport. New and improved public transport services would be likely to connect new housing to Telford and Newport Town Centres (as well as other, cross-boundary key destinations), this would also benefit existing residents who live nearby to the improved services. It would be likely that additional active travel facilities would link new growth to local shops and services as well as the town centre of Telford, helping to encourage walking and cycling as a primary means of day-to-day travel. This scale of growth could also help to fund some strategic road upgrades in order to handle the anticipated increase in journeys being made; it is difficult to predict the exact nature or viability of such a scheme, but the concentration of growth in one settlement would be likely to increase the potential for such a scheme to be delivered. Locating this scale of growth in Telford would also be beneficial in terms of locating the majority of housing in close proximity to the Borough's greatest concentrations of employment, helping to reduce distance-based barriers to active commuting. More negative implications would be expected to link to the significant increase in congestion associated with the increase in car journeys. This would likely play out predominantly at peak times and a traffic pinch points, however this scale of growth could (without adequate mitigation works) lead to issues close by to large scale of development throughout the day.

Growth of 741 dwellings in Newport is a fairly modest. It would not be expected to lead to the delivery of more strategic, higher level sustainable transport links, however existing public transport routes would be likely to see some increased viability alongside some smaller-scale active travel based improvements such as junction works and locking facilities. The increase in population could lead to some congestion related issues, especially at peak times and at traffic pinch points nearby to development.

The growth of 553 dwellings distributed across rural settlements would be likely to lead to some small scale improvements to active travel infrastructure, similarly to that outlined in Newport. Rural bus services may see some minor increases in usage, especially at commuting times. The lower density of employment, shops and services in these areas may drive up car dependency in the area.

Overall, whilst effects would be less pronounced in Newport and Rural Areas, the concentration of growth in Telford which is considered to be sustainable in terms of its accessibility to shops, services and employment would provide enhanced opportunities for the provision of infrastructure and services to cater for sustainable forms of transport. As such, **major positive effects** are predicted for the area. In addition to these effects, congestion would be expected to increase fairly substantially in Telford, especially nearby to growth and at peak journey times. Some mitigating infrastructure could reduce some of these issues, however **moderate negative effects** are still likely. The effects for Newport and rural areas would be minor in nature.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

This approach would deliver approximately 1800 fewer dwellings in Telford than outlined under Option 3.1, this growth would instead be allocated in Rural Areas.

Despite the reduced growth in Telford, the broad nature of effects outlined under Option 3.1 would be expected to be replicated under this approach, albeit at a slightly reduced magnitude. Nevertheless, the scale of growth is still likely to bring about major benefits in terms of infrastructure and accessibility, but also contribute to increased traffic.

Growth and associated effects in Newport would be the same as outlined under Option 3.1 (relatively minor effects).

Rural areas would see housing growth of 2,393 dwellings. It would not be likely that this would deliver large scale improvements to sustainable transport, instead it might be likely that some expansions to existing bus routes and timetables may cater for the additional growth as well as the likelihood of some new active travel infrastructure such as improved junctions and locking facilities. As rural areas are generally relatively small, accessing local shops and services by active means should be viable. Whilst rural areas are less likely to experience congestion related issues, the more isolated nature of these settlements and their low density of shops, services and employment mean that this may have some consequences relating to increases in car dependencies.

Overall, this approach would be likely to promote **major positive effects** and **moderate negative effects**. The benefits would be most felt in Telford, and rural areas could possibly become less isolated and better linked to other places. However, there would be an increase in car dependency and potential congestion issues in Telford in particular.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,013

Despite the reduced growth in Telford, the broad nature of effects outlined under Option 3.1 would be expected to be replicated under this approach, albeit at a slightly reduced magnitude. Growth and associated effects in Rural Areas would be the similar as outlined under Option 3.1 (despite there being an increase).

Newport would see some more substantial housing growth which could serve to have mixed effects in the town. The scale of development would be likely to magnify the effects outlined

under Option 2.3. This increase in significance of effects could relate to an increased viability of delivering improved sustainable transport provisions, connecting housing to employment, shops and services as well as other settlements. The fact that Newport has a concentration of employment, shops and services within the Borough means that housing is likely to be relatively well connected, increasing the potential for an increase in active travel. That said, the increased scale of growth would be likely to lead to worsened congestion issues, especially at peak journey times nearby to development.

Overall, this approach would be likely to promote **major positive effects** and **moderate negative effects.**

Option 3.4: Rural and Newport growth

Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

This option would offer a more distributed approach, with effects being realised more widely across Telford, Newport and Rural Areas.

For Telford and Wrekin as a whole, this approach would be beneficial in terms of distributing the positive effects of growth across a range of areas. There is also a strong focus on Telford, which is the most accessible location; hence **major positive effects** are likely. On the flipside, the spread of housing delivery would also lead to a spread of negative implications relating to increased congestion in more urban areas (particularly Telford and Newport) and increased car dependencies in rural areas. Hence, **moderate negative effects** are predicted too.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
			?								

Equality and Diversity

Tackle inequalities, ensure that decisions do not disproportionately affect minority populations and that services can be accessed equally by all.

Growth Scenario 1: Extending existing Local Plan growth- 5,582

Option 1.1: Maintain current strategy

Growth in Telford: 5,134
Growth in Newport: 257
Growth in Rural Areas: 190

With regards to equality and diversity, the distribution and scale of development is likely to relate to a number of factors. Accessibility is a key area of focus, where less accessible areas may leave those unable to drive or those without the means to access such means of travel more isolated and unable to access shops, services or employment. This might encompass educational facilities for younger populations, or healthcare facilities for elderly of disabled people, to name a few. As such this topic has a broad distinction of effects relating to urban and rural development. Rural development may be better suited to those who have enabling resources, including transport, a higher income and the ability to work from home, as well as those who are physically more able. It also considers whether development would be likely to lead to effects in areas which could be considered deprived (for the purposes of this appraisal, deprivation is determined by the 2019 Index of Multiple Deprivation). There are concentrations of certain communities, particularly in Telford, with the north and eastern parts of the built up area seeing higher proportions of BAME populations.

Growth within the urban areas of Telford and Newport would be likely to come forward under any approach. These sites are mostly small to medium sized and would not be likely to lead to any significant deliveries of infrastructure which would lead to effects on surrounding communities. Many of the sites are brownfield in nature, and hence their regeneration could lead to some improvements to public realm, which may be especially beneficial in more deprived areas which may have struggled to see investment in recent years. There could be benefits for women if the public realm is improved, and areas that are 'inactive' are brought into use. These effects within the urban areas would be expected to be realised under all approaches and are minor positives.

Growth on more peripheral areas of both Telford and Newport may lead to some additional infrastructures being delivered to support the increases in population. The level of provisions would be influenced by the scale of proposed growth. This is important for Telford because whilst it is connected to existing urban areas, some of the peripheral locations may have relatively poor accessibility, meaning that those with poor mobility (personal and access to automotive means to travel) may suffer from forms of isolation. Growth to the north of the urban area would be relatively close to concentrations of BAME communities. This could have benefits with regards to new homes and supporting social infrastructure being built in areas that may be attractive to such communities. There may also be benefits through improved access to open space, public services and transport.

Newport's peripheral areas are still broadly well connected to shops, services and facilities and hence, any growth around the town would not be expected to isolate any given sector of the community. As such, throughout this topic, the scale of peripheral growth is likely to bear influence on the scale of additional services provided to cater for the growth.

Considering the above, this approach would place some release of land on Telford's periphery. Where this could be clustered together it would be likely to improve accessibility of the area somewhat, helping to reduce potential isolation. This might also have benefits for certain BAME populations.

Growth in Newport would be of a fairly small scale and hence this would be unlikely to deliver significant supporting infrastructure. Equally, it would be unlikely to result in any groups of the population being negatively or disproportionately affected.

Rural growth under this option would be of a small scale. This would be unlikely to deliver any new infrastructure or significantly leave any groups of the population being disproportionately affected. However, it would do little to address current issues such as poor access to services.

Overall, **minor positive effects** are predicted. Whilst a broadly positive approach is taken, the significance of effects is restricted somewhat by the lower scale of growth (when compared to past rates of delivery). A lower scale of growth may be less capable of delivering housing needs and infrastructure improvements, and therefore positive effects on equality are only considered to be minor.

Option 1.2: Rural growth
Growth in Telford: 3,777
Growth in Newport: 257
Growth in Rural Areas: 1,547

This option would see a reduced scale of growth on Telford's periphery. This would be expected to somewhat reduce the delivery of accessible infrastructure on the peripheral areas. However it would still be likely to support the locations of growth, ensuring that new populations are not left isolated, though this would be seen to a reduced scale when compared to higher growth options. Minor positive effects are likely.

Growth and associated effects in Newport under this approach would be expected to be aligned with that set out under Option 1.1. (i.e. neutral / minor positive).

This option would place a greater emphasis on rural growth. It would be difficult to cluster this rural growth in concentrated areas and as such, this would be likely to lead to some more isolated housing being delivered that favours those with higher incomes and mobility. Conversely, the level of growth involved could potentially lead to minor improvements in services and infrastructure in rural areas, helping to reduce isolation. It could also help to improve affordability.

This approach would be likely to lead to a mix of effects as discussed above. Both **minor positive effects** and **minor negative effects** are predicted.

Option 1.3: Newport growth
Growth in Telford: 3,777
Growth in Newport: 1,275
Growth in Rural Areas: 529

Growth in Telford under this approach would be expected to mimic that set out under Option 1.2, with some minor positive effects.

This option would place a greater emphasis on housing in Newport. None of this development would be considered especially inaccessible, and the larger scale of growth would be expected to deliver some supporting shops and services (including potentially expanding schools and healthcare facilities), resulting in some benefits to accessibility to new and existing residents. This would be unlikely to disproportionately impact any groups of the population.

Rural growth under this option would be of a small scale (albeit higher than Option 1.1). This would be unlikely to deliver any substantial new infrastructure or significantly leave any groups of the population being disproportionately affected. However, it will have minor effects in terms of addressing rural affordability and mobility issues.

Overall, **minor positive effects** are predicted.

Option 1.4: Rural and Newport growth

Growth in Telford: 3,269
Growth in Newport: 1,021
Growth in Rural Areas: 1,293

Growth and associated effects under this approach would see a reduced delivery of housing on Telford's periphery. This would be expected to somewhat reduce the delivery of accessible infrastructure on the peripheral areas. However it would still be likely to support the locations of growth, ensuring that new populations are not left isolated, though this would be seen to a reduced scale when compared to higher growth options.

Growth and associated effects under this approach in Newport would be likely to be of a magnitude and nature broadly similar to, although marginally reduced than that seen under Option 1.3.

Effects relating this this approach's rural delivery of housing would be mixed (as described for option 1.2 albeit that being of a higher scale of growth).

This approach is therefore predicted to lead to **minor negative effects** and **minor positive effects.**

Growth Scenario 2: Re-based population led growth – 8,822

Option 2.1: Maintain current strategy

Growth in Telford: 7,921
Growth in Newport: 517
Growth in Rural Areas: 385

This approach would involve a higher level of overall development, most of which will be directed towards Telford's urban periphery. Where this growth would be clustered, this would be expected to increase the viability of delivering infrastructure which helps to serve prospective residents with more limited personal mobility. Growth to the north of the urban area in particular could bring some benefits with regards to BAME communities. Similar benefits could be realised to the east of the urban area, but to a lesser extent. Overall, moderate positive effects are predicted in this respect.

Growth and associated effects in Newport would be of a scale slightly above that set out under Option 1.1. This would be unlikely to deliver significant supporting infrastructure.

Equally, it would be unlikely to result in any groups of the population being disproportionately affected.

Rural growth under this option would be of a small scale (albeit higher than Option 1.1). This would be unlikely to deliver any new infrastructure or significantly leave any groups of the population being disproportionately affected.

This approach would be likely to have mixed effects. The growth around Telford would be expected to see **moderate positive effects**, whilst the rural growth could lead to uncertain **minor negative effects.**

Option 2.2: Rural growth
Growth in Telford: 6,305
Growth in Newport: 517
Growth in Rural Areas: 2,001

Growth and associated effects under this approach would be expected to be of a magnitude sat between scales set out under Options 1.1 and 2.1 in Telford, stemming from its peripheral growth.

Growth and associated effects in Newport under this approach would be expected to be aligned with that set out under Option 2.1.

This option would place a greater emphasis on rural growth. It would be difficult to cluster this rural growth in concentrated areas and as such, this would be likely to lead to more isolated housing being delivered, disproportionately affecting those with poorer access to personal mobility. However, it could also help to address affordable housing issues and support infrastructure improvements, potentially having minor to moderate positive effects on these communities.

Overall, this approach would be likely to lead to **minor negative effects** relating to growth in rural areas, with some potential **moderate positive effects** relating to Telford's peripheral growth and some rural areas possibly seeing improved services and affordability.

Option 2.3: Newport growth
Growth in Telford: 6,305
Growth in Newport: 1,729
Growth in Rural Areas: 789

Growth in Telford under this approach would be expected to mimic that set out under Option 2.2 (i.e. moderately positive effects).

This option would place a relatively large emphasis on housing in Newport. None of this development would be considered especially inaccessible, and the larger scale of growth would be expected to deliver some supporting shops and services (including potentially expanding schools and healthcare facilities), resulting in some benefits to accessibility to new and existing residents. This would be unlikely to disproportionately impact any groups of the population in a negative way and the improved accessibility may see some minor positive effects.

Rural growth under this option would be relatively modest in scale, and effects would be expected to be minor.

This approach would be likely to have mixed effects. The growth around Telford could lead to **moderate positive effects**, whilst a small amount of additional growth in the rural areas could perpetuate negative effects around mobility in the longer term (though or some settlements it could possibly help improve accessibility and affordability). These are potential / uncertain **minor negative effects**.

Option 2.4: Rural and Newport growth

Growth in Telford: 5,699
Growth in Newport: 1,1426
Growth in Rural Areas: 1,698

Growth and associated effects in Telford under this approach would be aligned with that set out under Option 1.1 (moderate positive effects)

Growth and associated effects in Newport would be likely to be similar with those set out under Option 1.3. (i.e. minor positive effects)

Growth and associated effects in rural areas would be likely to be similar to that set out under Option 2.2. (i.e. minor negative effects / minor positive effects).

Considering the above, some mixed effects are likely with **moderate positive effects** relating to Telford's peripheral growth and minor benefits in Telford and rural settlements. There could also be some **minor negative effects** relating to rural growth and poor accessibility.

Growth Scenario 3: High performance growth- 11,622

Option 3.1: Maintain current strategy

Growth in Telford: 10,329
Growth in Newport: 741
Growth in Rural Areas: 553

This approach would maximise growth on Telford's periphery. This would be expected to deliver some infrastructure to support the prospective populations, ensuring those with difficulties with mobility are not disproportionately affected. These provisions may also benefit wider communities on the edges of Telford, nearby to the growth. This includes BAME communities to the north and east of the urban area in particular.

Growth and associated effects around Newport under this approach would be likely to be of a scale in between that set out under Options 1.3 and 2.1. Whilst new populations or individual groups would not be expected to be disproportionately negatively affected by these plans, it would also not be likely that significant development supporting infrastructures would benefit the wider community.

Rural growth under this option would be of a small scale. This would be unlikely to deliver any new infrastructure or significantly leave any groups of the population being disproportionately affected.

The effects for this approach would be likely to be mixed. The growth around Telford could lead to **major positive effects,** with the rural growth being expected to result in **minor negative effects**.

Option 3.2: Rural growth
Growth in Telford: 8,489
Growth in Newport: 741
Growth in Rural Areas: 2,393

Growth and associated effects around Telford under this approach would be likely to be of a magnitude in between that set out under Options 2.1 and 3.1 (i.e. moderate to major positive effects).

Growth and associated effects in Newport under this approach would be expected to be aligned with that set out under Option 3.1 (minor positive effects).

This option would place an emphasis on rural growth. It would be difficult to cluster this rural growth in concentrated areas and as such, this could lead to more isolated housing being delivered, disproportionately affecting those with poorer access to personal mobility. Whilst the scale of growth proposed under this approach would lead to some infrastructure delivery in areas accessible to those with reduced personal mobility capacity, there would be a range of services and facilities which would not be accessible to these populations.

Mixed effects would be likely across the Borough as a result of this approach, potential **major positive effects** associated with the growth on Telford's periphery are recorded alongside potential **moderate negative effects** relating to larger amounts of growth in rural areas.

Option 3.3: Newport growth
Growth in Telford: 8,489
Growth in Newport: 2,121
Growth in Rural Areas: 1,012

Growth and associated in Telford under this approach would be expected to mimic that set out under Option 3.2 (i.e. moderate positive effects).

This option would place a relatively large emphasis on housing in Newport. A minority of this development would be considered more inaccessible, and the larger scale of growth would be expected to deliver some supporting shops and services (including potentially expanding schools and healthcare facilities), resulting in some benefits to accessibility to new and existing residents. This would be unlikely to disproportionately impact any groups of the population and the improved accessibility may see some minor/moderate positive effects for areas where growth could cluster to the south of the town. However, the more isolated areas which would be likely to be required to be allocated to meet the high housing demand would be unlikely to see as beneficial effects relating to improved delivery of infrastructures, making some of those future residents potentially isolated should they have a reduced personal mobility capacity.

Rural growth under this option would be of a modest scale and likely to lead to a mix of minor positive and minor negative effects for the reasons discussed previously.

This approach would be likely to have mixed effects. The growth around Telford would be expected to see some moderate to major positive effects, whilst the rural growth would be likely to lead to minor negative effects / minor positive effects. Growth in Newport would be expected to see a mix of minor positive effects relating to the clustered growth, and negligible negative effects relating to the less accessible areas of housing.

Overall, these effects are likely to amount to mixed **minor negative** and potential **major positive effects** considering the cumulative benefits of development.

Option 3.4: Rural and Newport growth

Growth in Telford: 7,799
Growth in Newport: 1,776
Growth in Rural Areas: 2,048

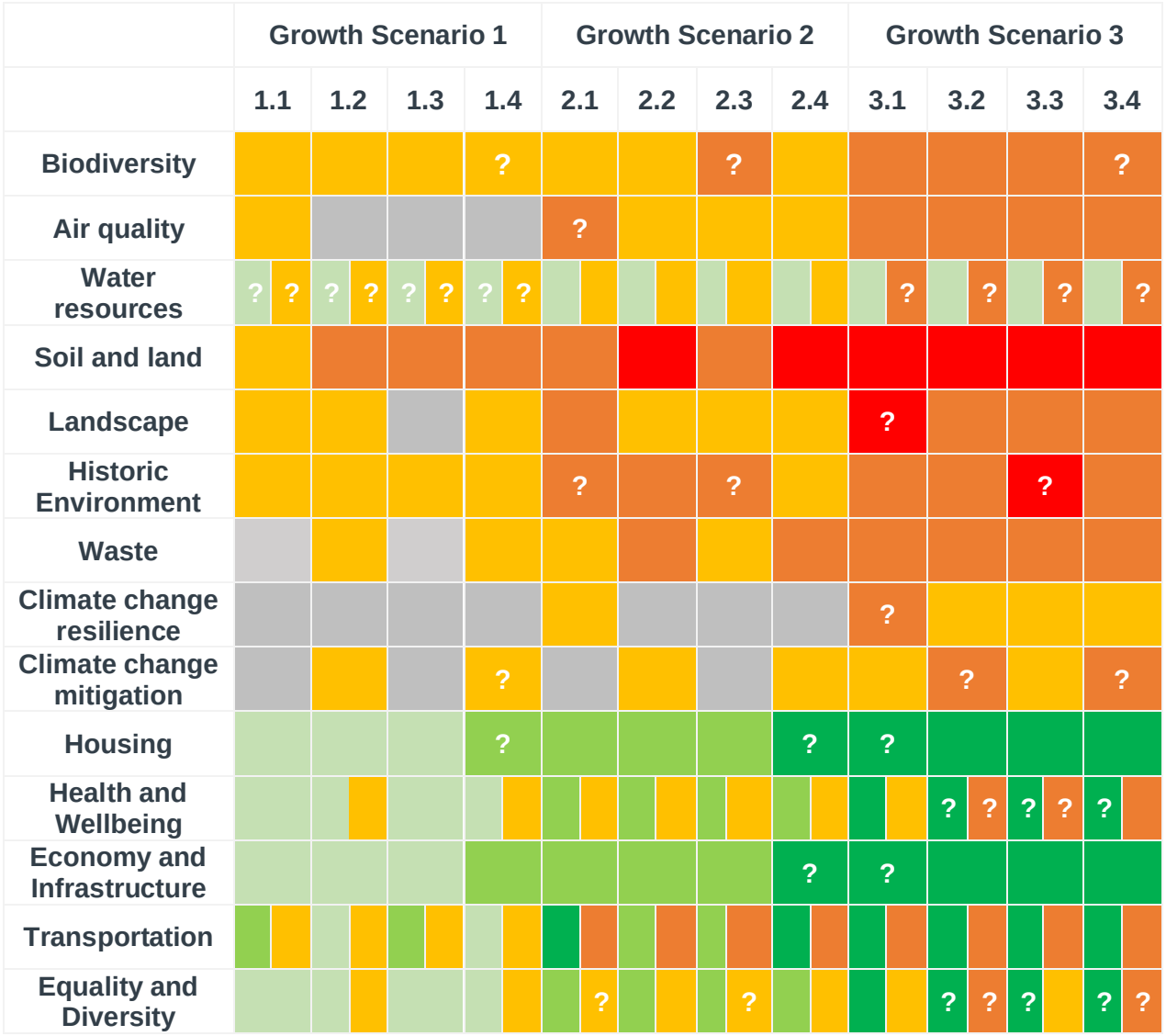
This approach would be expected to see growth and associated effects around Telford of a magnitude aligned with Option 2.1.

Growth and associated effects in Newport would be likely to be aligned with that set out under Option 2.3.

Growth and associated effects in rural areas would be likely to be of a scale and nature similar to that set out under Option 3.2.

Overall, this would be expected to have potential **major positive effects** relating to Telford's peripheral growth as well as housing delivery in Newport. This would be alongside potential **moderate negative effects** associated with a higher delivery of rural housing.

Growth Scenario 1				Growth Scenario 2				Growth Scenario 3			
1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
				?		?			?	?	?		?	?


Growth Scenario 1
Growth Scenario 2
Growth Scenario 3
1.1
1.2
1.3
1.4
2.1
2.2
2.3
2.4
3.1
3.2
3.3
3.4
Biodiversity
Air quality
Water resources
Soil and land
Landscape
Historic Environment
Waste
Climate change resilience
Climate change mitigation
Housing
Health and Wellbeing
Economy and Infrastructure
Transportation
Equality and Diversity

Summary of options appraisal

Growth Scenario 1

Despite being the lowest growth scenario, the housing target is still in excess of the standard methodology, and therefore positive effects are likely. However, these would be at a lower magnitude than the higher growth scenarios which are based upon current trends. The same is the case for effects on economy and infrastructure.

With regards to distribution of housing, Option 1.4 is considered to be most favourable, as it spreads the benefits of development across the borough.

There are a range of sustainability topics that result in the same outcome regardless of distribution. This includes effects on the historic environment, climate change resilience, and biodiversity.

The main differences between the options are as follows:

- Option 1.1 results in less negative effects with regards to soil and land as it could better avoid the loss of Grade 2 agricultural land.

- Option 1.1 performs less well with regards to air quality, as it focuses more growth into Telford.

- Option 1.3 performs most favourably with regards to landscape, as it focuses growth into less sensitive areas of Newport.

- The options that involve rural growth (1.2 and 1.4) both perform less well with regards to waste, climate change mitigation and transportation, with the main reason being poorer access to services, a greater likelihood of car use, and less energy efficient patterns of development.

Growth Scenario 2

The middle level of growth sees an increased magnitude of effects for some sustainability topics. In particular, there are increased positive effects with regards to housing and economy, and the potential for development to help fund improvements in social and physical infrastructure, which leads to increased benefits in terms of transportation and health and wellbeing

Conversely, an increase in housing development is more likely to lead to an increase in the magnitude of negative effects for certain SA topics. In particular, the following issues are noted:

- Major negative effects on soil resources could occur should a large amount of growth be directed to the rural areas. Moderate negative effects are likely regardless of distribution given the higher scale of growth and loss of agricultural land.

- The effects on landscape are potentially higher for Option 2.1, as there could be cumulative pressures on more sensitive locations around Telford. However, despite the increase in growth, distribution of growth to Newport and the Rural areas should still be possible to accommodate without a change in the magnitude of effects compared to growth scenario 1.

- The potential negative effects on the historic environment increase in significance at the medium level of growth for all of the options apart from Option 2.4.

- Option 2.4, which spreads growth across a wider range of settlements, could potentially have greater benefits in relation to housing, economy and transportation.

Growth scenario 3

At the highest scale of growth, the positive and negative effects for each option are increased in terms of significance. The differences between the options at this scale of growth are less pronounced, which is to be expected given that each involve greater growth across the borough and at specific settlements.

At the higher scale of growth, air quality issues are predicted to be moderately negative, which is in most part due to the increased amount of trips that are likely to arise.

All of the options will give rise to major negative effects in terms of soil and land, which is due to lesser flexibility to avoid the more sensitive agricultural land.

At a higher scale of growth, regardless of distribution, the pressure on waste water treatment facilities could give rise to negative effects of a greater significance, but there is uncertainty. Likewise, an increase in homes will lead to increased waste generation and overall green house gas emissions.

From a positive perspective, there would be major effects with regards to housing, and the level of funding towards transport improvements could possibly give rise to major positive effects, whether this be in Telford, Newport or the rural areas.

The increased spending and investment in social infrastructure should also help to improve health and wellbeing and address inequalities.

Observations and recommendations

Given that each of the options involves substantial growth in Telford, it will be important to understand how growth can be distributed around the urban periphery in the optimal way to avoid negative effects, whilst taking advantage of opportunities. The north of the urban area contains areas of Grade 2 agricultural land, air quality, and landscape. Focusing a large amount of growth in this location could therefore lead to major negative effects on these factors. Having said this, there are some benefits to growth in this location (tackling deprivation, biodiversity enhancement opportunities) so an optimum balance of new development ought to be explored and contrasted with growth in other locations.

Growth to the east of Telford could be relatively unconstrained by environmental factors, and could present opportunities for strategic infrastructure enhancement. However, it could present infrastructure challenges that potentially impact the viability of large scale development in this location.

Growth to the west of the urban area close to the AONB could be particularly sensitive with regards to landscape and biodiversity.

Telford has a good network of green infrastructure throughout and surrounding the urban area. Development should seek to maintain and enhance these networks. A comprehensive approach to GI that promotes corridors across site allocations would be a proactive approach and could help to facilitate net gain in the longer term.

There are limitations to a dispersed focus approach to growth, but some rural locations have relatively few environmental constraints, and could contribute to the spatial strategy.

An increase in growth at Newport should be possible to accommodate without generating significant negative effects, and whilst seeking to enhance social infrastructure and environmental quality to the south of the town. However, there is a tipping point, where effects upon heritage and landscape character could become difficult to avoid and mitigate if the level of growth is too high.

Appendix C : Strategic Employment Options Appraisal

Biodiversity

Avoid impacts on biodiversity, whilst mitigating and compensating any acceptable impacts, achieving net gains through enhancements, and creation of well-connected, functional habitats that are resilient to development, recreational and climate change pressures.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

The brownfield site adjacent to Junction 5 of the M54 contains substantial areas of woodland, some of which are classified as priority habitat. Development here for employment purposes could potentially lead to the loss of some habitat, but it will be necessary for this to be avoided, mitigated and compensated for. The smaller brownfield site in Ketley is unconstrained with regards to biodiversity and therefore unlikely to lead to any effects on biodiversity. Overall, minor negative effects are predicted, and this applies to each of the options discussed below.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

Development at Cludley would be relatively small scale, and would not overlap with any designated habitats. However, the sites are bounded by trees / vegetation, which would likely be disturbed during development. It ought to be possible to retain and enhance these features though. Though the site is within 1km of The Wrekin and The Erkall SSSI,it is considered unlikely that significant effects would arise (given that the main pressures on the site are recreational, and this would be employment uses). Neutral effects are predicted in this respect. With regards to Newport, a small site is proposed under this option, which is predominantly agricultural in nature. There are natural features such as trees at the boundaries, and species utilising these features would likely be negatively affected. However, it should be possible to avoid the loss of habitat, and net gain could potentially be achieved on site. Therefore, neutral / minor effects are anticipated.

The key feature of this option is substantial growth to the north of Telford. The proposed employment land does not fall within any designated habitats, and apart from boundary hedges, do not consist of any important habitat. However, one parcel of land is managed by an environmental stewardship agreement. A change in use could have negative effects with regards to the current environmental protection function this area has. It ought to be possible to mitigate and compensate for this by seeking net gain across the broader employment area, but nevertheless, these are minor negative effects.

Overall, **minor negative effects** are likely to arise in several locations across the borough, but cumulatively, this is unlikely to significantly affect biodiversity (particularly when the requirement for net gain is taken into account).

Option 1.2: Dispersal variation 1

This option would have less negative effects on biodiversity at North Telford, as it excludes the parcel of land that is currently under an environmental stewardship agreement. There would be slightly higher levels of growth at Newport, but the additional site involved is agricultural in nature and not likely to be of a high ecological value. Therefore, neutral / minor effects are anticipated in this respect.

The scale of growth at Cludley would also be higher compared to Option 1, with an additional large parcel of land to the south of the M54. This site is mainly agricultural, but is scattered with trees and other vegetation. It is also closer to the edge of the The Wrekin and the Ercall SSSI. Whilst development would be unlikely to directly affect the SSSI, there could be indirect effects on species relating to noise. The effects are considered to be minor though. An additional site would be involved at Junction 6 of the M54 for this option. This is largely unconstrained with regards to biodiversity designations, but it is bounded by priority habitats (woodland) and is close to Ketley Brook, which has ecological values. It is likely that there would be some minor negative effects as a result of development, but with mitigation, it is expected that major negative effects are avoidable.

Overall, a **minor negative effect** is predicted, reflecting the minor issues that could arise in several of the proposed locations across the borough.

Option 1.3: Dispersal variation 2

This is a similar approach to Option 1.2 in that the same strategy is proposed with regards to North Telford and Junction 6 of the M54. At Cludley and Newport, there is growth for both of the dispersal options, but more is focused to Newport for 1.3 and more toward Cludley for Option 1.2. The additional growth in Newport would be close to the other two proposed sites, and would increase the amount of development in proximity to the Aqualate Mere SSSI. Though this land is not likely to be sensitive in terms of biodiversity features on site, there would be a need to ensure that coupled with housing growth this did not have detrimental effects on the SSSI as a result of ground and surface water extraction. These are **minor negative effects** overall.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

At the higher end of the needs range, the same sites are involved as per option 1, but with the addition of the M54 location. The additional growth brings with it minor negative effects in another location, but it is unlikely to significantly increase the overall / cumulative effects beyond option 2.1. Therefore, **minor negative effects** are predicted.

Option 2.2: North Telford without J6

This option has the same effects compared to Option 1.1, but increases the magnitude of growth at Newport. The effects are therefore likely to be more prominent at Newport, but not to the extent that major significant effects would arise. Therefore, overall **minor negative effects** are predicted.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

This option involves growth in all of the aforementioned locations, but with a lower amount of growth at North Telford (avoiding parcels of land that are currently within an environmental improvement agreement). Whilst the effects are likely to be less negative at North Telford, growth at all the other locations could each bring about minor negative effects with regards to biodiversity. Overall, these are considered to be **minor negative effects**.

Growth Scenario 1			Growth Scenario 2		
1.1	**1.2**	**1.3**	**2.1**	**2.2**	**2.3**

Air Quality

Protect and improve local air quality through implementing measures to reduce air pollution caused by road traffic and other sources in the borough.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

There are no Air Quality Management Areas (AQMA) within the borough and air quality monitoring[1] shows that pollutant levels within the borough are below national objective levels. However, there are locations where pollutants, such as nitrogen dioxide (NO2) build up close to busy roads due to road traffic. The brownfield site Land South of Holyhead Road (site 352), is surrounded by three major highways: the M54, A5 and A442 where the additional employment use is likely to produce increased car and HGV traffic potentially leading to negative effects due to the increased emissions. Whilst existing uses adjacent to site are commercial/ Industrial, there are sensitive receptors in the form of residential areas to the north and north west within 300-500m of the site. Therefore the cumulative effects of existing and proposed additional employment development is likely to be negative due to the scale of the development (over 10ha) and the likely increase in traffic generating activities in a location surrounded by major highways. The Land at Aga Rangemaster, Waterloo Road (site 498) site is relatively small by comparison (1.7 ha) but within less than 100m of a residential area and less than 1 km from the M54.

Overall the sites are likely to create additional car and LGV/HGV traffic on busy major highways leading to adverse effects on air quality and the sensitive receptors (residential areas) nearby. That said, the provision of employment opportunities within these existing central employment areas in centrally located, readily accessible locations would help facilitate employment growth locally, reducing the need to travel/ commute further afield to access employment opportunities. This will partly offset the negative effects described above. Given the accessible/ well located sites, the lack of AQMAs and generally good air quality, potential **minor negative effects** are anticipated overall.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The north Telford sites (Wheat leasows and Wappenshall sites) are adjacent to residential areas and the A442, in close proximity to existing large scale industrial / commercial development, these are likely to create additional HGV traffic with potentially adverse effects on air quality. However, air quality in this area is not a concern presently, and significant effects are unlikely.

There are no residential receptors at the Cluddley location (sites 356,362, 364). The sites are located directly north and south of the M54 at Junction 7. They are relatively small and there is limited employment use in this location so there is less likelihood of significant cumulative effects here.

The Newport site (south of A518) is a substantial site (6.7ha) and is adjacent to the A518 and A41 where additional the employment allocations are likely to create more traffic on the surrounding A roads. However, there are no residential developments nearby (nearest around 900m) and air quality is not currently a major concern.

[1] Telford & Wrekin Council 2022 Air Quality Annual Status Report

Growth within accessible well connected areas (e.g. the central employment area) will help reduce journey lengths and out commuting and the majority of sites have good access to strategic highways (e.g. M54, A5, and A41) which will help reduce HGV traffic through lower-level roads in residential areas.

Whilst there are no AQMAs and monitored pollutants are below national objective, the potential for some cumulative **minor negative effects** remains due to the large scale growth at north Telford, and smaller growth proposed closer to areas of concern such as Watling street.

Option 1.2: Dispersal variation 1

This option uses fewer of the North Telford sites, there would be slightly higher levels of growth at Newport, with an additional site south of the A518. This latter is in close proximity to a residential area and would likely generate additional traffic, particularly when considered in combination with the other the other site south of the A518, to the east (adjacent to A41). Therefore, minor negative effects are anticipated in this respect. The scale of growth at Cluddley would also be higher compared to Option 1, with an additional large site to the south of the M54. There are no residential receptors here and there is limited employment use in this location so there is less likelihood of significant cumulative effects (though it should be noted that traffic could be drawn through nearby areas including areas of concern such as Watling Street). This option would also include an additional site at Junction 6 of the M54. Any additional HGV traffic generated would be expected to use the M54 rather than residential roads, but increased car trips and LGV trips could be generated on local roads, which are relatively close to areas of concern such as Watling Street.

Overall, **minor negative effects** are predicted as this involves smaller scale growth in the north Telford location and the proposed employment locations are generally well serviced by strategic roads making HGV traffic on lower level residential roads less likely. However, the potential for increased car and light vehicle trips along roads increases, particularly with the inclusion of the J6 site, as there are several locations along the M54 corridor.

Option 1.3: Dispersal variation 2

This option involves a similar approach to Option 1.2 utilising some of the north Telford plus the Junction 6 / M54 site. Compared to Option 1.2 this option would involve greater level of growth at Newport (compared to Option 1.2) and smaller growth at Cluddley. The additional growth in Newport would be close to the other two proposed sites there and therefore likely to produce additional HGV traffic, however proximity to the Newport bypass (A41) should help divert most of the traffic away from residential roads. Overall, **minor negative effects** are predicted.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

The higher growth under this option utilises the same sites as option 1 plus the M54 Junction 6 location. This increases the potential for air quality to be affected across the borough, but is unlikely to significantly increase air quality issues in any location. The increase in growth toward the north / north east of the Telford urban area could possibly increase car trips and LGV trips through the urban area, which includes areas of concern such as Watling Street. In combination with housing growth, this is likely to lead to **minor negative effects** in terms of air quality. These effects could diminish in the longer term with an increased take up of ultra-low emission vehicles.

Option 2.2: North Telford without J6

Compared to the previous option, this option involves more growth at Newport where minor negative effects could arise. However in common with the Option 1.1 and and Option 2.1 the scale of growth at north Telford is likely to lead to some localised negative effects on air quality (especially if this location also involves housing growth). Less growth at the J6 site and Cluddley under this approach should help to reduce cumulative effects along the M54 corridor, as well as local roads that feed these main routes (some of which contain areas of greater concern with regards to air quality. Therefore, **minor negative effects** are predicted.

Option 2.3: Maximise growth elsewhere with remainder at N. Telford

This option utilises all of the aforementioned locations, but with a lower amount of growth at North Telford. This option also involves sites at Stockton (adjacent to A41) where there are no residential areas with good access to the A41. Therefore effects would be reduced at North Telford but the growth at all the remaining locations could engender minor negative effects. This approach involves several locations along the M54 corridor though, which cumulatively is likely to generate **minor negative effects**.

Growth Scenario 1			Growth Scenario 2		
1.1	**1.2**	**1.3**	**2.1**	**2.2**	**2.3**
?		**?**			

Water Resources

Promote sustainable forms of development which minimise pressure on water resources, whilst maintaining and enhancing the quality of the Borough's rivers, lakes and aquifers.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The borough is not considered to be in a water stressed location and the water utility company, Severn Trent have recently taken action to ensure the ongoing sustainability of supply to Telford by increasing output at the Uckington borehole. Similarly no issues emerge in relation to headroom capacity at wastewater treatment works serving the borough. That said the proposed employment growth would need to be ensure that it does not produce adverse effects on water resources and quality by incorporating appropriate wastewater treatment and disposal systems where required and the inclusion of SuDS. In this context the effects are considered neutral for all Options

Option 1.2: Dispersal variation 1

Neutral effects considered provided the above points are taken into consideration.

Option 1.3: Dispersal variation 2

As above **Neutral effects** considered likely overall.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

Whilst the higher level of growth means more water resources and wastewater treatment capacity would be required the difference in overall growth is not considered to produce significantly different effects considered to the lower growth options. As such, **neutral effects** are predicted overall.

Option 2.2: North Telford without J6

As above **Neutral effects** considered likely overall.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

As above **Neutral effects** considered likely overall.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3

Soil and Land

Promote the effective use of land, minerals and soil resources; supporting the protection of best and most versatile agricultural land, preserving minerals resources, and taking opportunities to enhance the value of land for biodiversity, carbon sequestration, and other beneficial functions.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

The brownfield site adjacent to Junction 5 of the M54 and the smaller brownfield site in Ketley are both within land classed as urban/ non-agricultural according to the Provisional Agricultural Land Classification (PALC) and therefore unconstrained with regards to soil and land. Overall, neutral effects are predicted, and this applies to each of the options discussed below.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The north Telford sites are underlain by mainly Grade 2 agricultural land with some Grade 3a. These grades are considered Best and Most Versatile agricultural land (BMV) therefore development here would lead to loss of high quality agricultural land (up to 67 ha). At the Cluddley location the sites are mostly underlain by Grade 3 land with a high probability (greater than 60%) of BVM (grade 3a) land[2]. The Newport site (south of A518) is underlain by Grade 2 land according to the ALC data and therefore development here would result in some loss of higher quality BMV agricultural land (up to 11ha).
In total this option would lead to a loss of BVM land of approximately 75-85 ha, of which the majority is likely to be Grade 2 and therefore considered **moderately negative**.

Option 1.2: Dispersal variation 1

This option would utilise less of the north Telford sites but more of the Cluddley sites with the addition of allocations at Junction 6 of the M54 where there is lower probability of BMV land[3]. Overall this option would lead to a lower degree of BMV land take than the previous option, and would likely involve less Grade 2 land. However, it would still lead to the loss of up to 70 ha of higher grade agricultural land. Therefore, **moderate negative effects** are envisaged overall (despite this option being more favourable than 1.1 in this respect).

Option 1.3: Dispersal variation 2

Compared to the previous option this one utilises a smaller area of land at Cluddley (BMV area) with a similar area of land at North Telford (BMV area) and increases growth at Newport where the majority of sites are underlain by Grade 2 (according to PALC). This option is likely to lead to the loss of around 70-80 ha of BMV land (of which much is likely to be Grade 2) producing **moderate negative effects** overall.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

[2] According to Natural England's Likelihood of Best and Most Versatile (BMV) Agricultural Land - Strategic scale map West Midlands Region (ALC016)

[3] Ibid.

This uses a similar amount of area at north Telford (BMV land) and Cluddley (BMV) as Option 1.1 with more growth at Newport (BMV). It uses the same amount of land at Junction 6 /M54 (non BMV) as the previous two options with the rest allocated to Newport (BMV). The increase in growth would also likely be on BMV and over 100 ha loss, which is a **major negative effect**.

Option 2.2: North Telford without J6

Compared to the previous option this would utilise more BMV land at Newport but does not utilise the non-BMV land at Junction 6/M54 leading to a loss of over 100 ha of BMV land. Overall a **major negative effect** is predicted.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

Compared to the previous option this involves less of the BMV land at north Telford but uses more of the BMV land at Cluddley and utilises the same area of BMV land at Newport. The option also includes a large parcel of land at Stockton (A41) which is Grade 2 BMV agricultural land. Overall this option would lead to a loss of over 100 ha of BMV land, which is a **major negative effect**.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3

Landscape

Protect and enhance the character of valuable landscapes and townscapes; whilst ensuring their multifunctional use and enjoyment by all.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

The brownfield site adjacent to Junction 5 of the M54 is within the existing urban area of Telford and currently surrounded by existing employment uses, the M54, A5 and the A442. Therefore, the landscape is considered to be of low sensitivity (though it does contain green infrastructure that will be important to retain). The smaller brownfield site at Ketley is also in a built up area in a location containing existing industrial/ commercial uses and with appropriate planting/ screening significant effects on the landscape would be avoidable. Overall, these sites are not considered to be sensitive in terms of their landscape or visual characteristics and their associated effects would be broadly **neutral** across all options.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

This option directs growth north of Telford where the location is of medium sensitivity to development. Towards the eastern end of the location, there are exiting extensive industrial/ commercial estates where the landscape would be less sensitive. However, at this scale of growth it would be difficult to confine development to the eastern parts of the site. Therefore minor negative effects are anticipated here growth is in areas of low/ medium sensitivity with only a small proportion of growth allocated in areas of high/ medium high visual sensitivity (and / or being possible to mitigate effects somewhat).

Option 1.2: Dispersal variation 1

This option proposes larger growth at Cluddley compared to the previous option. As discussed above, the landscape at this location is considered more sensitive to development and at this scale of growth it would be harder to entirely avoid impacts on the character of the landscape giving rise to moderate negative effects.

The effects north of Telford would be reduced as the proposed growth is lower than under the previous option 1.1. With regards to Newport, the site options west of the A41 are located in an area considered to be of high / medium-high visual sensitivity where the higher growth would make it more difficult to avoid negative effects entirely.

The Junction 6 of the M54 site is in an area of medium/high sensitivity being in a largely rural area around 1 km from the AONB, though there are some existing employment uses within the site. The northern part of the site is more urban in character and therefore less sensitive due to the M54 and employment uses to the north. That said at the scale of growth proposed the majority of the site would be utilised giving rise to moderate negative effects overall.

Overall, **moderate negative effects** are likely to arise due to growth proposed in areas of higher landscape sensitivity in rural locations close to the AONB.

Option 1.3: Dispersal variation 2

More growth is allocated to Newport under this option compared to the previous one. The location is rural comprised of open fields intercepted by the A41 with some small areas in employment use. Given the larger scale of growth proposed at this location and the high/ medium high visual sensitivity, moderate negative effects are likely. Similarly the growth at Junction 6 / M54 is considered to engender moderate negative effects due to the location's high/medium high landscape and visual sensitivity.

Overall, **moderate negative effects** are likely to arise due to the scale of growth proposed in areas of higher landscape/ visual sensitivity.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

The level of growth at north Telford would be similar to that under option 1.1, therefore the same minor negative effects are anticipated here. The Junction 6/M54 site is allocated a similar level of growth as in the previous option giving rise to moderate negative effects. Growth in the high sensitivity landscapes around Cluddley is limited under this option considered to be minor negative. Overall, **moderate negative effects** are likely to arise due to some of the growth proposed being in areas of higher landscape/ visual sensitivity.

Option 2.2: North Telford without J6

Significant growth is allocated at North Telford (at a similar level to Option 1.1) where minor negative effects are anticipated for the reasons outlined above. Growth at Newport is comparable to that under Option 1.3, therefore the same moderate negative effects are likely. Minor negative effects are associated with the lower scale of growth at Cluddley.

Overall this option is considerate to produce **moderate negative effects,** mostly due to the increased scale of growth north of Telford.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

In addition to substantial growth at Cluddley and Newport this option allocates substantial growth to sites at Stockton (A41), whilst this location is considered of relatively low landscape sensitivity it is currently rural in character, comprised of open fields. Development here would inevitably change the existing landscape and visual character therefore there is potential for some adverse effects with respect to landscape character. Overall, **moderate negative effects** are likely due to growth within areas of high/ medium high landscape sensitivity at Cluddley, Newport and Junction 6/M54.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3

Historic Environment

Conserve and enhance heritage assets (including their setting), cultural heritage and natural history.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

In general, the site options within the existing built-up areas of Telford and Newport are not especially sensitive in terms of heritage assets and the historic environment. Much of the urban area is also of mixed character with some brownfield sites negatively contributing towards a sense of historic character. In this context the brownfield site adjacent to Junction 5 of the M54 is not considered to give rise to significant effects on the historic environment. The same applies to the brownfield site at Ketley which is also in a built up area in a location containing existing industrial/ commercial uses with no designated heritage assets at this location. Overall, these sites are not considered to be constrained in terms of the historic environment and therefore effects would be broadly **neutral** across all options.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

There are a couple of designated heritage assets near the north Telford location; a Grade II listed building (Turnip Lock, Hadley Park Lock and adjoining bridge) around 250m south east of the proposed sites and a Scheduled Monument (Wappenshall canal bridge), just over 500m to the north. Therefore the large-scale employment development proposed here could possibly affect the settings of these assets. However, effects are moderated by the existing residential estates, extensive tree cover (separating the scheduled Monument from the north of the site) and the A442 in the intervening spaces between the proposed sites and the assets; therefore with mitigation the effects are considered to be minor negative overall. There are several designated heritage assets in the form of listed buildings adjacent to sites at Cluddley and the site just north of M54 is in close proximity to a registered Park and Garden. Therefore, employment development in this location can potentially have adverse effects on the historic environment. The assets would not be directly affected, but large warehouse units here could have an adverse effect on the setting of multiple listed buildings. As such, potential moderate negative effects are identified.

The site option at Newport is within 500m of a registered Park and garden and there are three designated heritage assets (listed buildings) south of the proposed site where development can potentially change the rural setting. However, there would remain ample areas of open space and it us likely that only minor negative effects would arise.

Overall, potential **moderate negative effects** are predicted due to the growth proposed in areas in proximity to designated heritage assets (Particularly at Cluddley). The more limited scale of growth proposed at Newport offers scope for avoiding the most sensitive areas and the implementation of appropriate mitigation.

Option 1.2: Dispersal variation 1

This option involves smaller scale of growth in North Telford (compared to option 1.1) therefore effects there would be reduced in magnitude. However this option involves greater growth at Cluddley which is relatively more constrained in terms of the historic environment and the rural setting. The allocation at the Junction 6 location is relatively unconstrained with respect to the historic environment. The negative effects associated with growth at Cluddley is counterbalanced by growth in less constrained locations such at Junction 6 of the M54, leaving residual **moderate negative effects** overall.

Option 1.3: Dispersal variation 2

This option would involve less growth at Cluddley than the previous option thus reducing adverse effects there (But still in line with option 1.1). The additional significant growth at Newport would utilise a large site to the east of the A41 near existing business/ retail uses, which is less sensitive with regards to heritage. Therefore, overall potential **moderate negative effects** are predicted.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

This option involves the same level of growth at North Telford as Option 1.1 with likely minor negative effects. However overall effects are considered **moderately negative** due to the growth at Cluddley and Newport which is similar to that proposed under Option 1.2.

Option 2.2: North Telford without J6

The substantial growth at Newport under this option is anticipated to result in the same moderate negative effects discussed under Option 1.3 above. The same minor negative effects are predicted for the North Telford locations (as described under Option 1.1). Overall **moderate negative effects** are considered likely.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

The larger growth proposed at Cluddley (similar to Option 1.2) and Newport is considered to lead to moderate negative effects. The growth allocated to Stockton (A41) is in close proximity (within 500m) of a cluster of Grade II and Grade II* listed buildings where development is likely to adversely affect the rural setting of the assets. Overall, **moderate negative effects** are predicted.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3
?		?			

Waste

Minimise waste generation and support the circular economy by implementing the waste hierarchy.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

Opportunities for incorporating circular economy practices are more likely to occur within existing employment/ industrial locations such as business parks/ industrial estates where there would be more scope for companies to operate in a symbiotic business relationship for example by making use of each other's surplus energy or materials in their operations, or through resource or knowledge sharing. In this context the brownfield site adjacent to Junction 5 of the M54 is considered potentially positive as it is well served by the strategic road network and is within the central employment area of the borough. The same applies to the brownfield site at Ketley which is also in a well-connected area within a business park. Overall these sites are considered to have minor positive effects due to access to major highways (M54) and proximity to existing business uses. However, these are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

This option includes substantial growth at north Telford where there is good access to the highway network (e.g A442) and there are several major strategic employment areas such as at Donnington, Hadley Park and Hortonwood. Small scale growth is proposed at Newport close to the South Newport strategic employment area with access via the A41 and A518. The Cluddley location is close to the M54 but there are no major employment uses in the vicinity. Minor positive effects are possible due to the large scale growth in north Telford (and the constant urban brownfield sites); locations considered to have good access to strategic highways and to strategic employment locations within the borough (helping to promote efficient waste management. However, these are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Option 1.2: Dispersal variation 1

Lower growth is proposed at north Telford reducing some of the positive effects discussed under the previous option. There is larger allocation at Cluddley (compared to 1.1) where there are no major employment estates reducing the potential for circular economy practices. Similarly at the Junction 6 there is good access to the strategic highway network but no strategic commercial/ industrial areas nearby. The Newport allocation benefits from good access to strategic roads and being in the South Newport strategic employment location. Minor positive effects are possible due to growth in accessible locations at and allocations within existing strategic employment areas at north Telford and south Newport. However, these are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Option 1.3: Dispersal variation 2

Compared to the previous option this one involves less growth at Cluddley and more at Junction 6 and Newport. The latter benefits from proximity to the strategic employment area of South Newport and both locations are well served by the strategic highway network leading to potential minor positive effects with regards to circular economy opportunities. However, these are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

This is similar to Option 1.1 in that major growth is focused within north Telford; where the same positive effects could be expected. Similarly positive effects are associated with the Newport allocation due to proximity to major highways and the strategic employment area. Neutral effects are associated with the Junction 6 allocation where there is good access to the strategic highway network but no strategic commercial/ industrial areas nearby. However, positive effects are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Option 2.2: North Telford without J6

Positive effects are associated with the focus of growth at north Telford and Newport due to accessibility and proximity to strategic employment areas. Neutral effects are associated with the small growth at Cluddley. However, these are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

Neutral effects are predicted for the allocation at Cluddley and Stockton where there are no major strategic employment sites but good access to the highways network. More opportunities for circular economy could arise at the strategic south Newport employment area. However, these are counterbalanced somewhat by the waste that will be produced during construction and operation of new businesses. Therefore overall, **neutral effects** are predicted.

Growth Scenario 1			Growth Scenario 2		
1.1	**1.2**	**1.3**	**2.1**	**2.2**	**2.3**

Climate Change Resilience

Adapt and become more resilient to the impacts of climate change, including the effective management of flood risk, and preparing for more extreme weather events.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

The Ketley site is in an area of low fluvial and surface water flood risk therefore adverse effects are unlikely in terms flood risk. However, the M54 site is adjacent to areas of flood zones 2/3 and could result in a reduction in green infrastructure, leading to negative effects on surface water run-off. That said, it would be expected that any development would take account of the potential for future extreme rainfall events due climate change through design measures such as SuDS and the incorporation of green/ blue infrastructure. The fact that these sites are within urban areas make them more vulnerable to extreme heat conditions due to urban heat island effects. Again, this should be addressed through design considerations by incorporating cooling measures such as tree shading, greenspace provision and building orientation. Overall, potential **minor negative effects** are anticipated in connection with these constant sites due to the relatively low risk of flooding and the potential to incorporate improved drainage and design measures to mitigate heat island effects. Additionally, Telford's widespread provision of greenspace should help to mitigate potential negative effects relating to flooding and heating.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The allocation at north Telford under this option is located in an area that is mostly at low risk of fluvial and surface water flooding. However, there are watercourses crossing the site, which bring bands of Flood Zone 2/3. It is probable that these areas could be avoided though given the scale of the sites and the overall land requirement for employment. Nevertheless, potential **minor negative effects** are highlighted. The North of Telford area is largely rural where there is less likelihood of urban heat island effects. Similarly the allocation at Cluddley and Newport are in areas of low flood risk and non-urban. The development of greenfield sites, which can decrease rates of infiltration and lead to faster surface water flows and have downstream implications. However, it expected that there will be a requirement to implement SuDS and provide green infrastructure as part of new developments. A loss of greenfield land and replacement with buildings can also be negative in terms of contributing to the urban heat island effect. However, in the rural areas, this is not a critical issue. Overall, taking account of the urban constants and the additional sites, a potential **minor negative effect** is predicted.

Option 1.2: Dispersal variation 1

Lower scale growth is proposed at north Telford than in the previous option with more growth directed to Cluddley, Junction 6 and Newport. All these locations are in areas considered to be at low risk of flooding. They are also rural/ semi-rural in character therefore there is less likelihood for urban heat island effects. The likelihood of flood risk at North Telford remains the same though, given that the parcels of land proposed are those intersected by areas of flood zone 2/3. Overall, taking account of the urban constants and the additional sites, a potential **minor negative effect** is predicted.

Option 1.3: Dispersal variation 2
The lower scale of growth proposed at north Telford is accompanied by more growth at Junction 6 and Newport where the risk of flooding is also low and the locations are rural/ semi-rural. Overall, taking account of the urban constants and the additional sites, a potential **minor negative effect** is predicted.
Higher end of needs range (189ha) with 20% flexibility = 227ha
Option 2.1: Maximise North Telford plus Junction 6
Under this option most of the growth goes to north Telford and Newport with some growth allocated to Cluddley. Compared to option 1.1, the additional growth involved is in areas that are not particularly sensitive with regards to flooding or urban heating. Therefore, potential **minor negative effects** remain despite an increase in land release.
Option 2.2: North Telford without J6
Compared to option 1.2, the additional growth involved is in areas that are not particularly sensitive with regards to flooding or urban heating. Therefore, potential **minor negative effects** remain despite an increase in land release.
Option 2.3: Maximise growth elsewhere with remainder at N.Telford
Compared to option 1.2, the additional growth involved is in areas that are not particularly sensitive with regards to flooding or urban heating. Therefore, potential **minor negative effects** remain despite an increase in land release.

Growth Scenario 1			Growth Scenario 2		
1.1	**1.2**	**1.3**	**2.1**	**2.2**	**2.3**
?	**?**	**?**	**?**	**?**	**?**

Climate Change Mitigation

Facilitate and contribute to the move towards a carbon neutral Telford and Wrekin whilst improving social equity of access to energy.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

Focusing employment growth within centrally located, accessible locations is likely to reduce the need to travel further afield to access employment opportunities. Urban locations are also likely to be better served by more sustainable forms of transport such public transport (e.g. buses and trains) and walkways/ Cycleways. In this context the brownfield sites at Junction 5 of the M54 and Ketley are considered to be well located in urban areas well served by public transport (e.g. Telford Centra and Oakengates railway stations and bus services). That said increased employment growth is likely to result in more vehicular emissions particularly from HGV transport, especially if the employment is distribution/logistics. Whilst this is a short to medium-term problem in terms of GHG emissions for the Borough, the anticipated rapid policy and market driven introduction of electric vehicles is likely to mitigate some of the effects over the longer term. Clustering sites in close proximity to strategic employment locations can also help increase the viability of centralised heating/ cooling systems and onsite renewable energy generation for example through solar arrays, small-scale battery storage, solar hot water farms and ground source heat pumps. Overall **minor positive effects** are likely as the locations encourage sustainable forms of transport, reducing the need to travel / commute and the proximity to the strategic central employment area can facilitate energy efficiency measures and circular economy practices.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The north Telford sites are at the urban fringe of Telford where public transport provision is expected to be lower, though Wellington train station is just over 2 miles away. On the other hand proximity to the strategic employment locations of Horton Wood, Hadley Park and Donnington is likely to facilitate improved public transport services and make energy efficiency schemes such as district heating networks and circular economy practices more likely with potentially beneficial effects on GHG emissions reduction. The smaller scale allocations at Cluddley are relatively remote and less well served by public transport but given the smaller growth proposed only minor negative effects are likely in this respect. The small allocation at Newport is also less well served by public transport but is in a strategic employment area where the potentially positive synergies discussed above would be more likely. Overall the positive effects associated with the central brownfield sites and the north Telford allocations are counterbalanced by some adverse effects associated with the relatively remote allocations at Newport and Cluddley leaving residual **minor positive effects** overall.

Option 1.2: Dispersal variation 1

This option involves smaller growth at north Telford (compared to the previous option) and greater growth at Cluddley and Newport. Additionally this option includes growth at Junction 6 of the M54, a relatively central location within the urban area, around 1.7 miles from Wellington railway station and 3 miles from Ironbridge Park and Ride and in close proximity to the strategic central employment area. Overall positive effects are associated with the growth at Junction 6 and north Telford but the effects are counterbalanced by some adverse effects (discussed above) associated with the larger growth at Cluddley giving potential **minor positive effects** overall.

Option 1.3: Dispersal variation 2

Positive effects are associated with the growth allocated to north Telford and Junction 6 (both at similar levels to the previous option) and the lower growth assigned to Cluddley. Larger scale of growth is allocated to Newport than in the previous option and whilst the location is less well served by public transport and relatively distant from central Telford, it falls within the strategic employment area of South Newport where the additional growth can potentially facilitate improved public transport and presents opportunities for a centralised energy strategy providing low carbon energy to the strategic employment area. Overall **minor positive effects** are envisaged due to growth in well connected locations (north Telford and Junction 6) and the opportunities presented by clustering growth in strategic employment locations (e.g. at South Newport).

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

Positive effects are associated with the growth at north Telford and Newport due to proximity to strategic employment areas where the clustering of employment allocations can lead to synergies in terms of centralised low carbon/ renewable energy systems. The Junction 6 allocation is also considered positive due to the location being centrally located and well served by public transport. This is counterbalanced by the minor adverse effects associated with the Cluddley allocation giving **minor positive effects** overall. Though the overall amount of land provided under this option is higher than option 1.1, the effects are not likely to be significantly greater in terms of emissions.

Option 2.2: North Telford without J6

Positive effects are anticipated due to the allocations at north Telford and Newport due to proximity to existing strategic employment areas. Some minor negatives are associated with the smaller allocation at Cluddley due to the relative remoteness of the site. Overall **minor positive effects** are considered likely under this option.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

Negative effects are associated with growth in the relatively remote/ rural locations of Cluddley and Stockton. These are offset by positive effects associated with the allocations at north Telford, Junction 6 and Newport giving **minor positive effects** overall.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3
		?			

Housing

Support timely delivery of an appropriate mix of housing types and tenures, including a focus on maximising the potential of suitable brownfield opportunities, to ensure delivery of high-quality housing that meets the needs of Telford and Wrekin residents.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Option 1.1: Maximise Growth North of Telford and 'top up sites'

Each of the sites involved in this option have been promoted for employment uses. There are sufficient other sites to meet housing needs in locations that are less suited for employment land (particularly strategic sites that need good motorway connections). Therefore, it is considered that this option would be compatible with housing growth options and would not negatively affect delivery. In this respect, neutral effects are likely. Some minor positive effects are recorded as it is likely that increased job offerings in Telford can attract housebuilders to provide the new homes needed to support workers. Overall, a **minor positive effect** is predicted.

Option 1.2: Dispersal variation 1

Dispersal to a greater number of sites / locations is unlikely to have any differential effect with regards to housing delivery compared to option 1.1. Therefore, a **minor positive effect** is also predicted.

Option 1.3: Dispersal variation 2

Dispersal to a greater number of sites / locations is unlikely to have any differential effect with regards to housing delivery compared to option 1.1. Therefore, a **minor positive effect** is also predicted.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

The effects would be similar to those described above under the lower range of needs scenario. The increase in employment land provision under this approach could drive up demand for housing further (perhaps helping with delivery), but it would not be expected to be significantly more than the lower growth options, given that there is only a difference of 27ha in land in total. Overall, **minor positive effects** are predicted.

Option 2.2: North Telford without J6

The effects would be similar to those described above under the lower range of needs scenario. The increase in employment land provision under this approach could drive up demand for housing further (perhaps helping with delivery), but it would not be expected to be significantly more than the lower growth options, given that there is only a difference of 27ha in land in total. Overall, **minor positive effects** are predicted.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

The effects would be similar to those described above under the lower range of needs scenario. The increase in employment land provision under this approach could drive up demand for housing further (perhaps helping with delivery), but it would not be expected to be significantly more than the lower growth options, given that there is only a difference of 27ha in land in total. Overall, **minor positive effects** are predicted.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3

Health and Wellbeing

Support healthy, safe lifestyles and environments for all community groups; whilst seeking to close 'inequality gaps' and improve resilience to health issues.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The provision is additional employment land will improve the local economy and access to employment and training opportunities with positive knock-on effects on health and wellbeing due to improved incomes, skills and job prospects (discussed under the economy and infrastructure topic). These are minor positive effects in one respect.

Some of the locations proposed would result in the loss of areas of green / open space with potentially negative effects on wellbeing. The constant brownfield sites are within the urban area where there is smaller provision of green space and growth here would lead to the loss of some open/ green space although this may not be particularly accessible space. On balance minor negative effects are considered likely due to loss of green/ open space in busy urban locations. The larger site in the urban area close to Central Park is adjacent to some new housing, but employment uses are already established in this location. Whilst additional employment land could potentially bring increased traffic, it is considered unlikely that significant effects on amenity would arise for residents given the current situation.

Growth at north Telford is in a relatively rural location at the urban fringe of Telford where there is greater degree of green / open space provision. Therefore the effects are not considered significant here in terms of loss. Development would also be close to existing employment and therefore considered broadly suitable in terms of neighbouring land uses Though there would be considerable residential areas located on the opposite side of the A442, which may be affected by increased traffic and noise, these effects ought to be possible to mitigate and are not considered significant. Conversely, jobs growth in this location close to residential areas should help to improve access to employment and improved infrastructure.

Neutral effects would be expected at Cluddley and Newport where there is existing green/ open space provision due to the rural nature of these locations. There would likely be limited effects on access to recreation and open space as a result of development here. Residential amenity could be affected for a handful of properties, but significant effects would not be expected.

Overall, mixed effects are predicted. On one hand, **minor negative effects** are expected due to the loss of the amenity green/ open space certain locations and the potential for employment uses to cause amenity concerns through visual, noise and traffic near established residential areas to the North of Telford. However, a significant increase in employment and supporting infrastructure should help to provide jobs, mostly in areas that are accessible to deprived communities and by active modes of travel, which should have long term benefits for health. These are **minor positive effects**.

Option 1.2: Dispersal variation 1

The growth at Junction 6 will result in the loss of open green space here, but this is not public recreation ground, so the effects in terms of health would be limited. Furthermore, there remains a large amount of green/ open space provision nearby.

Though employment would bring some access to jobs, the positive effects would likely be minor given the relatively low amount of land involved or this option.

Similarly, negative effects on recreational space at north Telford, Cluddley and Newport are not considered significant given that the land us mostly in private use and there would remain substantial areas of open space nearby. Effects on amenity due to increased economic activity would be limited given the low number of properties likely to be affected and the relatively small scale of growth.

Overall, neutral to potential **minor negative effects** are predicted, as most of the land proposed for employment is not likely to affect recreation and leisure opportunities (but there are some effects on amenity likely).

Some sites are near to existing active travel routes and could promote active travel, which is beneficial for health. An increase in employment and supporting infrastructure should also help to provide jobs, some of which would be in areas that are accessible to deprived communities (which should have long term benefits for health). These are **minor positive effects**.

Option 1.3: Dispersal variation 2

The effects would be similar to option 1.2, with the main difference being increased growth in Newport rather than Cluddley. Both locations are unlikely to have significant effects on open space provision or access to recreation, and both are fairly accessible by active travel routes (though less so than the Telford based sites when considering deprived communities). Overall, mixed effects are predicted (potential / uncertain **minor positive effects** and **minor negative effects**).

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

As in the previous options, some **minor negative effects** would be likely due to the loss of green space and impacts upon amenity. However, the additional growth involved would not lead to the effects being of greater significance. With regards to positive effects, this option is likely to bring job opportunities in areas that are accessible to deprived locations, as well as being near to active travel routes. Therefore, uncertain/potential **moderate positive effects** are predicted.

Option 2.2: North Telford without J6

This option is likely to have similar effects to option 2.1. Though all of the sites are broadly supported by active travel routes, some are less accessible to deprived communities. Therefore, overall, mixed effects are predicted (potential **moderate positive effects** and **minor negative effects**).

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

This approach is unlikely to lead to significant loss of important open space for recreation and therefore effects are likely to be minor negative (as per the other options). The potential for positive effects is similar to option 2.1 in that employment growth is provided in areas that are accessible by active means

Growth Scenario 1						Growth Scenario 2					
1.1		1.2		1.3		2.1		2.2		2.3	
		?	?	?	?		?		?		?

Economy and Infrastructure

Build upon key industries and support growth, timely investment in infrastructure and economic diversification that has tangible benefits to the lives of local residents whilst addressing social inequalities.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Constant site allocations: Urban brownfield

The provision of additional employment areas is likely to lead to economic and employment growth and possibly contribute to enhanced infrastructure and services. Locations earmarked for growth would also benefit from increased footfall particularly in urban areas and in proximity to existing strategic employment areas. Larger employment developments can facilitate better transport and infrastructure provision due to the improved economies of scale. The additional employment opportunities created can also help address deprivation in the more deprived areas of the borough and help reduce inequalities. In this context the brownfield site allocations are considered to lead to minor positive effects due to being located at the centre of the most densely populated area within the borough (urban areas of Telford) and proximity to the strategic central employment area.

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The growth proposed at north Telford is likely to facilitate improved employment opportunities at the urban fringe of Telford. The scale of growth involved and proximity to major strategic employment areas should help produce the economies of scale required for improved infrastructure provision and produce increased footfall leading to moderate positive effects. The smaller scale growth at Cluddley and Newport would help bring some local employment opportunities to these locations too, but this is less likely to bring about improved infrastructure due to the small scale growth proposed. Overall **moderate positive effects** are considered likely.

Option 1.2: Dispersal variation 1

Whilst the more dispersed approach is likely to spread the economic benefits across both urban and rural areas of the borough it is less likely to provide the economies of scale required for the provision of new infrastructure and services. In this instance growth would be anticipated to bring about some benefits to Cluddley providing improved employment opportunities there. The allocations at north Telford and Junction 6 are likely to benefit from being in centrally located areas within the urban area of Telford and from proximity to the borough's strategic employment areas. This is likely to bring about some improved infrastructure and services, but overall effects are likely to be smaller in magnitude at north Telford. However, **moderate positive effects** are still anticipated as a wider range of locations are offered, which should help with diversity of employment land and access to a wider range of communities.

Option 1.3: Dispersal variation 2

This larger allocation of growth at Newport is potentially positive due to proximity to the strategic South Newport employment area where cumulative employment development can produce enhanced economic growth and infrastructure provision to Newport. **Moderate positive effects** are anticipated as a wider range of locations are offered compared to 1.1, which should help with diversity of employment land and access to a wider range of communities. It would also place growth in two hubs for employment at North Telford and Newport (building upon existing employment in these areas).

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

The higher employment growth is expected to bring about greater employment and economic growth to the borough. This option focuses growth to north Telford (in addition to the constant brownfield sites) and junction 6 both of which are considered to produce positive effects due to proximity to exiting strategic employment areas where the cumulative growth is expected to produce increased investment leading to improved infrastructure provision and economic growth. The locations should also help to benefit deprived communities. This option would involve some small scale growth at Cluddley and Newport helping bring about local employment opportunities to these locations. Overall, **major positive effects** are identified. There would be likely infrastructure enhancement to the north, as well as a greater range of locations across the borough to deliver further employment near to existing strategic employment locations.

Option 2.2: North Telford without J6

This option would produce the same positive effects associated with the growth at north Telford with further positive effects expected at Newport where a greater level of growth (compared to Option 2.1) is allocated. The latter allocation benefits from being within the strategic employment area of south Newport where it would be expected to help bring about improved infrastructure provision and economic growth. The overall effects are considered to be similar to those under Option 2.1 namely **major positive effects**.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

This option includes significant growth at Stockton, relatively distant from the main urban areas and strategic employment sites therefore less this is likely to bring about improved infrastructure. However the allocation would provide improved employment opportunities locally and to the surrounding rural areas. The same level of growth is proposed for Newport as in Option 2.2 so effects there would be on par. Overall this dispersed approach is anticipated to bring about potential **major positive effects** as it helps spread the economic and employment benefits across urban and rural areas of the borough. However, it is less likely to produce the economies of scale required for significant improved infrastructure in some locations, and thus there is a greater element of uncertainty that major effects would arise.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3
					?

Transportation

Ensure that provision of transport infrastructure reflects local population and demographic needs, promotes sustainable modes of travel, connects new housing to employment, education, health and local services and maximises accessibility for all.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The focus of growth within the urban areas is generally better served by sustainable transport than the more rural locations. The clustering of growth within existing strategic employment areas is likely to bring about improvements in the transport infrastructure and sustainable transport services. In this context growth within the constant brownfield sites is anticipated to be positive as these locations are well served by public transport where the additional growth can facilitate improvements to sustainable transport services (e.g. bus services) and active travel infrastructure such as cycle and pedestrian walkways. Whilst the large growth allocated at north Telford is in an area less well served by public transport, the focus of growth in proximity to existing strategic employment areas can facilitate improved sustainable transport infrastructure and enhanced public transport services. This location also has potential as a mixed use site, which would bring new homes in close proximity to employment and also bring further investment in infrastructure. The small-scale growth at Cluddley is in a relatively remote location less well served by sustainable transport services and employment areas thus effects are considered neutral here. The growth at Newport is unlikely to facilitate improved transport provision due to the small scale of growth proposed. Overall, potential **moderate positive effects** are predicted due to the growth allocated within the brownfield sites and economies of scale at north Telford that could help to expand sustainable transport.

Option 1.2: Dispersal variation 1

Smaller growth is allocated to north Telford therefore reducing some of the positive effects there. The larger growth at Cluddley is in a more rural location with lower transport connectivity and sustainable transport services but the growth may help bring about some improved transport infrastructure and services though this is unlikely to be significant. The growth at Junction 6 is potentially positive as it is within an accessible location within the main urban area of the borough and well served by existing transport infrastructure and public transport services therefore minor positive effects would be expected here. The growth at Newport may bring about some improvements to transport infrastructure and sustainable transport provision due to being in strategic employment area where the cumulative effects of growth are likely to make this more viable. Overall **minor positive effects** are considered likely under this option due to the growth in some well-connected centrally located sites (brownfield sites and Junction 6) and sites in close proximity to existing strategic employment areas (north Telford and Newport) where cumulative effects of growth can bring about improved infrastructure provision and public transport services.

Option 1.3: Dispersal variation 2

Positive effects are anticipated from the larger growth at Newport due to proximity to the strategic employment area of South Newport where the cumulative effects of growth can facilitate improved infrastructure and services. Similarly positive effects are associated with the north Telford and Junction 6 allocations for the above mentioned reasons giving **minor positive effects** overall.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

The growth proposed within the brownfield sites and Junction 6 is more likely to bring about improved infrastructure and services due to the urban, well-connected locations. Similarly the north Telford allocation is likely to bring about investment in infrastructure and services due to the cumulative effects produced by proximity to major strategic employment areas in the borough (and potentially new homes). Therefore, this option is considered to produce **moderate positive effects.**

Option 2.2: North Telford without J6

This option shares some of the positive effects associated with the previous option due to the growth within the brownfield sites and north Telford. The larger scale growth at Newport is also likely to be positive due to the existing strategic employment area at South Newport where cumulative positive effects would be expected. Therefore this option is considered likely to generate **moderate positive effects** overall.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

The positive effects associated with the growth at the brownfield sites, Junction 6 and Newport are counterbalanced by the allocation at Stockton where the location is relatively remote from existing strategic employment, sustainable transport infrastructure and services leading to only **minor positive effects** overall.

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3
?					

Equality and Diversity

Tackle inequalities, ensure that decisions do not disproportionately affect minority populations and that services can be accessed equally by all.

Lower end of needs range (167 ha) with 20% flexibility = 200ha

Option 1.1: Maximise Growth North of Telford and 'top up sites'

The large scale of growth within the brownfield sites, constant across all options is positive as it would bring about improved access to employment and training opportunities to some of the most deprived areas in the borough (includes 10% most deprived neighbourhoods in the country). The north Telford sites are within the least deprived areas of the borough (amongst the 10% to 20% least deprived areas in the country) therefore this location is less likely to directly help those in the most deprived neighbourhoods. However, jobs could be accessible to communities that suffer from deprivation, as well as being fairly close to concentrations of ethnic minority communities to the north west of the Telford Urban Area. The smaller scale growth proposed at Cluddley and Newport are within the 40% and 30% least deprived (respectively) areas in the country, and are unlikely to have the same positive effects as growth at North Telford. Overall potential **moderate positive effects** are considered likely due to the growth within the central brownfield sites in some of the most deprived areas in the borough. North Telford could also have some potential benefits for nearby deprived and ethnic minority communities.

Option 1.2: Dispersal variation 1

This option involves growth at Junction 6 of the M54. Though the location itself is not considered deprived (40% least deprived) it abuts areas of relative deprivation (within the 30% most deprived) just north of the M54. Therefore the allocation at here is likely to bring about improved access to employment and training here. These same communities could also have access to opportunities at North Telford. This is counterbalanced by the growth at Cluddley and Newport; where there is relatively little deprivation. Nevertheless, much of the employment growth would be directed to locations that can be accessed by deprived and ethnic minority communities, which are **moderate positive effects**.

Option 1.3: Dispersal variation 2

Minor positive effects are expected under this option due to the growth proposed within the brownfield sites and the Junction 6 location. The larger scale allocations at Newport is less likely to directly benefit the most deprived areas in the borough.

Higher end of needs range (189ha) with 20% flexibility = 227ha

Option 2.1: Maximise North Telford plus Junction 6

The large scale growth within the north Telford sites should bring significant employment opportunities to communities that can access these locations. As discussed above, this includes deprived areas and ethnic minorities. The Junction 6 (M54) site is also fairly well placed in this respect and both would be involved under this option.

Growth at Cluddley and Newport; where there is relatively little deprivation or ethnic diversity is considered less likely produce significantly positive effects.

Overall, **moderate positive effects** are predicted due to the growth proposed within the brownfield sites, North Telford and the Junction 6 location.

Option 2.2: North Telford without J6

Apart from the growth allocations within the brownfield sites, this option directs a sizeable amount of the remaining growth to less deprived areas at Newport and Cluddley. There could still be benefits realised in relation to central urban sites and north Telford though, so **minor positive effects** are predicted overall.

Option 2.3: Maximise growth elsewhere with remainder at N.Telford

The larger growth at Cluddley, Newport and Stockton under this option is less likely to directly benefit the most deprived areas in the borough, but overall effects are considered are **moderate positive effects** due to the allocations within the brownfield urban sites, Junction 6 and North Telford (albeit a lower scale).

Growth Scenario 1			Growth Scenario 2		
1.1	1.2	1.3	2.1	2.2	2.3
?					

Summary of options appraisal

Lower end of range

At the lower end of the needs range, there is little to separate the options across the full range of sustainability topics. None of the sites are understood to be particularly sensitive with regards to biodiversity and water resources, and each is predicted to have limited effects with regards to waste. Likewise, effects in terms of flooding are likely to be limited for each option, and each site is of a scale to achieve mitigation in terms of SUDs, avoidance of any watercourses and flood areas etc. Cumulatively, a loss of greenfield could have minor effects on factors such as the urban heat island.

All of the sites involved contain agricultural land to some extent, with much of this being best and most versatile. Therefore, whichever combination of sites is involved, moderate negative effects are predicted. For landscape, the impacts are likely to be less prominent for option 1.1 (North Telford) overall, with options 1.2 and 1.3 involving some more sensitive parcels of land. This is the key difference between the options in environmental terms.

With regards to socio-economic benefits, each option is predicted to have positive effects as they will all provide employment in appropriate locations that will help provide jobs and investment. The options that place more growth close to or accessible to deprived communities (1.1 and 1.2) are considered more likely to bring greater benefits in terms of equality and diversity.

In terms of infrastructure investment, an approach that delivers significant growth in one location could potentially bring greater potential for improvements to road networks, sustainable travel networks and access to new services and facilities. This is particularly the case if housing is delivered alongside new employment. In this respect, option 1.1 performs most favourably.

In terms of health and wellbeing, all three options are likely to have mixed effects. On one hand, jobs will be created in areas that are accessible to communities that could benefit from investment and employment opportunities. However, on the other, there is potential for development to have amenity effects on nearby communities (visual impacts, increased noise and traffic etc). Broadly speaking, at the lower end of the needs range option 1.1 performs marginally better overall compared to the other two options. However, there are uncertainties relating to effects as scheme details may well lead to a more or less positive outcome than predicted at this stage. With the exception of land and soil resource use, it ought to be possible to mitigate negative effects in relation to each of the sustainability topics.

Higher end of range

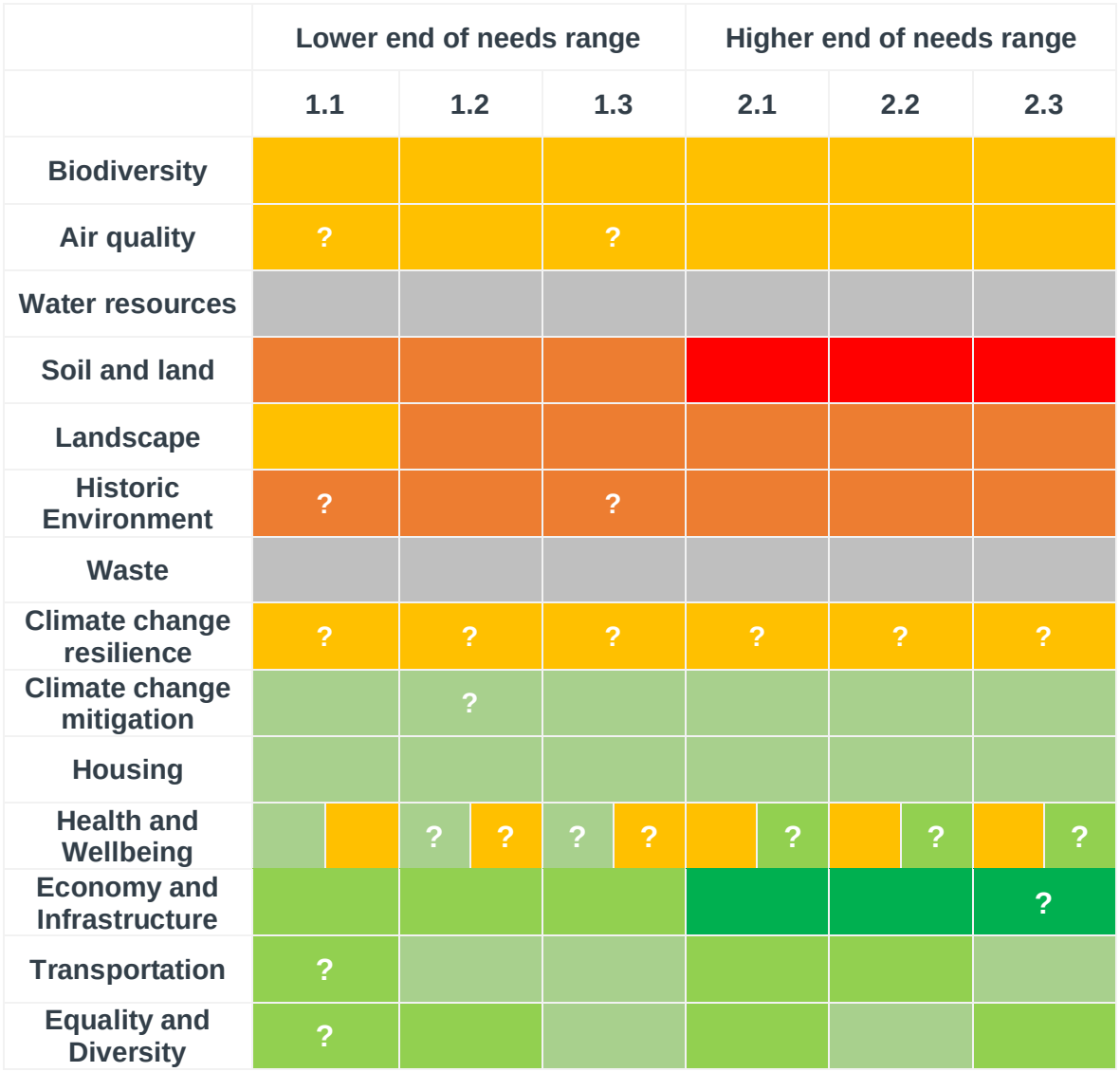
At the higher end of the needs range, whilst the effects are likely to be of slightly greater magnitude, this does not translate to more or less significant effects for the majority of sustainability topics. For example, effects in relation to biodiversity, air quality, water resources, historic environment, waste, climate change adaptation and climate change mitigation remain of the same degree of significance for each option. The only difference is that in some instances, the effects are considered more likely to arise / there is less uncertainty.

The increase in land loss, means that further agricultural land would be affected, and it would most likely need to involve the higher Grade 2 resources. As such, major negative effects are predicted for each option.

The landscape effects are moderately negative for all options at this scale of growth, as the combinations of sites for each option all involve elements of sensitive land and / or cumulative effects are slightly increased.

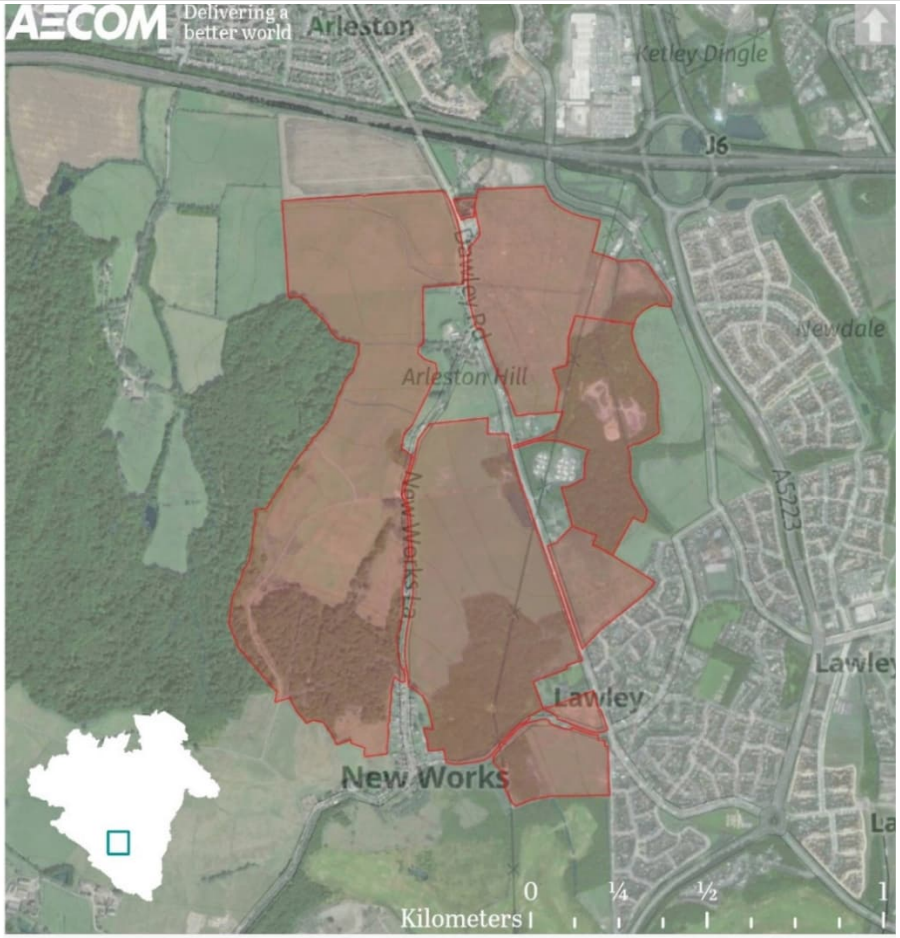
In terms of socio economic benefits, it is more likely that major positive effects would arise in terms of employment and infrastructure for all three options, and this could also translate to increased positive effects in terms of health.

It is more difficult to separate the overall performance of the options at the higher end of the needs range, as each involve sites with similar characteristics and similar combinations. The key differences relate to the potential for transport enhancements and positive implications with regards to equality and diversity, which are best reflected by option 2.1 (but not significantly differently to the other options).



Appendix D : Appraisal of Sustainable Urban Extensions

Land at Dawley Road



Environmental Constraints

Biodiversity

Approximately 950m away from this area lies The Wrekin & The Ercall SSSI, it is adjacent to Short Wood ancient woodland and contains some deciduous woodland priority habitat. The area's perimeter is 400m from a local nature reserve and it contains an area of habitat network, classified as a network enhancement zone. Even if habitats were to be avoided in terms of development, it is likely that there could be some recreational pressures and disturbances to habitats nearby, including the SSSI. As a result **moderate negative effects** are predicted.

Air Quality

Significant growth in this location would be likely to increase traffic on nearby motorway junctions, as well as on local roads throughout the Telford urban area. To the north of the area, there are some locations that are noted as being of some concern in terms of air quality, so there could be some **minor negative effects** here. That being said, new homes in this location ought to be well connected to local services, facilities and sustainable transport, which should help to offset some of the increases in traffic anticipated.

Water Resources

This area is within a surface water nitrate vulnerable zone and (in part) appears to be in current use for agricultural purposes.

The area falls within a surface water drinking water safeguard zone.

The Ketley Brook flows through the site on its eastern side; the brook was classified as poor in 2019 according to the Water Framework Directive.

Development in this location has the potential to lead to pollution of watercourses, as well as increased pressures on drainage and wastewater networks. There should be good potential to avoid negative effects through the application of SUDs and construction management techniques. The change in use from agriculture may also lead to fewer pollutants such as nitrate and phosphorous. On balance, **neutral effects** are predicted.

Soil and Land

The site is largely undeveloped, greenfield land. According to the provisional data, the area falls predominantly within grade 3 agricultural land, alongside some non-agricultural land. Focusing on later surveys, the land is predominantly of lower agricultural quality, with some small areas of Grade 3a and 2 in the northern part of it. As such, **minor negative effects** are predicted as a result of permanent changes in use.

Landscape

This area is adjacent to the Shropshire Hills AONB, with the majority of the site being considered as highly sensitive in terms of its landscape (for residential uses); however, the eastern side of the site is considered to be of lower sensitivity. In terms of its visual sensitivity, the majority of the site is highly sensitive, with the eastern side being of medium-low sensitivity (for residential uses). The scale of development would likely lead to significant changes to landscape character, and thus potential **major negative effects** are predicted.

Historic Environment

The area contains coal mining remains which have been recognised as a scheduled monument as well as a Grade II listed church which can be found in the south eastern corner. It is considered unlikely that the area designated as a Scheduled Monument would be lost to development, as it is also covered by woodland. With regards to the listed church, this does not sit within site boundaries as such, but development of surrounding parcels of land would likely affect the setting of this asset. This area could potentially be avoided, but there is potential for **minor negative effects** if development expands to include this area.

Waste

This area has relatively poor access to a nearby household waste recycling centre (HWRC). Its peripheral urban location and size mean that new waste management services would be expected to be established to handle an increase in waste production in the area. However, this would be expected for any new development to an extent. **Neutral effects** are predicted.

Climate Change Resilience

This is a greenfield area which suggests that current surfaces in the area are largely permeable and natural cooling may benefit from the high density of green infrastructure. There are two core areas of surface water flood risk which run through the site, most

likely relating to local topography and drainage patterns. However, the area falls mainly within Flood Zone 1. Overall, intensive development here could have minor negative effects if it leads to a significant loss of greenfield land (in terms of increased heat island and surface water run-off). However, there is potential for new and enhanced green infrastructure to be implemented as part of new development, which could offset these effects. Overall, **neutral effects** are predicted, but there is an element of uncertainty.

Climate Change Mitigation

The area is nearby to two bus routes with some existing stops found towards the southern periphery of the location and less than 1km away from existing active travel routes. The area is also close to Lawley, a District Centre and from there, Telford Centre can be accessed by sustainable means of transport. It is likely that routes would be extended in relation to new development, which could help to ensure a degree of accessibility.

In relation to energy efficiency and low carbon generation, the location and characteristics of an area are less important than design, though it is worth noting that developing on a greenfield site might mean that the reduced construction costs compared to brownfield development could be directed towards renewable energy generation and efficiencies. Overall, **minor positive effects** are predicted, but this is dependent upon scheme details, and therefore uncertainties exist.

Housing

This location is broadly accessible to nearby local centres, including their respective employment opportunities, as well as being located within a somewhat accessible location for access to strategic employment sites (with potential for employment on site); access would be likely to be less viable by active means. The area is likely to be attractive for prospective buyers and the location within an area which is potentially slightly less affordable than more central areas in the Borough could potentially result in some increased local affordability. The site's size could help to deliver a locally appropriate range of housing types and tenures and contribute significantly towards hosing delivery. As such, **moderate positive effects** are predicted.

Health and Wellbeing

This area provides access to a large amount of accessible green and open space (including woodland), as well as nearby recreation facilities, a leisure centre and GP surgery. Relatively nearby active travel infrastructure and local and district centres ought to help to promote active means of transport, helping to promote physical activity. As such, **moderate positive effect** are predicted.

Economy and Infrastructure

This area is not adjacent to strategic employment land, however within 2.5km (straight line distance), Stafford Park, T54, Central Telford, Hortonwood, Donnington and Hadley Park employment sites can be found. Part of the site has also been promoted for employment uses, in a location close to strategic routes. The site provides closer access to Lawley, Arleston and Ketley alongside their smaller scale employment opportunities. These nearby centres provide scope for economic activity, including shops, jobs and services. The location of this site, adjacent to Junction 6 of the M54, provides connectivity to the strategic road network, providing access to Shrewsbury, Wolverhampton and Birmingham. Overall, potential **moderate positive effects** are predicted, as there may be potential to deliver a mixed-use development of employment and housing in a relatively accessible location with links to nearby urban centres.

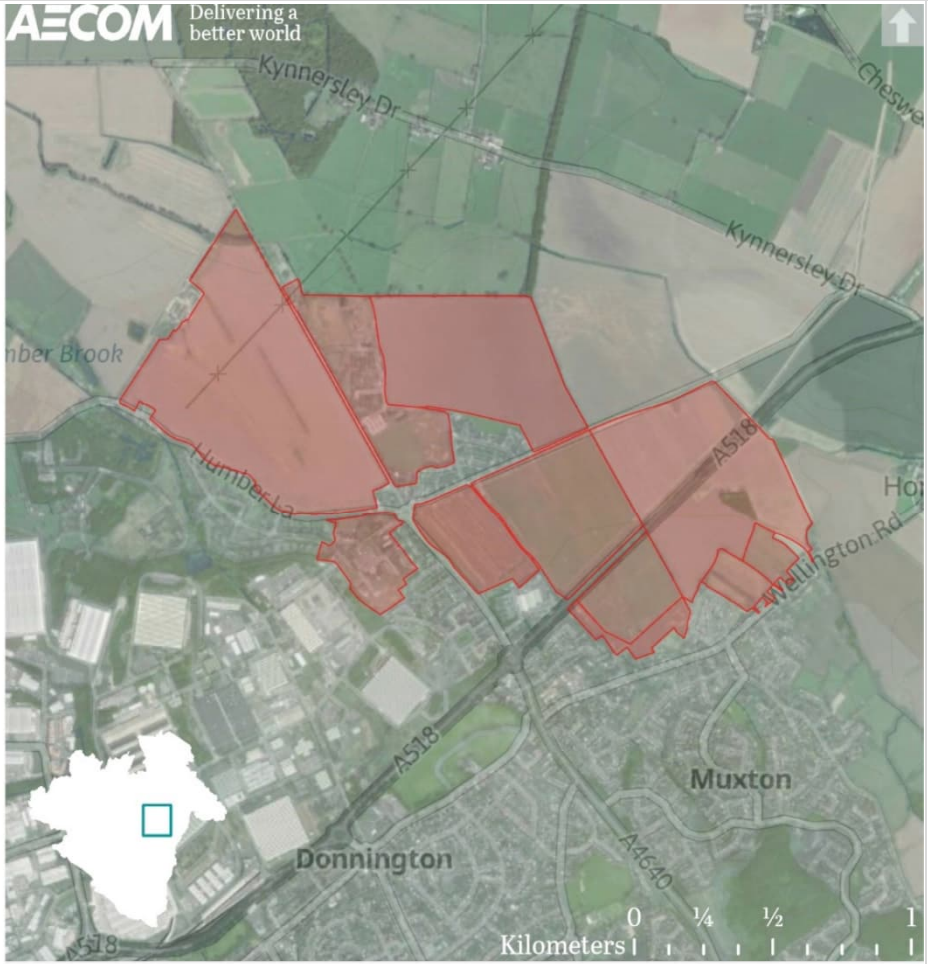
Transportation

The area is nearby to two bus routes with some existing stops found towards the southern periphery of the location and less than 1km away from existing active travel routes. The area is also close to Lawley, a District Centre and from there, there is access into Telford Centre by sustainable means of transport. That said, major employment areas not being within the immediate proximity of the site may mean that there could be some increased car dependencies associated with this location, with the knock-on effects relating to congestion, especially at traffic pinch points and peak journey times. The potential for a mixed use development including employment land could offset this to an extent, and so overall **minor positive effects** are predicted.

Equality and Diversity

In terms of multiple deprivation, this area is not considered to be deprived, however nearby areas in the top 30 and 20% of deprived areas nationally and may benefit from improved infrastructure and services associated with any new development. The location is considered to be within the top 30% of deprived areas nationally in relation to barriers to housing and services. The location of the SUE is unlikely to lead to disproportionate effects upon any person or group with characteristics protected by those outlined under the Equality Act, 2010. As such, overall potential **minor positive effects** are predicted.

Broad Area for Growth- Land North East of Muxton



Environmental Constraints

Biodiversity

A small section of the south/south eastern area of the growth area is within the Muxton Marsh SSSI impact risk zone relating to residential development of over 100 units. The site is also relatively close to two Local Nature Reserves, and could therefore put some increased recreational pressures upon these locations. However, the existing land is predominantly agricultural in nature / and development should present a good opportunity to enhance the biodiversity value of the land (as well as providing recreational land to reduce pressures on nearby nature reserves. As such, overall effects are **neutral** at this stage.

Air quality

Relatively speaking, this locaton is not experiencing poor air quality, despite being close to large employment areas. Substantial growth here would increase traffic onto the A518 in particular, which could in turn increase trips through the urban areas of Telford. However, this would not be in any areas that are identified as being of particular concern. On its own, an SUE here is therefore unlikely to have significant effects. Overall, **neutral effects** are predicted.

Water Resources

Two Water Framework Directive monitored waterbodies run adjacent to the site, with one partially crossing through its northern most extent. The northern Wall Brook's status was unchanged in 2019 vs 2016, at moderate. The Red Strine's had deteriorated in that time, from poor to bad.

The area falls within a surface water drinking water safeguard zone. This area is within a surface water nitrate vulnerable zone and appears (in part) to be in current use for agricultural purposes. The area falls within a groundwater source protection zone (number three).

Construction activities present potential for further negative effects on watercourses in this location, though it is expected that management activities would be secured to minimise risks. Development in this location also has the potential to lead to increase pressures on drainage and wastewater networks. There should be good potential to avoid negative effects through the application of SUDs and construction management techniques. The change in use from agriculture may also lead to fewer pollutants such as nitrate and phosphorous. On balance, **neutral effects** are predicted.

Soil and Land

The site is largely undeveloped, greenfield land. Aside from the urban areas, this area is largely considered to be Grade 2 agricultural land. More recent surveys reveal land which is largely classified as Grade 2 and 3a, with some small pockets of Grade 3b. Given that a fairly substantial amount of best and most versatile land would be lost to development, this constitutes **major negative effects**.

Landscape

This location is an area is considered to be of a medium-low sensitivity in terms of its landscape and visual sensitivities (for residential uses). As such, the effects are predicted to be **minor negative**.

Historic Environment

There is a cluster of Grade II listed buildings found to the south east of the area, though aside from these nearby buildings, the area is relatively unconstrained by heritage assets. The aforementioned listed buildings are on the edge of the existing urban area, but are relatively well screened from the surrounding countryside and their setting is unlikely to be significantly affected by new development. As such, **neutral effects** are predicted overall.

Waste

This area has relatively good access to a nearby household waste recycling centre (HWRC). Its peripheral urban location and size mean that new waste management services would be expected to be established to handle an increase in waste production in the area. However, this would be expected for any new development to an extent. **Neutral effects** are predicted.

Climate Change Resilience

This is a greenfield area which suggests that current surfaces in the area are largely permeable and natural cooling may benefit from green infrastructure. In terms of fluvial flood risk, a central area and eastern area are both affected by flood zones 2 and 3, however the majority of the area is not constrained in this respect and areas at risk would likely be avoided. There are some core areas of surface water flood risk which run through the site, most likely relating to local topography and drainage patterns. Overall, intensive development here could have minor negative effects if it leads to a significant loss of greenfield land (in terms of increased heat island and surface water run-off). However, there is potential for new and enhanced green infrastructure to be implemented as part of new development, which could offset these effects. Overall, **neutral effects** are predicted, but there is an element of uncertainty.

Climate Change Mitigation

The area is nearby to two bus routes with some existing stops found towards the southern periphery of the location and is adjacent to existing active travel routes. The area is also close to Donnington, a District Centre which is accessible by active travel routes and public transport. Sustainable transport routes also offer access to Telford and Newport Centres.

In relation to energy efficiency and low carbon generation, the location and characteristics of an area are less important than design, though it is worth noting that developing on a greenfield site might mean that the reduced construction costs compared to brownfield development could be directed towards renewable energy generation and efficiencies. Overall, **minor positive effects** are predicted, but this is dependent upon scheme details, and therefore uncertainties exist.

Housing

This location is broadly accessible to nearby local centres, including their respective employment opportunities, as well as being located adjacent to areas of strategic employment. The area is likely to be attractive for prospective buyers and the site's size could help to deliver a locally appropriate range of housing types and tenures. It is probable that over 1700 homes would be delivered in the Plan period (possibly higher depending on delivery rates), and a total of 2500 is being promoted, providing further supply beyond the plan period. As such, **moderate positive effects** are predicted.

Health and Wellbeing

This area provides access to some sporadic, small to medium sized areas of accessible green and open space (including woodland), as well as nearby recreation facilities, a leisure centre and GP surgery. Adjacent active travel infrastructure and local and district centres ought to help to promote active means of transport, helping to promote physical activity. There should also be potential to introduce new areas of recreation on land that is not publicly accessible currently, which is also likely to be beneficial for the health and wellbeing of residents. Overall, **moderate positive effects** are predicted.

Economy and Infrastructure

This area is adjacent to the strategic employment land at Hortonwood, Donnington and Hadley Park, and as such provides good access to existing jobs. The site also provides access to Muxton and Donnington local/district centres alongside their smaller scale

employment opportunities. These nearby centres provide scope for economic activity, including shops, jobs and services. The site's location provides access to both Telford and Newport along A roads. Overall, **minor positive effects** are predicted.

Transportation

The area is nearby to two bus routes with some existing stops found towards the southern periphery of the location and is adjacent to existing active travel routes. The area is also close to Donnington, a District Centre which is accessible by active travel routes and public transport. Sustainable transport routes also offer access to Telford and Newport Centres.

Some major employment areas are within the immediate proximity of the area and hence, it would be likely that a portion of future housing growth would be supported by local employment, driving down the potential for unsustainable transport uptake.

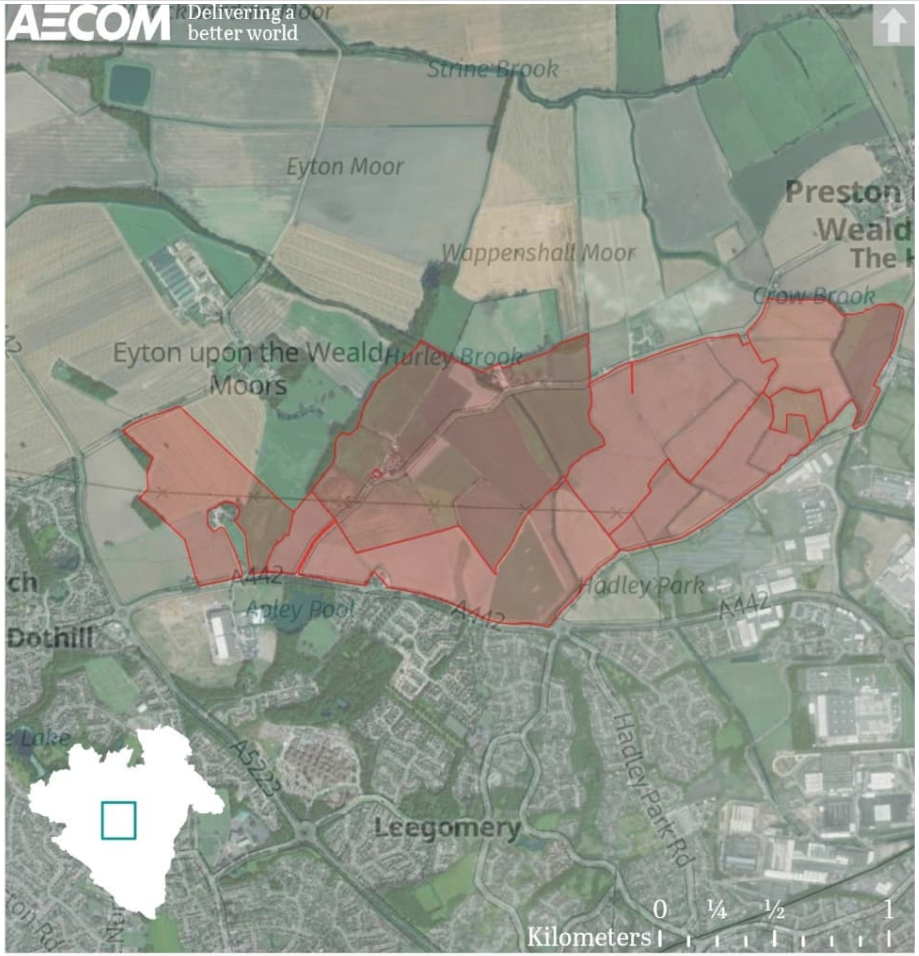
Whilst the site is supported by some sustainable travel infrastructure and services, dominant behavioural norms mean that the size of the site would be expected to result in increased traffic volumes on the road network, with congestion likely to be caused around the site, especially at peak journey times and traffic pinch points.

Overall, on balance, **minor positive effects** are predicted.

Equality and Diversity

In terms of multiple deprivation, this area is not considered to be deprived, however nearby areas in the top 40% of deprived areas nationally may benefit from improved infrastructure and services associated with any new development. Most of the location is considered to be within the top 30% of deprived areas nationally in relation to barriers to housing and services, though a parcel of land in the south east of this area is not considered to be deprived in this respect. The location of this broad area for growth is unlikely to lead to disproportionate effects upon any person or group with characteristics protected by those outlined under the Equality Act, 2010. As such, **neutral effects** are predicted.

Broad Area for Growth- Land North of the A442, Wheat Leasows



Environmental Constraints

Biodiversity

The area is adjacent to some areas of priority habitat (deciduous woodland and an area which has been recognised for containing additional habitats (lowland fens)) as well as a containing a small area of deciduous woodland. Some parcels of land are also under environmental stewardship agreements (or adjacent to other areas of land). New development in or adjacent to these locations could potentially have an effect on such habitats.

The area falls adjacent to the Apley Woods Local Nature Reserve, though the A442 separates them. Development could potentially lead to increased recreational pressure on the nature reserve, but new development may also help to secure new recreational space to offset such pressure. Indeed, some of the growth area is classified as being within the habitat network's 'network enhancement zone 1' , with a larger area covered by land classified as a 'network expansion zone'. Much of the land is agricultural in nature, and therefore, there ought to be potential to implement biodiversity enhancements through new development.

On balance, **neutral effects** are predicted.

Air quality

Growth in this location is likely to lead to an increase in car trips, and this could be relatively close to existing and new communities. There are no areas of significant concern with regards to air quality in the immediate vicinity, but it could reasonably be expected that some trips through the urban area of Telford could arise, including towards areas of concern near Arleston. That being said, new homes in this location ought to be well connected to local services, facilities, jobs and sustainable transport, which should help to offset some of the increases in traffic anticipated. Therefore, only **minor negative effects** are predicted, and given the distance to areas of concern, these are uncertain.

Water Resources

The Ketley Brook runs through the centre of the site, the brook was classified as poor in 2019 according to the Water Framework Directive.

The area falls within a surface water drinking water safeguard zone, is within a surface water nitrate vulnerable zone and (in part) appears to be in current use for agricultural purposes. The area also falls partly within a source protection zone (number three) at its northern most extent.

Construction activities present potential for further negative effects on watercourses in this location, though it is expected that management activities would be secured to minimise risks. Development in this location also has the potential to lead to increase pressures on drainage and wastewater networks. There should be good potential to avoid negative effects through the application of SUDs and construction management techniques. The change in use from agriculture may also lead to fewer pollutants such as nitrate and phosphorous. On balance, **neutral effects** are predicted.

Soil and Land

The site is largely undeveloped, greenfield land. This area is almost exclusively within Grade 2 agricultural land according to the pre-1988 survey data, with some small areas of Grade 3 land towards the north eastern extent. More accurate, post-1988 surveys have revealed the area to largely comprise of agricultural land classifications of Grades 2 and 3a,with smaller areas of 3b. The land would be permanently lost and as such, **major negative effects** are predicted.

Landscape

Is area is considered to be of a medium-low sensitivity in terms of its landscape and visual sensitivities (for residential uses), aside from a small parcel on the site's eastern extent which is classified as medium-high sensitivity. Parts of the area are also identified as being potentially suitable for employment uses (and are promoted as such). The effects could therefore be more prominent should such uses be brought forwards. Overall, **minor negative effects** are predicted in relation to housing growth, with potentially moderate negative effects depending on the extent of employment land that may be included.

Historic Environment

The area of growth surrounds four Grade II listed buildings around The Bridge House as well as the adjacent Wappenshall canal bridge ancient monument, which partly intersects the area of growth. To the west / north west of the area, there are a further seven listed buildings, of which one is Grade II* (the others are Grade II). There is some degree of screening between the area of growth and the assets, and so direct impacts are unlikely. However, it could be argued that the setting of this cluster of heritage assets may be affected by substantial growth. Therefore, **minor negative effects** are predicted.

Waste

This area has relatively good access to a nearby household waste recycling centre (HWRC). Its peripheral urban location and size mean that new waste management services would be expected to be established to handle an increase in waste production in the area. Overall, **neutral effects** are predicted.

Climate Change Resilience

This is a greenfield area which suggests that current surfaces in the area are largely permeable and natural cooling may benefit from the high amount of green infrastructure. In terms of fluvial flood risk, a central area alongside a smaller area in the east of the site is affected by flood zones 2 and 3, however the majority of the area is not constrained in this respect and it is expected that these areas would be prioritised for any development. There are some areas of surface water flood risk which run through the site, some which overlaps with fluvial flood risk and some which does not; these areas are most likely relating to local topography and drainage patterns. Overall, intensive development here could have minor negative effects if it leads to a significant loss of greenfield land (in terms of increased heat island and surface water run-off). However, there is potential for new and enhanced green infrastructure to be implemented as part of new development, which could offset these effects. Overall, **neutral effects** are predicted, but there is an element of uncertainty.

Climate Change Mitigation

The area is nearby to two bus routes with some existing stops found to the south east and west of the location and is adjacent to existing active travel routes. The area is approximately 1.5km from Hadley, a District Centre which is accessible by active travel routes and public transport. Sustainable transport routes also offer access to Telford and Newport Centres. It is probable that development would help to support expansion of services and infrastructure, but without such enhancements, there could be some increased car dependencies.

In relation to energy efficiency and low carbon generation, the location and characteristics of an area are less important than design, though it is worth noting that developing on a greenfield site might mean that the reduced construction costs compared to brownfield development could be directed towards renewable energy generation and efficiencies. Overall, **minor positive effects** are predicted, but this is dependent upon scheme details, and therefore uncertainties exist.

Housing

This location is broadly accessible to nearby local centres, including their respective employment opportunities, as well as being located adjacent to areas of strategic employment(with potential expansions to employment). The area is likely to be attractive for prospective buyers and the site's size could help to deliver a locally appropriate range of housing types and tenures, potentially leading to some more balanced affordability ratios in the wider area. It is probable that over 1700 homes would be delivered in the Plan period (possibly higher depending on delivery rates), and a total of 2500 is being promoted, providing further supply beyond the plan period. Overall, **moderate positive effects** are predicted.

Health and Wellbeing

This area provides access to some sporadic, small to medium sized areas of accessible green and open space (including woodland), as well as relatively nearby recreation facilities and two GP surgeries. The nearest leisure centre is further away than some comparable sites, though this is not considered to be inaccessible. Adjacent active travel infrastructure and local and district centres ought to help to promote active means of transport, helping to promote physical activity. The scale of growth involved should also help to improve recreation on land that is currently inaccessible, and should also help to deliver social infrastructure to support new communities. As such, **moderate positive effects** are predicted in terms of health and wellbeing.

Economy and Infrastructure

This area is adjacent to planned for strategic employment land at Shawbirch and existing strategic employment land at Hortonwood, Donnington and Hadley Park. The site provides access to Shawbirch and Leegomery local centres alongside their smaller scale employment opportunities. These nearby centres provide scope for economic activity, including shops, jobs and services. The location's close position in relation to the A442/A5223 provides access to Telford. There are also parcels of land identified that could be brought forward for employment uses, which would further improve access to jobs and services. Overall, potential **major positive effects** are identified.

Transportation

The area is nearby to two bus routes with some existing stops found to the south east and west of the location and is adjacent to existing active travel routes. The area is approximately 1.5km from Hadley, a District Centre which is accessible by active travel routes and public transport. Sustainable transport routes also offer access to Telford and Newport Centres. It is to be expected that

public transport routes would be enhanced to support growth associated with strategic growth. Without such investment, it is likely that car dependency would be high.

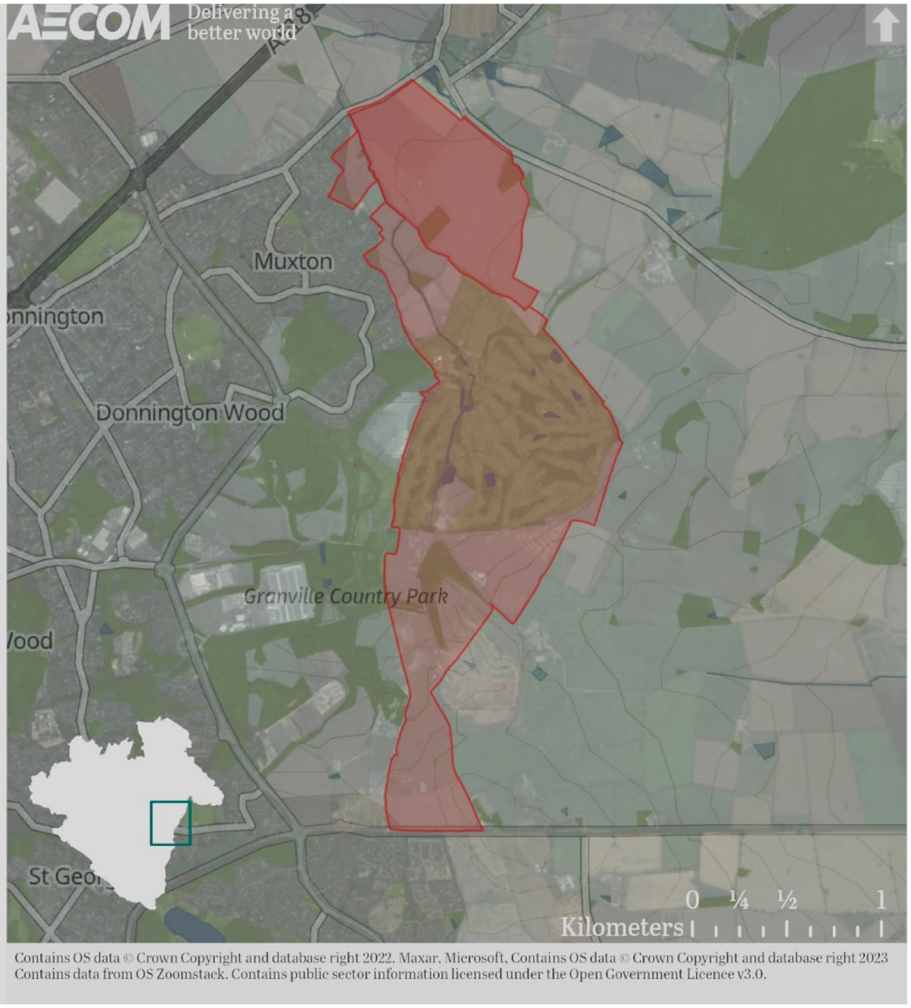
Some major employment areas are within the immediate proximity of the area and hence, it would be likely that a portion of future housing growth would be supported by local employment, driving down the potential for the increased modal share of unsustainable transport options.

Whilst the site is supported by some sustainable travel infrastructure and services, dominant behavioural norms mean that the size of the site would be expected to result in increased traffic volumes on the road network, with congestion likely to be caused around the site, especially at peak journey times and traffic pinch points. The potential for a mixed use development including employment land could offset this to an extent, and so overall **minor positive effects** are predicted.

Equality and Diversity

In terms of multiple deprivation, this area is not considered to be deprived, however relatively nearby areas in the top 40% of deprived areas nationally may benefit from improved infrastructure and services associated with any new development. The location is considered to be within the top 30% of deprived areas nationally in relation to barriers to housing and services and adjacent to an area considered to be in the top 10% deprived nationally in relation to its living environment. The location of this broad area for growth is unlikely to lead to disproportionate negative effects upon any person or group with characteristics protected by those outlined under the Equality Act, 2010. However, it could potentially benefit adjacent communities and those slightly further away to the north west of Telford (characterised by BAME communities), which are potential **minor positive effects**.

Broad Area for Growth- Land North of Redhill



Environmental Constraints

Biodiversity

The growth area is approximately 430m from the Muxton Marsh SSSI and partly within the associated impact risk zone which relates to residential developments of 100 or more units. The area for growth is also adjacent to the Granville Country Park local nature reserve.

Some relatively small areas of ancient woodland lie to the east of the site, the closest being 200m away. The north of the area also contains some small areas of deciduous woodland priority habitat. A large parcel of land is currently a golf course, with some features that could support wildlife such as ponds, trees and hedges.

Development is likely to put increased pressure and disturbance to adjacent wildlife sites, as well as affecting areas of woodland within the areas for development. This could be offset to an extent by the creation of new areas of biodiversity value, as well as new areas of recreation, to divert pressures away from designated biodiversity habitats. Nevertheless, the potential for **moderate negative effects exists**.

Air quality

Relatively speaking, this locaton is not experiencing poor air quality, despite being close to large employment areas to the far north and south. Substantial growth here would increase traffic, but the peripheral nature of growth could mean that tripsthrough the more congested parts of urban Telford are not as significant. On its own, an SUE here is therefore unlikely to have significant effects. Overall, **neutral effects** are predicted.

Water Resources

The area falls within a surface water drinking water safeguard zone, and partly within a source protection zone (number three) at its northern most extent. This area is also within a surface water nitrate vulnerable zone and appears to be in current use for agricultural purposes. Development in this location also has the potential to lead to increase pressures on drainage and wastewater networks. There should be good potential to avoid negative effects through the application of SUDs and construction management techniques. The change in use from agriculture may also lead to fewer pollutants such as nitrate and phosphorous. On balance, **neutral effects** are predicted.

Soil and Land

This land is classified as almost entirely Grade 3 agricultural land; post-1988 survey work has shown that the area is partly non-agricultural, alongside some Grade 3a, 3b and 2 land, more focused towards the north. The site is largely undeveloped, greenfield land, though this site does contain a golf course. Overall, there will be some loss of Grade 2 and 3a agricultural land, but much of the remaining areas are not best and most versatile land, and therefore **moderate negative effects** are predicted.

Landscape

This area is considered to be of a medium sensitivity, with a small area of low sensitivity towards the south of the parcel in terms of its landscape sensitivities (for residential uses). In terms of the area's visual sensitivity (for residential uses), the majority of the site is classified as medium-low, with a smaller area in the south classified as low. Consequently, **minor negative effects** are predicted.

Historic Environment

The southern extent of this area contains a Grade II listed building as well as being adjacent to and in close proximity to two scheduled monuments. One Scheduled Monument is a former headgear at Grange Colliery, which is currently sat within a caravan park and surrounded by trees. It is unlikely that the condition or setting would be affected by adjacent development. There is part of a Roman Camp adjacent to the southern parcel of land, but it is unlikely this would be directly affected.

The rest of the site is largely unconstrained in terms of the historic environment, aside from a few nearby Grade II listed buildings towards the northern top of the site. Of note is Grade II Listed Honnington Grange, which has an open countryside context. Large scale development could potentially affect this setting, but the building is relatively well screened and further mitigation measures such as additional screening and buffer areas could minimise effects. As a result, overall only **minor negative effects** are predicted.

Waste

This area has relatively average access to a nearby household waste recycling centre (HWRC). Its peripheral urban location and size mean that new waste management services would be expected to be established to handle an increase in waste production in the area. Overall, **neutral effects** are predicted.

Climate Change Resilience

This is a greenfield area which suggests that current surfaces in the area are largely permeable and natural cooling may benefit from the high density of green infrastructure. There are some small channels of surface water flood risk which run through the site, these areas are most likely relating to local topography and drainage patterns. The majority of the area falls within flood zone 1. Overall, intensive development here could have minor negative effects if it leads to a significant loss of greenfield land (in terms of increased heat island and surface water run-off). However, there is potential for new and enhanced green infrastructure to be implemented as part of new development, which could offset these effects. The level of fluvial flood risk is also low across and adjacent to the areas involved. Overall, **neutral effects** are predicted.

Climate Change Mitigation

The area is nearby to two bus routes with some existing stops found towards the southern and northern peripheries of the location and is adjacent to existing active travel routes to the north and west. The area is also relatively near to Donnington, a District Centre which is accessible by active travel routes and public transport. Sustainable transport routes also offer access to Telford and Newport Centres. There would be an expectation that expansion of bus routes would be needed to support development, otherwise there is a risk of increasing car dependencies.

In relation to energy efficiency and low carbon generation, the location and characteristics of an area are less important than design, though it is worth noting that developing on a greenfield site might mean that the reduced construction costs compared to brownfield development could be directed towards energy generation and efficiencies. Overall, **minor positive effects** are predicted, but this is dependent upon scheme details, and therefore uncertainties exist.

Housing

This location is broadly accessible to nearby local centres, including their respective employment opportunities, as well as being located nearby to areas of strategic employment. The area is likely to be attractive for prospective buyers and the site's size could help to deliver a locally appropriate range of housing types and tenures. It is probable that over 1700 homes would be delivered in the Plan period (possibly higher depending on delivery rates). Overall, **moderate positive effects** are predicted.

Health and Wellbeing

This area provides access to some areas of accessible green and open space (including woodland), as well as relatively nearby recreation facilities and a GP surgery. Some of the site's current use is as a golf course, and this facilitity would be lost (though it

should be noted that this is not available to non-members). The nearest leisure centre is further away than some comparable sites, though this is not considered to be wholly inaccessible. Adjacent active travel infrastructure and local and district centres ought to help to promote active means of transport, helping to promote physical activity. Overall, **minor positive effects** are predicted. Though there is good access to green space and potential for enhancements, development will lead to the loss of a leisure facility (golf course) and is also not ideally located in terms of access to other leisure opportunities.

Economy and Infrastructure

This area is nearby to strategic employment land at Hortonwood, Donnington, Hadley Park and Donnington Wood, but many parts would not be within reasonable walking distances on foot. The site provides access to Muxton, Priorslee and Donnington local/district centres alongside their smaller scale employment opportunities. These nearby centres provide scope for economic activity, including shops, jobs and services. The site's location provides access to both Telford and Newport along A roads. Overall, **minor positive effects** are predicted.

Transportation

The area is nearby to two bus routes with some existing stops found towards the southern and northern peripheries of the location and is adjacent to existing active travel routes to the north and west. The area is also relatively near to Donnington, a District Centre which is accessible by active travel routes and public transport. Sustainable transport routes also offer access to Telford and Newport Centres.

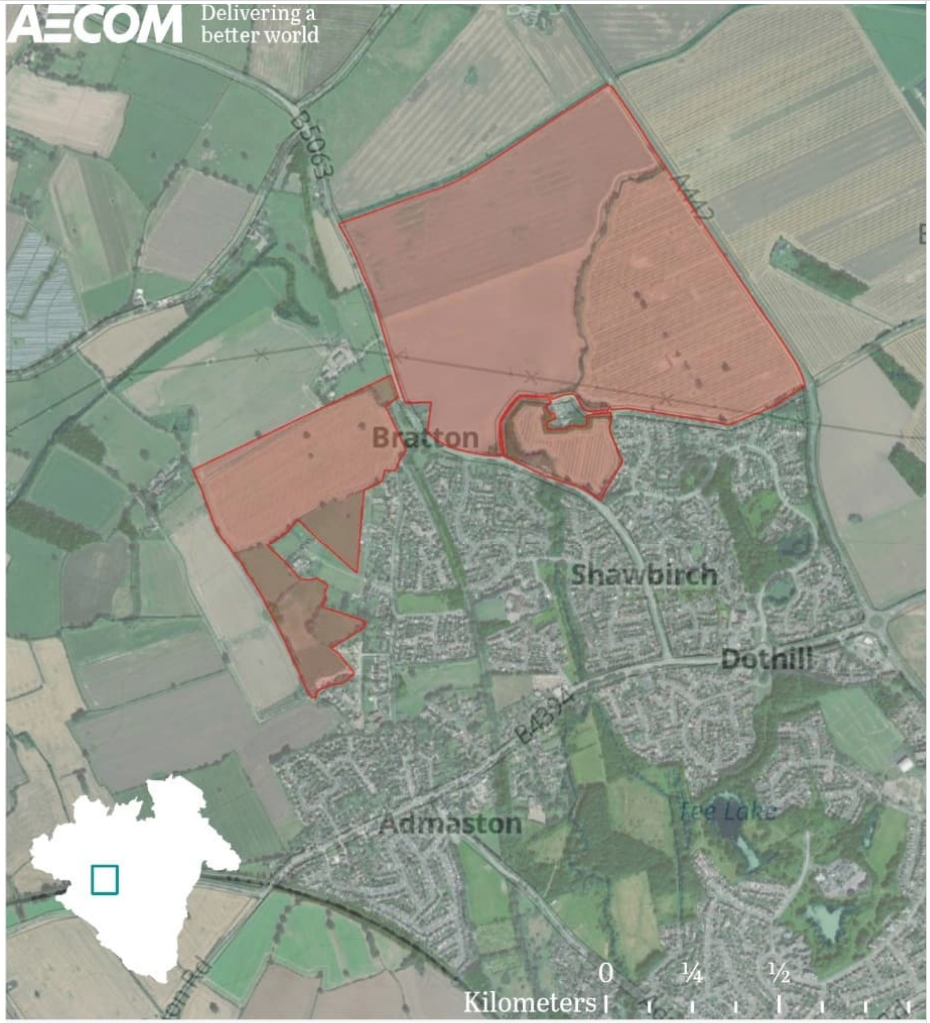
Some major employment areas are found relatively close to the location area and hence, it would be likely that a portion of future housing growth would be supported by local employment, driving down the potential for the increased modal share of unsustainable transport options.

Whilst the site is supported by some sustainable travel infrastructure and services, dominant behavioural norms mean that the size of the site would be expected to result in increased traffic volumes on the road network, with congestion likely to be cause around the site, especially at peak journey times and traffic pinch points. This would particularly be the case if sustainable transport modes are not substantially expanded across the wider site. There are also substantial access issues that could be detrimental to the road networks. On balance, **minor positive effects** are predicted.

Equality and Diversity

This area of potential growth is not considered to be deprived. The location of this broad area for growth is unlikely to lead to disproportionate effects upon any person or group with characteristics protected by those outlined under the Equality Act, 2010. Overall, **neutral effects** are predicted.

Broad Area for Growth- Land North West of Bratton and Shawbirch



Environmental Constraints

Biodiversity

There are some small parcels of deciduous woodland priority habitats across the area, and a brook running through one parcel of land. For the most part, the site is characterised by agricultural land, and is not in close proximity to any designated wildlife sites. Development should present a good opportunity to enhance the biodiversity value of the land. As such, overall effects are **neutral** at this stage.

Air quality

Growth in this location is likely to lead to an increase in car trips. There are no areas of significant concern with regards to air quality in the immediate vicinity, but it could reasonably be expected that some trips through the urban area of Telford could arise, especially along the A442 and Whitchurch Drive. Only **minor negative effects** are predicted, and given the distance to areas of concern, these are uncertain.

Water Resources

The Beanhill Brook runs in close proximity to the growth area, intersecting with it on the eastern side of the growth area's western parcel. Ketley Brook runs abut to the area of growth to the north. Both brooks were classified as poor in 2019 according to the Water Framework Directive.

The area falls within a surface water drinking water safeguard zone and largely falls within a source protection zone (number three).

The areas also falls within a surface water nitrate vulnerable zone and ostensibly, in part in current use for agricultural purposes.

Construction activities present potential for further negative effects on watercourses in this location, though it is expected that management activities would be secured to minimise risks. Development in this location also has the potential to lead to increase pressures on drainage and wastewater networks. There should be good potential to avoid negative effects through the application of SUDs and construction management techniques. The change in use from agriculture may also lead to fewer pollutants such as nitrate and phosphorous. On balance, potential **minor negative effects** are predicted.

Soil and Land

The site is largely undeveloped, greenfield land. This land is classified as almost entirely Grade 2 agricultural land; post-1988 survey work has shown that the area is mostly Grade 3a and 2 land, with some Grade 3b. The land would be permanently lost to development, and therefore **major negative effects** are predicted.

Landscape

In terms of landscape sensitivity (for residential uses), this area is classified as low sensitivity and for visual, it is medium-low (for residential uses). As a result, only **minor negative effects** would be anticipated.

Historic Environment

This area is relatively unconstrained in terms of the historic environment, aside from one Grade II listed building which the site surrounds. This is a farmhouse, which benefits from a rural / open countryside setting. Large scale development could potentially have negative effects on this rural setting, but there ought to be opportunities to secure screening and buffer areas to minimise effects. As such, overall uncertain **minor negative effects** are predicted.

Waste

This area has relatively poor access to a nearby household waste recycling centre (HWRC). Its peripheral urban location and size mean that new waste management services would be expected to be established to handle an increase in waste production in the area. Overall, **neutral effects** are predicted.

Climate Change Resilience

This is a greenfield area which suggests that current surfaces in the area are largely permeable and natural cooling may benefit from the high density of green infrastructure. In terms of fluvial flood risk, a central area as well as a large area in the site's north/north eastern extent is affected by flood zones 2 and 3 which follow a small watercourse running through the centre of the site, however the majority of the area is not constrained In this respect. There are some areas of surface water flood risk which run through the site, some which overlaps with fluvial flood risk and some which does not; these areas are most likely relating to local topography and drainage patterns. It is expected that development would avoid areas at risk of flooding, and should have good potential to incorporate SUDs. Overall, **neutral effects** are predicted, though there is a degree of uncertainty.

Climate Change Mitigation

The area is nearby to a bus route with some existing stops found towards the southern periphery of the location and is adjacent to existing active travel routes. The area is also close to the local centres of Admaston and Shawbirch, which are accessible by active travel routes. Sustainable transport routes also offer access to Telford, especially if services are expanded to support development. However, there is a risk that car dependencies could increase if development comes forward without new on site services and travel connections (thus increasing emissions).

In relation to energy efficiency and low carbon generation, the location and characteristics of an area are less important than design, though it is worth noting that developing on a greenfield site might mean that the reduced construction costs compared to brownfield development could be directed towards renewable energy generation and efficiencies. Overall, **minor positive effects** are predicted, but this is dependent upon scheme details, and therefore uncertainties exist.

Housing

This location is broadly accessible to nearby local centres, including their respective employment opportunities, as well as being located nearby to an area allocated for future strategic employment. The area is likely to be attractive for prospective buyers and the site's size could help to deliver a locally appropriate range of housing types and tenures, potentially leading to some more balanced affordability ratios in the wider area. It is probable that over 1700 homes would be delivered in the Plan period (possibly higher depending on delivery rates). Overall, **moderate positive effects** are predicted.

Health and Wellbeing

This area provides access to some sporadic, small to medium sized areas off accessible green and open space (including woodland), as well as relatively nearby recreation facilities and a GP surgery. The nearest leisure centre is further away than some comparable sites, though this is not considered to be wholly inaccessible. Adjacent active travel infrastructure and local and district centres ought to help to promote active means of transport, helping to promote physical activity. Development should also present the opportunity to provide on-site recreation and open space. Overall, potential **moderate positive effects** are predicted.

Economy and Infrastructure

This area is adjacent to planned for strategic employment land at Shawbirch. The site provides access to Shawbirch and Admaston local centres alongside their smaller scale employment opportunities. These nearby centres provide scope for economic activity, including shops, jobs and services. The location's close position in relation to the A442/A5223 provides access to Telford. Overall, **moderate positive effects** are predicted.

Transportation

The area is nearby to a bus route with some existing stops found towards the southern periphery of the location and is adjacent to existing active travel routes. The area is also close to the local centres of Admaston and Shawbirch, which are accessible by active travel routes. Sustainable transport routes also offer access to Telford, and these could be enhanced through new development.

Some employment areas are found relatively close to the location area and hence, it would be likely that a portion of future housing growth would be supported by local employment, driving down the potential for the increased modal share of unsustainable transport options. That said, more extensive employment land is found further from the site, potentially reducing the potential for sustainable travel. Whilst the site is supported by some sustainable travel infrastructure and services, dominant behavioural norms mean that the size of the site would be expected to result in increased traffic volumes on the road network, with congestion likely to be cause around the site, especially at peak journey times and traffic pinch points. Overall, on balance, **minor positive effects** are predicted.

Equality and Diversity

In terms of multiple deprivation, this area is not considered to be particularly deprived. The location is within the top 20% of deprived areas nationally in relation to barriers to housing and services and part of the location is within an area considered to be in the top 40% of deprived areas nationally in relation to its living environment. However, in terms of multiple deprivation, the area is in the lower ends of the spectrum. The location of this broad area for growth is therefore considered unlikely to lead to disproportionate effects upon any person or group with characteristics protected by those outlined under the Equality Act, 2010. As such, **neutral effects** are predicted.

Appendix E : Site Assessment Methodology and Appraisal Matrix

SA Criteria and Objectives			Score Thresholds (note, for non-applicable scorings, a white colour has been used)	Data (national/local data)	Methodology	Notes
1. Biodiversity	*1.1*	*Direct loss or disturbance of biodiversity assets*	*Greater than 50m from biodiversity asset* *Adjacent to/within 50m of biodiversity asset* *Less than 10% of the site overlaps with a biodiversity asset* *Greater than 10% of the site overlaps with biodiversity asset*	*SSSI, SAC, SPA, Ramsar, NNR* *LWS. LNR*	*Euclidean distance from site to nearest biodiversity asset.*	
	1.2	*Loss of trees and hedgerows*	*Development would not be likely lead to any loss of trees or hedgerows* *Development would lead to some loss of trees or hedgerows, on site mitigation possible* *Development would lead to some loss of trees or hedgerows, mitigation not possible.* *Overlap with TPO or ancient woodland, but retention possible* *Development would lead to the substantial loss of trees or hedgerows* *Development would result in the loss of a TPO or ancient woodland*	*Satellite imagery, Google Street View, ancient woodland TPOs*	*Site-by-site assessment of likely loss of on-site features, qualitative details and rationale provided*	
2. Air Quality	*2.1*	*Contribution to poor air quality*	*Site is >800m from nearest A-Road* *Site is <800m from nearest A-Road and also under 5ha.* *Site is <800m from nearest A-Road and also 5-10ha* *Site is <800m from nearest A-Road and >10ha* *HGV generating (employment) development within 2km of an A Road*	*A Roads (excluding those with slip-road access)*	*Road distance to nearest A-Road and estimated site yield as a product of site area.*	

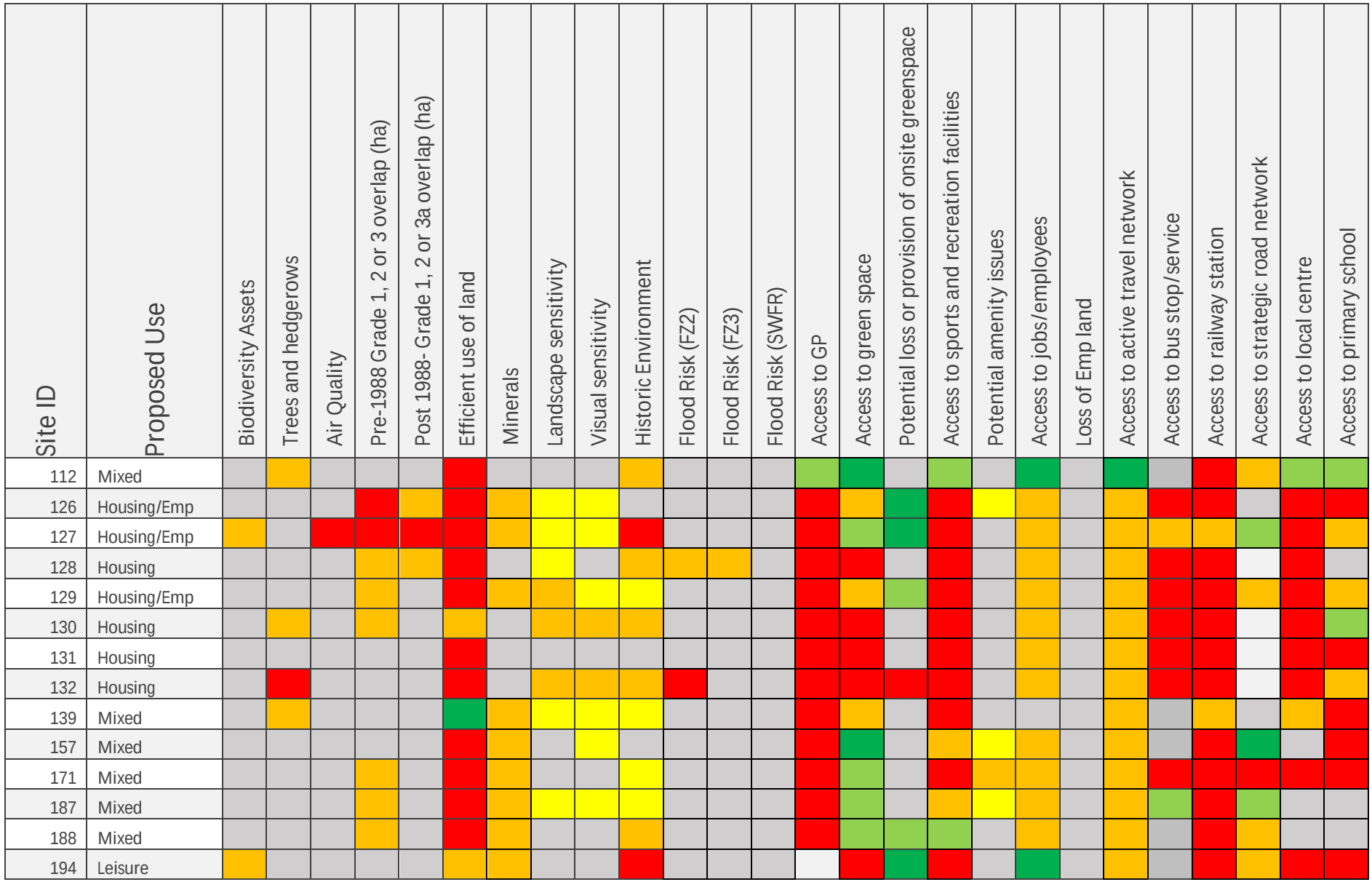
3. Water Quality						
4. Soil and Land	*4.1*	*Loss of high quality agricultural land*	*Site would result in the loss of <1ha Grade 1, 2 or 3 agricultural land* *Site would result in the loss of 1-20ha of Grade 1, 2 or 3 agricultural land* *Site would result in the loss of >20ha of Grade 1, 2 or 3 agricultural land*	*Agricultural Land Classification (pre-1988)*	*Site overlap (ha) with agricultural land classification*	
	4.2		*Land has not been assessed for agricultural potential in any post-1988 survey* *Site would result in the loss of <1ha. Grade 1, 2 or 3a agricultural land* *No data* *Site would result in the loss of 1-20ha of Grade 1, 2 or 3a agricultural land* *Site would result in the loss of >20ha of Grade 1, 2 or 3a agricultural land*	*Agricultural Land Classification (post-1988)*	*Site overlap (ha) with agricultural land classification*	
	4.3	*Efficient use of land*	*>50% of site is classified as previously developed land* *<50% of site is brownfield* *Site is fully greenfield*	*Satellite imagery, Google Street View*	*Site-by-site assessment of current site land use*	
	4.4	*Loss of land safeguarded for mineral extraction*	*Site is not safeguarded* *More than 5% of the site overlaps with safeguarded areas*	*Mineral safeguarding areas*		
5. Landscape	*5.1*	*Landscape Sensitivity*	*The over 80% of the site is (or, the largest part of the site is):* *Within the existing built-up area / not deemed sensitive for additional development* *Low sensitivity* *Medium or medium-low sensitivity* *High or medium-high sensitivity* *Very high sensitivity*	*Landscape sensitivity study*	*Overlap with areas identified as potentially sensitive*	
	5.2	*Visual Sensitivity*	*The majority of the site is:*			

			Within the existing built-up area / not deemed sensitive for additional development Low sensitivity Medium or medium-low sensitivity High or medium-high sensitivity Very high sensitivity			
6. Historic Environment	6.1	Impact of historic environment and nearby heritage assets	Site is over 400m from any heritage asset Site would be likely to better reveal the significance of a heritage asset Site is within 400m of a heritage asset but effects are extremely unlikely due to factors such as: screening, distance, separation. Site is within 400m of a heritage asset, but it unlikely to significantly impact its significance and/or setting Site is likely to effect the significance and/or setting of a nearby heritage asset	Listed buildings, world heritage site, historic parks and gardens, scheduled monuments, registered battlefields conservation areas	Euclidean distance to nearest heritage asset Site-by-site assessment looking at potential impact on nearby heritage asset	A degree of subjective assessment will be required.
7. Waste						
8. Climate Change Adaptation	8.1	Potential for site to flood (fluvial)	Site is >80% Flood Zone 1 Site is 20-50% Flood Zones 2 or 3 Site is >50% Flood Zones 2 or 3	Environment Agency Flood Risk Data	Site overlap (%) with flood zone	
	8.1	Surface Water Flood Risk	Site is <10% within 30 year area of risk Site is >10% within 30 year area of risk	Council provided SFRA	Site overlap (%) with flood zone	
9. Climate Change Mitigation						
10. Housing						
11. Health and Wellbeing	11.1	Distance to nearest GP	Site is <400m from nearest GP Site is 400-799m from nearest GP Site is 800-1200m from nearest GP Site is >1200m from nearest GP	GP surgeries	Road/path distance to GP	

	11.2	*Distance to nearest formal green/open space*	*Site is <400m from nearest green/open space* *Site is 400-799m from nearest green/open space* *Site is 800-1200m from nearest green/open space* *Site is >1200m from nearest green/open space*	*Green/open space*	*Road/path distance to green/open space*	
	11.3	*Potential for site to provide onsite green/open space*	*Potential to provide substantial on-site green/open space- >10ha* *Potential to provide some on-site green/open space 5-10ha* *Site unlikely to provide onsite green/open space <5ha* *Overlap with open space but onsite mitigation possible (>5ha)* *Loss of formal green or open space which cannot be replaced on site*	*Site options*	*Site size could result in adequate onsite provision, alongside a qualitative assessment about loss and potential to mitigate*	
	11.4	*Distance to sports/ recreation/ gym facilities*	*Site is <400m from nearest facility* *Site is 400-799m from nearest facility* *Site is 800-1200m from nearest facility* *Site is >1200m from nearest facility*	*Sports/ recreation facilities* *Leisure centres*	*Road/path distance to facility*	
	11.5	*Amenity issues nearby (sources of noise, odour, nuisance and related land use etc)*	*No identified nearby potential amenity issues* *Site is within close proximity of potential amenity issues* *Site is adjacent to A-Road, Motorway or Railway* *Potential amenity issue, unconfirmed use of nearby land from a desktop study*	*Satellite imagery, Google Street View*	*Check for potential nearby amenity issues on a site-by-site basis*	
12. Economy and Infrastructure	*12.1*	*Access to jobs*	*Highest scoring number of jobs within all distances used for colour code: (relative scoring)* *Top 33% jobs within 1.2, 3 and 5km* *Middle 33% jobs within 1.2, 3 and 5km* *Bottom 33% jobs within 1.2, 3 and 5km*	*BRES data on employees*	*For each site, the best scoring value's (from across the distance thresholds) colour coding is used as the overall access to jobs colour.*	*Thresholds to be determined when spread of data is available*

	12.2	Loss of employment land	No loss Partial loss Loss of employment site (including potential sites)	Employment land		
13. Transportation	13.1	Proximity to active travel network	Site is <200m from active travel network Site is 200-400m from active travel network Site is >400m from active travel network	Active travel network (cycle and PROW)	Road/path distance to network	
	13.2	Proximity to bus stop	Site is <200m from a regular frequency bus stop/settlement Site is 200-799m from a regular frequency bus stop/settlement Site is <200m from a medium frequency bus stop/settlement Site is 800-1200m from a regular frequency bus stop/settlement Site is 200-799m from a medium frequency bus stop/settlement Site is 800-1200m from a medium frequency bus stop /settlement Site is >1200m from a bus stop, or very poor frequency	Bus stop data Settlement Rural settlement matrix data relating to public bus services	Road/path distance to bus stop	
	13.3	Proximity to railway station	Site is <400m from a railway station Site is 400-1199m from a railway station Site is 1.2-3km from a railway station Site is >3km from a railway station	Railway stations	Road/path distance to railway station	
	13.4	Proximity to strategic road network	Site is <100m of strategic road network Site is 100-499m from strategic road network Site is 500-999m from strategic road network Site is 1-3km from strategic road network Site is >3km from strategic road network	Strategic Road network	Road distance to A road or motorway	

	13.5	*Distance to nearest built-up centre*	*Site is <200m of nearest built up centre* *Site is 200m -399m from nearest built-up centre* *Site is 400-799m from nearest built-up centre* *Site is 800-1200m from nearest built-up centre* *Site is >1200m from nearest built-up centre*	*Built-up centres*	*Road/path distance to nearest built-up centre (including small collections of shops and services*	
	13.6	*Distance to nearest primary school*	*Site is <200m from nearest primary school* *Site is 200m-399m from nearest primary school* *Site is 400-799m from nearest primary school* *Site is 800-1200m from nearest primary school* *Site is >1200m from nearest primary school*	*Primary schools*	*Road/path distance to nearest primary school*	
14. Equality and Diversity						


Site ID
Proposed Use
Biodiversity Assets
Trees and hedgerows
Air Quality
Pre-1988 Grade 1, 2 or 3 overlap (ha)
Post 1988- Grade 1, 2 or 3a overlap (ha)
Efficient use of land
Minerals
Landscape sensitivity
Visual sensitivity
Historic Environment
Flood Risk (FZ2)
Flood Risk (FZ3)
Flood Risk (SWFR)
Access to GP
Access to green space
Potential loss or provision of onsite greenspace
Access to sports and recreation facilities
Potential amenity issues
Access to jobs/employees
Loss of Emp land
Access to active travel network
Access to bus stop/service
Access to railway station
Access to strategic road network
Access to local centre
Access to primary school
112 Mixed
126 Housing/Emp
127 Housing/Emp
128 Housing
129 Housing/Emp
130 Housing
131 Housing
132 Housing
139 Mixed
157 Mixed
171 Mixed
187 Mixed
188 Mixed
194 Leisure

196	Mixed
197	Mixed
198	Mixed
199	Mixed
200	Mixed
201	Mixed
202	Mixed
459	Housing
210	Mixed
220	Housing
224	Housing
225	Mixed
228	Mixed
233	Mixed
237	Housing
241	Housing/Emp
241	Housing/Emp
245	Housing
251	Mixed
257	Housing/Emp
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263	Emp
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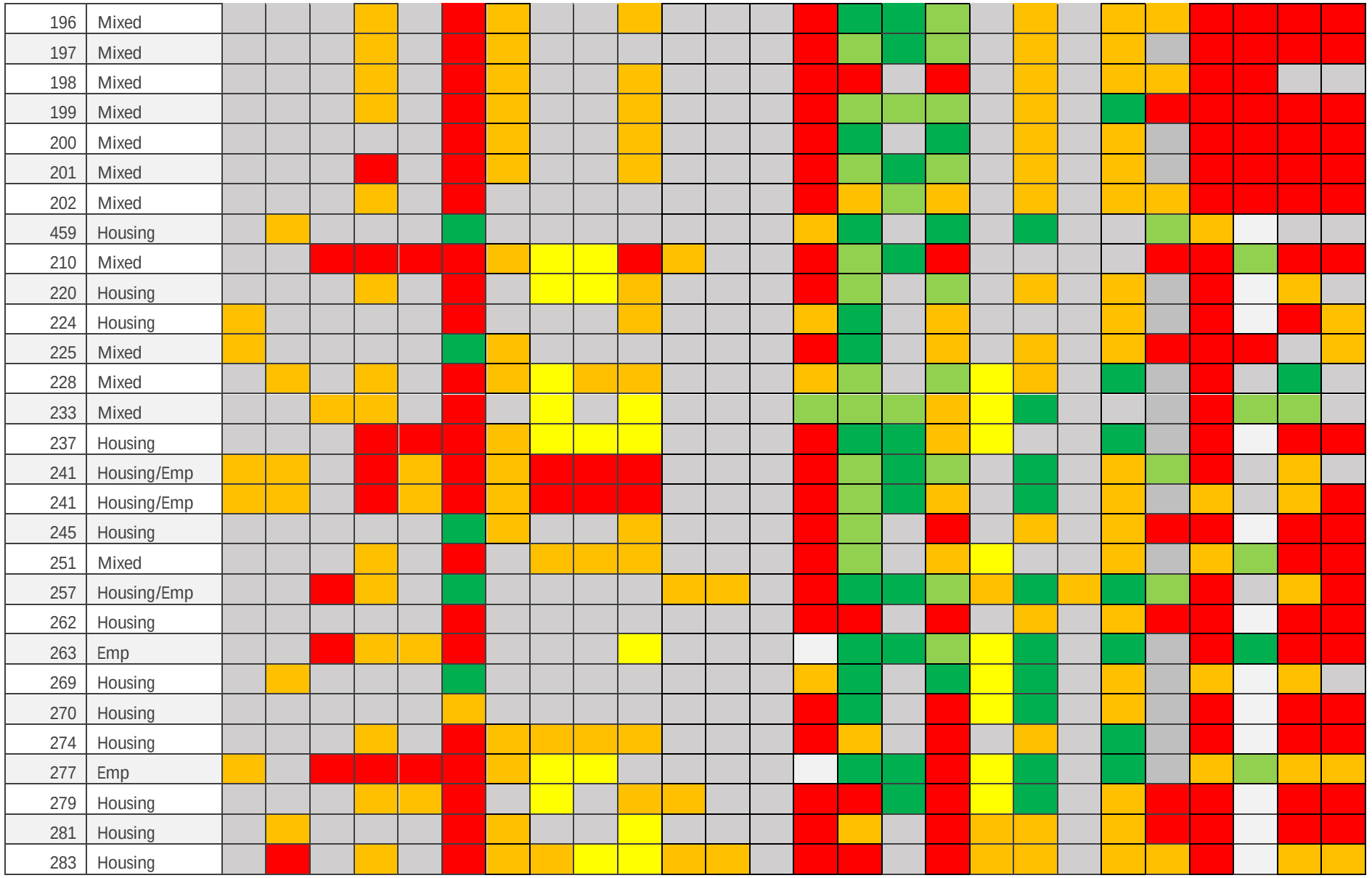
274	Housing
277	Emp
279	Housing
281	Housing
283	Housing



287	Housing																										
292	Housing																										
293	Housing																										
298	Mixed																										
299	Housing																										
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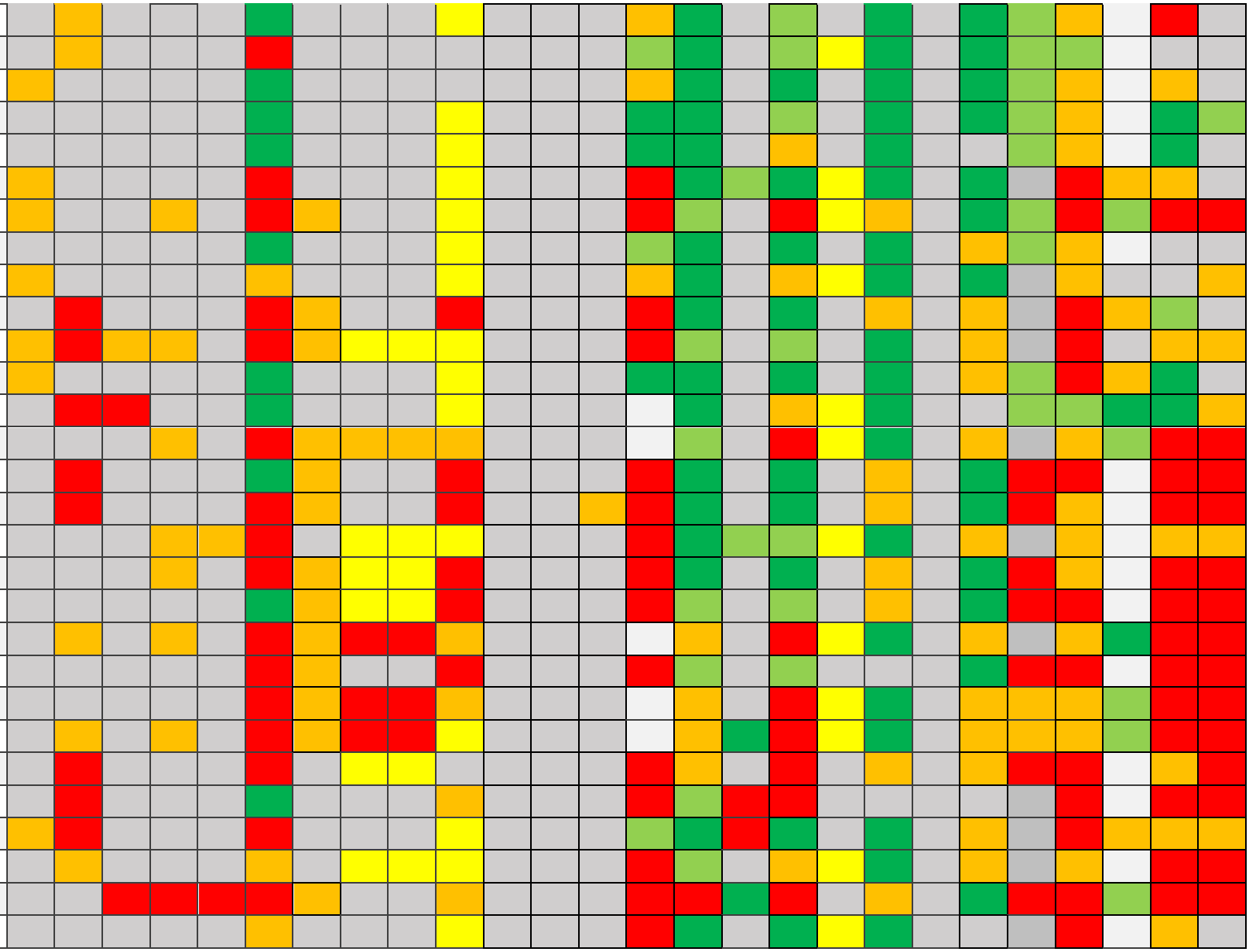
338	Housing	
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350	Mixed	
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369	Housing	
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378	Housing	
380	Mixed	
389	Housing	

394	Mixed
397	Emp
398	Emp
399	Housing/Emp
401	Housing
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411	Housing
412	Housing
413	Housing/Emp
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449	Housing
450	Housing

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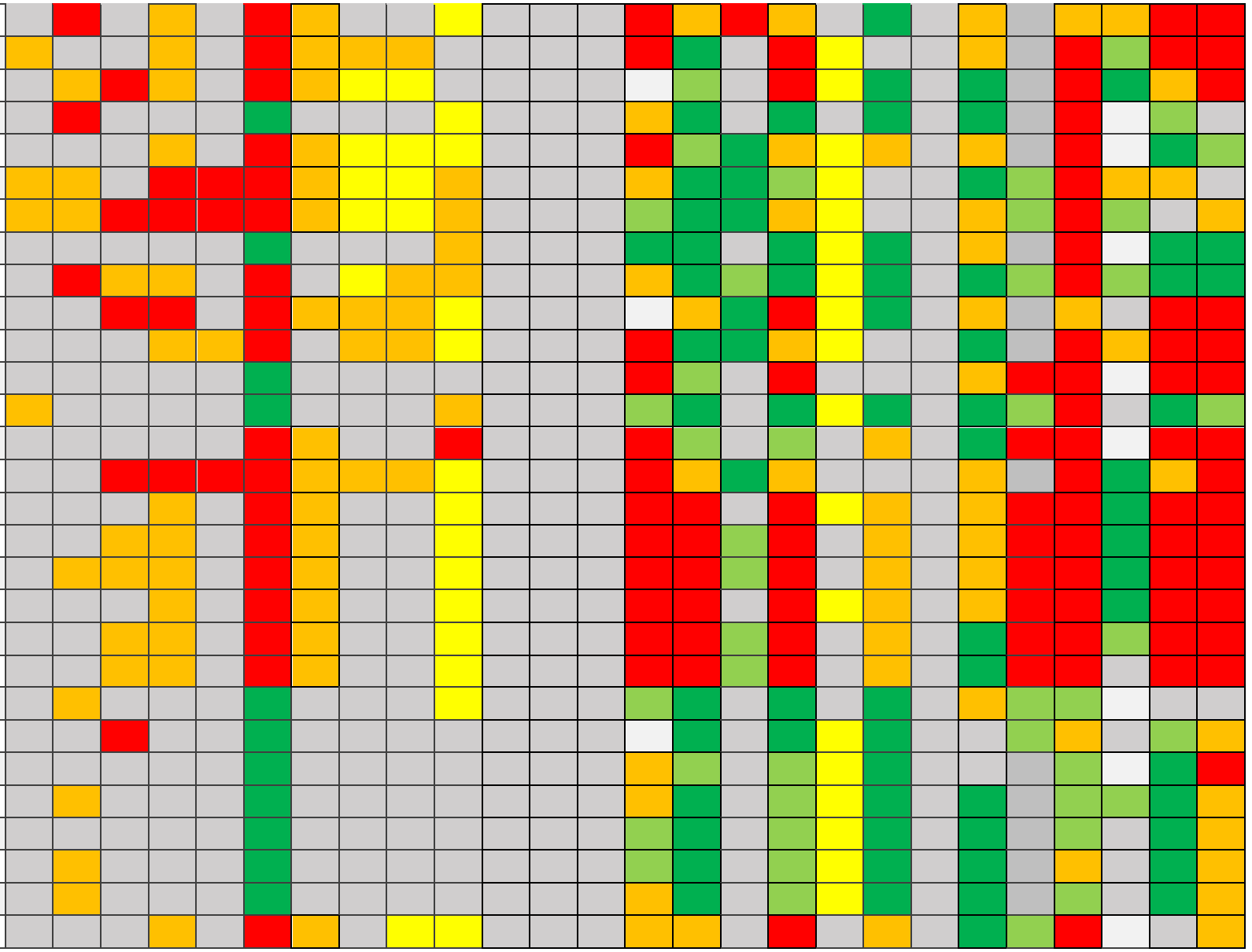
376	Housing/Emp



484	Housing																											
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524	Housing																											
525	Emp																											
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700	Mixed																										

Appendix F : Full draft Plan Appraisal

Telford and Wrekin Local Plan housing requirement: 20200 (1010dpa)				
Location	**Split**	**Requirement**	**Supply**	**Residual need**
Telford	86%	17,382	9,451	7,921
Newport	8%	1,616	1,099	517
Rural	6%	1,212	827	385

Biodiversity

Effects of the spatial strategy

The strategy would be expected to deliver additional growth in dwellings of 7,921 in Telford, 517 in Newport and 385 in rural areas.

This approach would deliver growth in Telford at a scale which would permit more significant effects in respect of Biodiversity to be avoided. Some sites which are more constrained would not be required to be allocated in order to meet the identified housing need. For example, where site 685 overlaps with the New Hadley Brickpit SSSI, avoidance of this site would be possible given the range of other less constrained sites to choose. It would be expected that some sites which are near to biodiversity assets (namely, Local Nature Reserves) may come forward, but mitigation ought to be able to avoid more significant effects because of this. In terms of strategic growth, suitable land is available to the north of Telford to deliver moderately sized schemes to assist in meeting housing needs.

The three Broad Areas of Growth being taken forward for further consideration are less constrained with regards to biodiversity than the two discounted sites at this stage. The large-scale nature of the sites on mostly agricultural land should also allow for biodiversity enhancements to be achieved (indeed, north of Telford has been identified as a potential habitat enhancement opportunity area).

Growth in Newport and rural areas would be of a relatively small scale and would be expected to come forward on sites which are broadly unconstrained in terms of biodiversity designations.

Some development would come forward on sites which contain Tree Preservation Orders (TPOs), where this is the case in most parts it would be possible to retain and protect the relevant trees. Considering the size of the site and concentration of TPOs, development on site 472 in Newport could give rise to the loss of TPOs.

Whilst the strategy would provide potential to develop brownfield sites, a large proportion of growth would be expected to come forward on greenfield land, especially on sites on the periphery of Telford and in Newport and rural areas. It is likely that some species for whom grassland / hedgerows or trees is their native habitat may be negatively impacted, though it is unlikely that this would lead to significant effects due to a lack of identified designations/protections for these pieces of land.

Furthermore, the draft Plan policies seek to protect biodiversity features and achieve biodiversity net gain of at least 20% on major developments.

This should ensure that the site specific and cumulative effects on biodiversity are capable of being mitigated and would not be significantly negative.

Development management

Local Plan policy ought to help to mitigate adverse effects arising as a result of the spatial strategy, with the potential for enhancements.

Policy NE-1 (Biodiversity and Geodiversity) ensures protection for national and internationally designated sites and seeks impact assessment and appropriate mitigation for any site which may impact a locally designated site. Further to this, habitats and species are to be protected and enhanced, including through the promotion of ecological networks within sites and connecting to the surrounding environment and existing networks.

Potential negative effects in relation to impacts upon trees, hedgerows and woodlands ought to be mitigated through Policy NE2. The policy seeks to protect and manage existing assets as well as enhancing the Borough's stock which should help to reduce potential impacts; this could reduce potential more negative effects on sites 327, 334, 349, 352, 412, 445, 463 and 472 (should they form a part of the strategy).

Biodiversity Net Gain Policy NE3 ensures that all new development will deliver biodiversity gains, with a threshold of 20% net gain for major developments (likely to be seen on any site allocation in the broad areas for growth to the north of Telford, which gives the opportunity to enhance biodiversity in this area, including through an increase in habitat networks).

Policies NE4, NE5, NE6 and NE7 relate to green infrastructure and open, natural landscapes; whilst they do not relate to designated biodiversity assets, the policies are expected to improve and protect networks of natural spaces which are important for the protection of habitats and species.

Strategic policies outlined in the plan help to outline higher level support for the protection and enhancement of the Borough's habitats and species. Policy S4 (Forest Community_ supports the protection and expansion of green and natural spaces which can form favourable habitats for local protected and unprotected species. Policy S5 (Nature Conservation) outlines measures to help to restore and prevent harm to the natural environment.

Overall effects

Overall, whilst the spatial strategy might give rise to some potential minor negative effects (relating to the proximity to biodiversity designations, development on greenfield land and potential interferences with trees and hedgerows), the Plan's policies ought to mitigate adverse effects to an acceptable level and in the longer term provide biodiversity enhancements and net gains. However, there is still a degree of uncertainty relating to the methodology and effectiveness of net gains. However, there is a clear commitment to exceed net gain on suitable sites, to enhance urban greening and to continue protection of biodiversity habitats and species. Therefore, uncertain **moderate positive effects** are predicted at this stage.

Air quality

Effects of the spatial strategy

In delivering the draft strategy, it would be assumed that all of the site options which are not significantly constrained within the Telford and Newport urban areas would be allocated under this approach. These sites are generally well connected to shops, services, employment, public transport and active travel infrastructure. These factors are likely to support sustainable modes of travel which maximise use of active or communal forms of travel, reducing the propensity for people to rely on private motor vehicles which exacerbate air quality issues. Whilst these accessible locations for development should promote modes of travel which reduce air quality issues, prevalent behavioural norms are likely to mean that any development could result in an increase in car use in the surrounding areas. Built-up areas are more likely to experience issues associated with congestion, which worsens air quality issues and as such, where these sites are medium/large, air quality is likely to worsen in the surrounding areas, especially at peak journey times and traffic pinch points. Further to this, heavy goods vehicle journeys from employment sites may contribute towards a deterioration in air quality issues, particularly when accessing and using the strategic road network. This would be more likely to lead to some potential issues on employment sites 473, 498 and 352, where an increase in heavy goods vehicles in the area may give rise to increased air quality issues.

Peripheral growth may lead to increases in car dependencies and associated air quality related issues, though depending on the scale of sites, new services and facilities which reduce the need to travel may be delivered. Where traffic from the new growth meets main roads and joins the existing urban area, there may be some increases in air quality issues, especially at peak journey times. The above effects are likely to be more pronounced in Telford where more growth is directed under this approach. The main area of concern in Telford is around the B5061, with hotspots at Mill Bank / Watling Street. Therefore, growth that encourages trips through these areas in particular are likely to be most negative with regards to air quality. Growth delivering housing and employment land around Junction 7 of the M54 may well contribute towards issues in the aforementioned hotspot. Other sites of particular interest in this respect are those to the north and west of the Telford urban area.

Rural growth would be of a relatively low scale. Whilst this could drive up car dependency and reduce the potential for new populations to travel by active means, the scale of growth would be unlikely to affect air pollution across the Borough significantly. Further to this, the increase in rural population may give rise to some increased use of local shops and services (including transport services), potentially somewhat increasing their viability. Therefore, neutral effects are predicted.

Strategic growth coming forward in a broad area of growth to the north of Telford would have varied effects depending upon where the growth was allocated to. The peripheral northern area of Telford is not currently experiencing significant air quality concerns, though any growth further to the west may increase associated traffic in areas of concern close to Arleston/Ercall. More local air quality impacts may be seen along the A442, adjacent to the location of a more strategic area of growth. This would be likely to be more pronounced at peak journey times and at traffic pinch points.

Whilst issues associated with air quality are commonly associated with motor vehicle use, longer-term projections suggest a future scenario characterised by more widespread electric vehicle usage, whilst this significantly reduces air quality issues, issues associated with high volumes of vehicles will not be fully solved due to electrification (e.g. particulate matter associated with rubber degradation). Throughout all options, sites would be expected to improve the availability of electric car charging infrastructure, assisting with the acceleration of the shift from combustion engines to electric powered vehicles. Therefore, longer term effects on air quality due to growth ought to be offset to an extent.

Overall, whilst there would be expected to be some level of growth in less accessible locations, these areas would also be likely to see some improvements to accessibility, including some potential beneficial effects for those living nearby to growth (reducing the need to travel by means which may worsen air quality). The scale of growth in Newport and rural areas would be unlikely to lead to significant implications for air quality, and whilst some pressure for growth in Telford could lead to poorer quality in the urban areas, especially near to new employment land and on larger housing sites.

Development management

Policies outlined in the Local Plan ought to help to mitigate negative effects relating to air quality in the Plan area (both relating to strategically planned growth and windfall development). Policies ought to help to promote more sustainable travel, an increase in electrified vehicle usage and the protection and enhanced provision of green infrastructure, all of which should help to reduce air quality concerns or mitigate adverse effects of deteriorating air quality.

Policy EC1 supports employment developments which would be accessible by sustainable transport, with further economic policies prioritising employment developments within more accessible locations (according to the established settlement hierarchy in the area). The same goes for the support of the development of housing, leisure, cultural and tourist proposals and community facilities.

Policy HO2 focuses on sustainable urban extension sites and it aims to promote sustainable transport within and connecting to the area of growth. The natural environment related policies NE2, NE4, NE5, NE7, Policy CI2 and CI3 ought to protect and enhance the Borough's green infrastructure provisions, helping to provide more aesthetically appealing setting to travel by bicycle or walking (whilst also helping to partially absorb some particulate matter where these provisions occur in areas which may have higher amounts of air pollution).

Policy CC6 specifically focuses on air quality, ensuring developments focus on the effects of a new development on local air quality, including through impact assessments and appropriate mitigations; the policy also seeks to reduce potential future exposure to poor air quality.

Electric vehicle charging is catered for in Policy IC4, where development of new leisure, cultural and tourism sites is supported where they are well connected to electric vehicle charging infrastructure. The sustainable travel and transport network policies promote active and public modes of transport alongside an increased usage of electric vehicles, through Policies ST1, ST2, ST4 and ST5 (specifically focusing on provisions for electric vehicle charging). Design related measures in the Plan also seek to incorporate considerations for promoting sustainable transport usage, including Policies DD1 and DD2.

Strategic policies in the Local Plan provide high level policy support for developments which will help to mitigate both the occurrence and effects of air quality. This is broadly through measures which support sustainable transport usage through accessibly located developments, or through the provision of new or improved infrastructure and services which support public or active travel) (Policies S2 (Housing Delivery Strategy), S3 (Mitigating and adapting to Climate Change), S6 (Healthy Stronger Communitie) and S7 (Developer Contributions and Infrastructure Delivery). Further policy measures help to mitigate air pollution issues through green infrastructure and reducing human exposure to areas of concern (For example Policies S4 (Forest Community).

Overall effects

The Telford and Wrekin Local Plan is likely to lead to some increases in motor vehicle usage across the Borough, especially in areas which are expected to see higher levels of housing growth such as Telford. This could be more pronounced around the north of Telford nearby to larger areas of growth, which could also increase the prevalence of heavy goods vehicles near to somewhat more sensitive locations already experiencing air quality pressures. Effects would be likely to be most pronounced at traffic pinch points and at peak journey times. That said, the Plan seeks to mitigate adverse effects through policy which promotes active and public transport choices, helps to facilitate an increase in electric vehicle usage and protects and enhances the Plan area's provision of green infrastructures which may help to mitigate poor air quality to some extent. In this sense, more significant effects ought to be avoided, with only **minor negative effects** predicted overall.

Water resources

Effects of the spatial strategy

For the proposed growth, there is an assumption that appropriate wastewater treatment capacity would exist or be planned for to accommodate new development. In this respect, neutral effects are predicted. However, an increase in the number of homes and new businesses could well lead to a deterioration in water quality in watercourses due to increased discharges to watercourses, surface water run off containing sediment and pollutants for example. It will be important to incorporate natural drainage solutions into new development to reduce the likelihood of direct pollution to watercourses.

Deliverable development within the existing urban areas of Telford and Newport is broadly on sites which are not sensitive in terms of proximity to nearby water sources or protected zones (groundwater source protection zones etc), meaning that direct contamination from site-related pollutants (including both during the construction and post-construction phases) would be unlikely to be significant. Furthermore, the majority of these sites would be unsuitable for agriculture and as such, their development and use for housing purposes would be unlikely to lead to a reduced likelihood of nitrate ground and/or surface water pollution stemming from the site use (which is commonly associated with some agricultural fertilising practices).

Planned for growth in Newport would not meet the identified housing levels set out under the spatial strategy, and hence additional growth would be expected to be met through windfall development. This could lead to development which is less aligned with the Council's strategic priorities, including through speculative or appeal-led development. The need for growth at a level which is greater than that planned for may give rise to higher densities or development on less appropriate sites. Effects in this regard are likely to be dependent upon the location and nature of development and as such, may lead to some uncertain negative effects. Due to the small scale of windfall development, effects are unlikely to be significant though.

Some larger, strategic growth would be expected to come forward within one of the broad areas for growth along Telford's northern periphery. Each of the potential sites are located close to, or include a body of water, meaning that, without sufficient mitigation, water quality may see some negative effects, especially during construction phases (though measures should at least partially mitigate these construction related factors). That said, the change in use from agricultural (or with the potential for agricultural uses) may also lead to fewer pollutants such as nitrate and phosphorous, which can cause significant issues for the quality of waterbodies. The extent to which surrounding waterbodies might see a deterioration in quality depends on which area of growth is developed, the layout and design features.

Some areas for strategic growth could see development fall within a surface water drinking water safeguard zone, with surface water nitrate vulnerable zones, groundwater source protection zones, source protection zones all interacting/overlapping with the growth areas to various extents. With appropriate mitigation in these areas though it should be possible to mitigate adverse effects. Development in these locations also has the potential to lead to increased pressures on drainage and wastewater networks. There should be good potential to avoid significant negative effects through the application of SUDs and construction management techniques and strategic planning for wastewater treatment.

Peripheral growth on the edges of Telford (particularly on the western extent) and Newport (focused on the south and south eastern extent) might see some similar effects to those related to the strategic growth (though, aligned with the smaller sites sizes, effects may be of a smaller magnitude). However, in this context only site 473 (Land East of Dawley Road) is in close proximity to a Poor quality Water Framework Directive monitored watercourse, potentially leading to some negative consequences.

Rural growth under this approach would be of a broadly small scale, meaning that the most sensitive sites in relation to water quality could be omitted from allocation and / or effects effectively managed.

Where a majority of site options on the peripheries of Telford and Newport as well as many of the sites in rural areas are greenfield with some assumed agricultural use, their allocation would go some way towards reducing the potential for future agricultural uses to lead to nitrate pollution of surface and groundwater.

The spatial strategy might be expected to deliver a mix of minor positive and minor negative effects, though these are uncertain due to the lack of detail around mitigation and heightened potential for cumulative effects to impact water quality in particular.

Development management

Policies outlined in the Local Plan ought to help to mitigate negative effects relating to water quality in the Plan area. Policy HO1 (Housing Development Principles), DD1 (Design Criteria) and CC5 (Flood Risk Management and Sustainable Drainage Systems) ensure that development will address potential issues relating to surface water or other flood risks, this will help to manage excessive flows of water, potentially reducing related water quality issues, with CC5 specifically focusing on the role sustainable drainage systems will play in this.

Policy HO2's (Sustainable Urban Extension Sites) promotion of the use of sustainable drainage systems should help to reduce flooding and inundation of stormwater pipe networks, helping to protect water quality.

Policy CC1 (Sustainable Construction and Carbon Reduction) would seek to ensure that future proposals incorporate facilities to recycle water, helping to increase the water efficiency of new development.

Policy CC4 (Water Re-use, Conservation, Efficiency and Quality) is a core policy in respect of water resources, it seeks to maximise water efficiency within new developments through schemes including reuse and recycling, adherence to water consumption limits (linked to Building Regulations), appropriate management of surface and wastewater as well as specifically ensuring that no development within the Borough adversely affects the Midland Meres & Mosses Phase 2 Ramsar site, located to the north-east of Telford and Wrekin. There is also a requirement to limit water consumption in new developments.

Potential adverse effects from mineral development on water resources across the Borough will be mitigated by Policy ML3 (Mineral Development), which ensures that drainage, water quality and quantity impacts are avoided.

Strategic policy in the Local Plan provides high level policy support for developments which will help to mitigate the Plan's impacts upon water resources. Policy S3 (Mitigating and adapting to Climate Change) promotes development which reduces the demand on water resources and incorporates well-designed and multi-functional sustainable drainage systems. This is likely to promote positive outcomes for water resources, albeit it at a very high level. More granular and detailed policy promoted in the Plan ought to engender more specific effects.

Overall effects

The pool of sites in the Telford and Wrekin draft Local Plan have the potential to lead to some mixed effects. There are potential negatives coming through the contamination of watercourses nearby to growth, which may be somewhat heightened by the presence of multiple water-quality related designations in the Borough. However, several policies ought to mitigate this, with requirements for appropriate management of various forms of drainage and water flows, efficient usage of water resources (including reuse and recycling) and measures to reduce effects upon water quality in the Borough, especially on sensitive sites.

Some positive effects may be seen by turning agricultural land (or land with the potential to be used for agricultural purposes) into alternative uses, in turn driving down the potential for water quality issues related to fertilisers (nitrates and phosphates).

Overall, **minor positive effects** are predicted.

Soil and land

Effects of the spatial strategy

The spatial strategy would be expected to maximise growth on sites within the Telford and Newport urban areas. These sites are largely brownfield and on land not suitable for agricultural purposes. In this respect, the re-purposing of brownfield land ought to promote positive effects.

Sites on the peripheral areas of Telford and Newport are more commonly a mix of brownfield and greenfield, or greenfield. Considering the fact that not all site options identified at this stage would be required to be allocated, preference could be shown for allocating mixed brown/greenfield sites around Telford, though it would be expected that purely greenfield sites would be required to be allocated, leading to some more negative effects. Much of Telford's peripheral sites are situated on Grade 3 agricultural land, leaving the potential for loss of Best and Most Versatile agricultural land. Development at site 356 (Site 1, Land North of Junction 7, M54) could result in the loss of productive Grade 2 agricultural land, though there may be some potential to avoid the development of this site. Where site 472 (Land South of The Dale) to the south of Newport would be expected to be allocated, these would be some loss of greenfield land which is identified as Grade 2 agricultural land.

Planned for growth in Newport would not meet the identified housing levels set out under the spatial strategy, and hence additional growth would be expected to be met through windfall development. This could lead to development which is less aligned with the Council's strategic priorities, including through speculative or appeal-led development. The need for growth at a level which is greater than that planned for may give rise to an increased potential for development on greenfield sites, and sites on Best and Most Versatile agricultural land. In relation to the lack of clarity regarding the location of this housing growth, some uncertain potential negative effects might arise.

Strategic growth to the north of Telford would result in the loss of greenfield land which is also classified a Best and Most Versatile agricultural land. There would be some variance between the options related to broad areas for growth, though considering the scale of development, more significant negative effects would be expected to arise from any of the large areas of growth.

Rural growth under this strategy would be at a very low scale. However, the majority of rural sites are located on land identified as Grade 2 and so it is unlikely that allocations could avoid developing on land which could be valuable for agricultural purposes. The majority of growth would come forward on greenfield land. As such, rural housing delivery would be expected to result in the loss of land which is considered to be valuable in terms of Soil and Land sustainability related objectives. This would be of a low magnitude though, and so significant effects are unlikely.

In relation to minerals, the spatial strategy would be expected to maximise allocations on those sites which are within and adjacent to the existing urban areas, where land is less suitable for mineral extraction. In this regard, effects would be expected to be minimal, aside from potential implications in relation to strategic areas of growth, namely around the north of Telford.

Effects would be least pronounced on 'Land North East of Muxton', due to a smaller overlap with mineral safeguarding land. Potential growth at 'Land North and West of Bratton and Shawbirch' and 'North of the A442' could potentially lead to the sterilisation of land with the potential to contain mineral resources.

Development management

Policies outlined in the Local Plan ought to help to minimise the loss of land which could be considered to be valuable in terms of maximising the use of previously developed land and safeguarding land which is considered to be valuable for agricultural purposes. This will apply to windfall development but is less relevant for the sites that are allocated where losses of soil and mineral resources will be unavoidable.

Multiple policies ensure that developments protect and enhance the provision of green and natural spaces across the Borough, where these spaces may be found on existing Best and Most Versatile agricultural land, this policy direction may serve to protect such resources, potentially for small scale productive land uses, such as small scale agriculture or allotments (Policies S3- Mitigating and adapting to Climate Change, S4 - Forest Community, S5 - Nature Conservation, HO2 - Sustainable Urban Extension Sites, NE1 - Biodiversity and Geodiversity, NE4 - Greening Factor, NE5 - Green Network, NE6 - Shropshire Hills Area of Outstanding Natural Beauty (AONB) and Strategic Landscapes, NE7 - Strategic Green Gaps, CI2 – Existing Public Open Space, CI3 – Provision and Management of Public Open Spaces).

The Plan's policies promote the reuse of brownfield land, helping to make efficient use of the Borough's available land for development and safeguarding greenfield and potentially valuable agricultural land (Policies EC2 - Employment in the Rural Area, S2 - Housing Delivery Strategy, ML5 – Land Contamination, DD2 – Estate Design). This includes efforts to help to remediate contaminated land.

Policy ML1 (Mineral Safeguarding) seeks to protect land which is potentially suitable for mineral extraction. It is accepted that where development for other uses has no other suitable location, then exceptions can be made. But on the whole, the policy should minimise the unnecessary loss of mineral deposits and safeguard them for potential future extraction. Policies ML2 (Maintaining Aggregate Supplies) and ML3 (Mineral Development) provide further protection and conditions to ensure sufficient mineral supplies in the Borough.

Overall effects

Overall, the Plan seeks to direct development onto land which is less valuable in terms of agricultural potential, which is previously developed where possible and which attempts to avoid the potential sterilization of safeguarded minerals. However, some allocated sites and potential windfall development is expected to come forward on sites which do not meet these aspirations, and hence some negative effects are anticipated, especially in relation to strategic growth on greenfield land. Whilst policy might mitigate this somewhat, **moderate negative effects** are still anticipated given the potential for large scale greenfield land development on agricultural land. It is recommended that allocations / development on greenfield land is supported by an understanding of the quality of agricultural land. Where possible, sites with higher quality soils should not be allocated, or where development is proposed on such sites, the pockets of land within sites containing higher quality soil resources could be set aside as areas of open space/green infrastructure/landscaping.

Landscape

Effects of the spatial strategy

Growth within the existing urban areas of Telford and Newport would be likely to come forward on all suitable sites, making use of the deliverable urban sites which do not have significant constraints in terms of landscape. Generally, these sites are not considered to be sensitive in terms of their landscape or visual characteristics and their associated effects would be likely to be broadly neutral across all options. In some circumstances, positive effects could arise if high quality design is introduced that improves townscape.

Potential unplanned-for windfall/appeal-led development could come forward in Newport in order to meet the town's split of the housing growth. This could change the landscape character, but land surrounding most of the town has not been identified as highly sensitive in terms of its landscape or visual role.

On Telford's urban periphery, there are different sensitivities with regards to landscape character. To the west, close to the AONB there are areas with high and very high sensitivity, whilst to the north and east of the urban area there are a greater number of parcels with lower sensitivity, though this is interspersed with areas of higher sensitivity. Taking into account other constraints, it ought to be possible to deliver the housing growth on sites which are considered to be of a low or medium-low sensitivity in relation to landscape or visual impacts.

Strategic growth to the north of the Telford area would be expected to be able to be delivered on land which is medium-low or low sensitivity, reducing the potential impacts on the Borough's landscape. Where part of the North-East of Muxton site is more sensitive, the size of the site might permit a degree of mitigation through screening, landscaping and a suitable site layout. That said, the large scale of growth in one or more of these locations is likely to lead to some significant changes to the landscape in the areas which receives growth, resulting in potential significant negative effects.

Rural growth under this approach would be of a very small scale. The majority of site options in rural areas are not located in areas of landscape or visual sensitivity rated as more sensitive than medium. As such, it would be expected that this growth could be met on sites which are not visually sensitive or likely to disrupt the rural landscape significantly.

Development management

Policies outlined in the Local Plan ought to help to somewhat mitigate the impact of development on the Borough's landscape.
In general, green infrastructure (including trees, hedgerows and green/open natural spaces) ought to help to preserve the natural landscape of the Borough's land and townscape. This could be seen as particularly relevant in Telford, where the Town has a high provision of green infrastructure helping to shape its character, with the natural environment related policies NE2, NE4, NE5, NE7, Policy CI2 and CI3 promoting positive effects in this respect given that they support environmental protection and enhancement.

Policy NE6 - Shropshire Hills Area of Outstanding Natural Beauty (AONB) and Strategic Landscapes provides a high degree of protection for the landscape and scenic beauty of the AONB, with Policy NE7 - Strategic Green Gaps guiding development in a manner which preserves strategic gaps which perform critical landscape functions (including preventing coalescence). Both of these policies serve to protect the strategic level landscape character in the Borough, and the spatial strategy does not undermine these policies by directing growth away from the AONB in the main.

Further policy relating to appropriate and high-quality design of future developments ought to help to preserve and enhance the current townscape of the Borough, with Policies HO1 - Housing Development Principles, HO2 - Sustainable Urban Extension Sites, ST4 - Design of Roads and Streets, DD1 - Design Criteria, DD2 - Estate Design and DD4 - Commercial and Industrial Development Design all promoting this.

Design which takes account of local character should be delivered on developments, with a particular emphasis on large sites and rural sites, helping to minimise any effects relating to inappropriately juxtaposed character on the landscape. This is promoted through a number of policies, including HO12 – Housing Development in the Rural Area, DD1 - Design Criteria, Policy HE1 - Heritage Assets, Policy HE2 - Ironbridge Gorge World Heritage Site and Policy HE4 - Conservation Areas.

Policy CC3 - Strategic Renewable Energy Development helps to prevent potential negative impacts on the Borough's landscape through ensuring that no proposals will be deemed acceptable should they cause a significant adverse effect on the landscape. This is in-line with national policy. Policy ML3 - Mineral Development provides the same insurances relating to mineral development.

Overall effects

Overall, the Plan's spatial strategy prioritises development on sites within the built-up area and on sites with lower landscape and visual sensitivities. However, it is likely that strategic areas of growth (to the north of Telford for example) would lead to more significant effects on the landscape due to the scale of change involved.

Further effects (more marginal) might be seen in peripheral locations, especially around Telford and rural areas and nearby to the AONB. However, only small-scale sites are likely to be involved, and the magnitude of effects would be limited, particularly when Plan policies are applied to ensure high quality and locally relevant design and through the enhancement of green infrastructure.

Effects may also be seen in locations within the built-up areas of the Borough where the local character plays a strong role in forming the townscape. Conversely, positive effects could be achieved were urban development leads to an improved public realm.

Overall, whilst policy will help to mitigate the effects of development, some residual **minor negative effects** are likely to be unavoidable on larger scale developments on the periphery of settlements.

Historic Environment

Effects of the spatial strategy

Development in the vicinity of historic assets can have impacts upon the setting and significance of the building or area. This is dependent upon the site's context and the proposed development. Though, it can be said that mitigation through sensitive, character driven design and appropriate screening can mitigate negative effects in this respect. This is more likely to be seen on smaller sites or sites which serve to improve the character of the area. Larger sites or those which significantly change the setting of a heritage asset would be less likely to show potential to mitigate effects.

In general, the site options within the existing built-up areas of Telford and Newport are not especially sensitive in terms of heritage assets and the historic environment. Where there are a number of these sites which are 'constrained' by nearby listed buildings, it would be expected that development design considerations would take account of heritage assets and facilitate growth which is sympathetic to local character. Much of the urban area is also of mixed character with some brownfield sites not contributing positively towards a sense of historic character. As such, well-designed developments could contribute positively towards maintaining and better revealing the significance of heritage assets. It is considered likely that, with the exception of sites which are significantly constrained, the majority of urban sites within both Telford and Newport would not lead to any deterioration of the historic environment either as a result of individual developments or cumulatively. Potential negative effects for more 'constrained' sites may be offset by positive effects associated with the repurposing of brownfield sites in a manner which is sensitive to the historic environment.

Where the World Heritage Site is located in the south of Telford's urban area, site 483 is close to the northern boundary of this area of historic significance. It would be assumed that the development of the brownfield land (currently a car park) in a sensitive way, would contribute in a more positive way to the area's historic character and the setting of the World Heritage Site.

Greenfield sites on the periphery of Telford are broadly unconstrained aside from some scattered listed buildings. The majority of the listed buildings which intersect with or are nearby to site options are Grade II and sensitive design alongside screening would be expected to mitigate significant effects. However, the open countryside setting of listed buildings at the urban periphery is likely to be negatively affected to some extent. As a result, at least minor negative effects are predicted in this respect.

Growth nearby to clusters of listed buildings might lead to more pronounced effects, especially where site's are located on the urban periphery. For example on site 274 (adjacent to Lilleshall), 472 (Newport) alongside some rural sites in villages such as Preston, Allscott, Tibberton and Edgmond.

Rural areas are generally more constrained in relation to the historic environment, with the rural nature of the area and proximity to the countryside playing an important role in the setting of heritage assets. There would be a degree of choice in relation to the allocation of sites in rural areas, and as such, more constrained ones could potentially be omitted. However, broadly speaking, the site allocations in these areas are expected to see more pronounced effects than other comparatively sized sites across the Borough.

In Newport, the majority of sites are not significantly constrained by the local historic environment, meaning that this small scale of growth proposed for the area would be unlikely to result in significant effects. Sites nearby to listed buildings (472 and 627) could have potential for greater effects, but again, it is likely that these would not be significant given the need to apply high quality design. Windfall/appeal-led development could also come forward in Newport in order to meet the town's split of the housing growth. this could be on more sensitive land and the potential for negative effects could be heightened should this come forward nearby to the town's central conservation area, scheduled monument and concentration of listed buildings.

An element of uncertainty surrounds these effects in Newport. However, considering the scale and potential spread of development, cumulative effects might be expected to be kept to a minimum.

Development management

Policies outlined in the Local Plan ought to help to mitigate adverse effects on the historic environment associated with the spatial strategy. This would be achieved primarily by ensuring that planning-related changes to the built environment respect local character and ensuring that the setting and significance of historic assets are considered thoroughly through design considerations. These requirements are reflected in several draft Policies. It is recommended that once site allocations and Broad Areas of Growth are confirmed that suitable site policies are developed that consider a range of site-specific factors (of which historic environment should be one).

General policies which seek to protect green infrastructure across Telford ought to help to preserve the green focus of the town, helping to retain the current townscape and setting of areas surrounding historic assets. A review of protected trees and / or greater support for tree retention could help to further consolidate these positive effects. However, this would need to be informed by evidence.

Policy EC10 - Shopfront and Advertisement Design specifically ensures that proposals for new and/or altered shopfronts consider the local character in their design, and that they retain and repair historic frontages.

A range of policies also seek to ensure that design is a key focus in development, with the local character (including historic factors) being considered throughout proposals (Policies HO12 - Housing Development in the Rural Area, HO13 - Affordable Rural Exception Sites, Policy DD1 - Design Criteria and DD3 - Residential alterations & Extensions)

Specific heritage related policy seeks to restrict the degree to which developments in the Borough impacts the setting of and significance of heritage assets, including Listed Buildings, general heritage assets, the Ironbridge Gorge World Heritage Site, Conservation areas, Buildings of Local Interest, Historic Parks and Gardens and Scheduled Monuments and Archaeology (Policies HE1 - Heritage Assets, HE2 - Ironbridge Gorge World Heritage Site, HE3 - Listed Buildings, HE4 - Conservation Areas, HE5 - Buildings of Local Interest, HE6 - Historic Parks and Gardens and HE7 - Scheduled Monuments and Archaeology). This ought to ensure that development which falls within proximity of any of these assets pays close attention to the relationship between the development and asset, with considerations made to ensure that detrimental effects are minimised and that future development, where possible, compliments and improves the historic character of each area.

Overall effects

The growth and spatial strategy (in the context of the potential sites) should enable the most constrained sites, or those with little prospect of successfully mitigating effects upon the historic environment, to be omitted from allocation. However, it is likely that some planned-for development could be near areas of sensitivity in relation to the historic environment. This could lead to effects upon the significance of heritage assets such as listed buildings (mainly through a change to the 'rural' landscape in parts of the borough).

The significance of effects would be dependent upon the exact sites proposed for allocation, the layout and design. With that being said, a range of policies in the Plan should ensure that future development considers the historic character of the Borough, as well as specific impacts on the setting and significance of designated and non-designated heritage assets. In this respect, it is predicted that any negative effects would be minor to moderate.

There are also a range of supporting policies that are likely to have positive secondary effects on heritage including policies that support green infrastructure, reuse of land and buildings, and high-quality design.

On balance, whilst effects are expected to be largely mitigated by policy requirements, development is likely to have some residual negative effects in particular parts of the Borough. Therefore uncertain **minor negative effects** are predicted.

Waste

Effects of the spatial strategy

Sites within the urban boundaries of Telford and Newport are expected to be well connected to existing waste collection routes, meaning that it is unlikely that new routes would have to be set-up to cater for the population growth. That said, it may be that existing routes have to be scaled up in terms of their collection capacity to deal with the increased demand and volume of waste to be collected.

When looking at access to household waste recycling centres (HWRC), the majority (with the exception of a small number) of sites in Telford have access within 3 miles, whereas none of the sites in and around Newport have access to a HWRC within 3 miles. Neutral effects would be expected in relation to the growth within Telford's urban area, whereas in Newport some negligible negative effects are anticipated due to the worse access to a HWRC, potentially reducing the propensity for residents to recycle some items of waste that are not collected at kerbside.

Areas of peripheral growth along Telford's northern periphery would locate new housing within a 3 mile drive from the nearest HWRC, supporting the ability to recycle excess materials that are not picked up at kerbside. The approach would permit a degree of site allocations to the west of Telford, potentially enabling some efficiencies in new waste collection rounds.

A small number of peripheral sites in/around Newport are within 5 miles of the nearest HWRC. This is not an optimum distance, however given that some growth would be delivered in and around Newport in any circumstance, sites towards the south-west of the urban area would be more accessible to the nearest HWRC. The site options are broadly well connected to the existing urban area, and hence existing waste collection routes. This scale of growth within Newport would be unlikely to require entirely new waste collections routes and could be facilitated on sites which maximise accessibility to the nearest HWRC. The potential for future windfall/appeal led development in Newport may lead to difficulties in strategic waste collection planning due to the uncertainty surrounding the location of these sites.

Aside from rural areas nearby to Telford (Lilleshall and Wrockwardine), all rural locations are broadly poorly situated in terms of accessibility within 5 miles of a HWRC. The small scale of growth under this approach in rural areas would be likely to facilitate some fairly efficient extensions of existing waste collection routes. Therefore, neutral effects are predicted in this respect.

Development management

Policies outlined in the Local Plan ought to help to reduce adverse effects of future development on considerations relating to waste in the Borough.

Policy EC3 focuses specifically on waste management facilities; this ought to support waste management processes which promote a reduction in the production of waste and an increase in recycling and which provides sufficient waste management capacity for the local population.

Policies DD5 (Waste Planning for Residential Developments) and DD6 (Waste Planning for Commercial, Industrial and Retail Developments) seek to ensure that future developments will provide sufficient waste facilities and management for the relative demand in a way which promotes a reduction in waste production and an increase in sustainable usage and reusage patterns.

With regards to construction related waste, support for the reuse of land and buildings is positive in helping to reduce the amount of inert waste generated from demolition, land working and new building materials. However, much of the growth could be on strategic new developments, which require a significant amount of resources and can generate substantial waste. The requirement to implement site waste management plans would help to mitigate such effects, as well as stating a preference for the retention of buildings rather than demolition (unless absolutely required to make a development safe and / or viable).

Overall effects

The spatial strategy is likely to place most new growth in locations that have good access to a HWRC and where waste collection should be relatively effective and efficient. In some locations accessibility and waste collection could be less efficient, but this only applies to a small amount of development across the borough/

Several plan policies ought to help to ensure that the Borough's waste demands are met and managed efficiently, but it should also be recognised that construction waste is likely to be substantial because of strategic growth. On balance, **neutral effects** are predicted.

Climate change resilience

Effects of the spatial strategy

The potential sites within the strategy mostly avoid significant flood risk from fluvial sources or identified surface water sources. A handful of sites have a small area of overlap with flood zones 2 and/or 3 (210, 257, 428 and 675), but these are smaller parcels within strategic areas of growth and hence, though there is some risk, it is probable such areas could be avoided through layout and design.

Though most development is not in areas currently at risk of flooding, 60% of potential development sites are entirely greenfield and there is likely to be an overall reduction in the permeability of the land.

Future development would be expected to suitably manage flows of water by means of sustainable drainage systems, but it is possible that cumulatively there will be an overall increase in the volume and speed of surface water run-off. This could potentially lead to surface water flood events and the exacerbation of fluvial flooding.

Larger greenfield developments should have better potential to deliver a natural, catchment-based approach to drainage to help manage the aforementioned effects. However, taking climate change into account, the potential for increased flooding needs to be addressed through site specific and general plan policies.

Development management

Following on from the discussion above, it is important to highlight seeral policies in the draft Plan that are likely to help manage flooding and improve wider resilience in terms of climate change.

There is a need to ensure that the effects of climate change are considered throughout proposals, including considerations relating to how an increased occurrence of extreme heat and flood events could be mitigated (Policies HO1 - Housing Development Principles, HO2 - Sustainable Urban Extension Sites, HO9 - Estate Regeneration, DD1 - Design Criteria, Policy DD2 - Estate Design and Policy DD2 - Estate Design). Factors discussed including drainage (including Sustainable Urban Drainage Systems), surface permeability, ventilation and greening, which are key pathways to adapting to climate change. The draft policies strongly reinforce the need for multifunctional solutions which may also improve the new environment of developments, including visual appearance.

Policies specifically relating to climate change are likely to have the most pronounced effects in efforts to facilitate resilience to climate change in Telford and Wrekin. Policy CC1 (Sustainable Construction and Carbon Reduction) seeks to ensure future development incorporates ventilation and uses materials with good thermal properties, helping future buildings and spaces become more resilient to extreme weather.

Policy CC5 (Flood Risk Management and Sustainable Drainage Systems) should ensure that future development avoids areas of identified flood risk, would not inappropriately use land which is required for flood risk management, would not increase flood risk on or off site and provide suitable drainage to ensure that runoff rates from greenfield sites do not exceed specified targets.

This should go some what to mitigating the effects of growth proposed in the spatial strategy.

Policies S4, S5, NE2, NE4, NE5, NE6 and NE7 relate to green infrastructure and open natural landscapes. Whilst they do not specifically aim to reduce flood risk, the policies are expected to increase the rates of permeability and interception across the Borough, reducing flood risk to some degree. The protection and expansion of green and blue infrastructure across the Borough ought to also provide some cooling effects, especially where these are situated in more dense, built-up areas. It is important to note that the urban area of Telford would be expanded through strategic growth, which could be counterintuitive in terms of urban cooling. It will therefore be important to ensure that green infrastructure is enhanced through development to offset these effects.

Strategic policy S3 (Mitigating and adapting to Climate Change) in the Local Plan provides high level policy support for developments which incorporate measures to adapt to the effects of climate change, including a focus on ensuring that the development alongside other areas are not adversely affected by any proposals. Whilst this sets a positive framework, it would be beneficial to make requirements clear for strategic sites when they are allocated.

Overall effects

In terms of fluvial flood risk, the spatial strategy is likely to avoid areas which are identified as at heightened risk (flood zones 2 and 3). Though there are some potential intersections with strategic development opportunities, there ought to be capacity to avoid building on sensitive parts of sites.

Regardless of current flood risk, where development occurs on greenfield land, an associated increase in runoff rates is likely to be seen, with more profound effects on and around larger sites. In this sense, areas on Telford's periphery, especially the north and west are likely to be more affected. However, there will be a need to ensure that future development does not increase flood risk on or off site and that developments are better prepared to handle extreme heat or cold weather events. The draft Plan also supports the protection and enhancement of green infrastructure and multi-functional environments. Such policy measures should be sufficient to ensure that significant negative effects do not arise as a result of growth.

At this stage, an **uncertain effect** is predicted with regards to climate change resilience. It is considered possible that positive effects could arise, depending on the layout and site specific requirements for growth; with particular opportunities on strategic sites if a green infrastructure-led approach is required. However, in the absence of a proactive policy direction, it is also possible that strategic growth may not fully realise opportunities for climate change resilience, leaving neutral or potentially minor negative effects.

Climate change mitigation

Effects of the spatial strategy

The proposed strategy would continue a focus on housing growth in Telford, with more limited housing being delivered in Newport and Rural Areas. There are a number of factors at play when focusing on efforts to drive down greenhouse gas (GHG) emissions in order to mitigate the severity of climate change. When looking at the household scale, the design of buildings to be energy efficient and provision of household energy generating capabilities are the key factors to consider. However, when appraising options in this context, it is impossible to determine effects at the household scale due to any development offering the opportunity to pursue such measures. Hence, a more strategic focus must be adopted. This relates to the potential for new development to encourage sustainable forms of transport use (mostly active travel and public transport), reducing the frequency of the need to travel and shortening distances where possible as well as the potential for sites to offer site-wide energy efficiency and generation schemes.

In relation to travel, housing growth generally leads to an increase in car use. Whilst this is a short to medium-term problem in terms of GHG emissions for the Borough, the anticipated rapid policy and market driven introduction of electric vehicles is likely to mean that the day-to-day running of cars in the longer-term should not be a major contributing factor to GHG emissions (providing, as expected, that the National grid see's corresponding decarbonisation).

Carbon sequestration through tree planting and retention as well as protecting carbon sinks is a proven and potentially low-cost solution to reducing CO2 levels in the atmosphere; though, it must be accepted that at the scale of housing development in Telford and Wrekin, substantial reductions in CO2 in the atmosphere through these efforts would not be expected. Whilst any form and mix of housing could come forward regardless of location, it is considered more likely that rural and urban periphery sites would be lower density schemes with larger homes. Generally speaking, this will lead to increased emissions per capita when compared to high density development in urban areas.

Where this approach aims to focus the majority of growth in and around Telford, the town's high concentration of shops, services and employment means that the need to travel longer distances would be reduced. The concentration of growth in Telford should increase the viability of sustainable transport schemes to cater for the population growth and reduce the need to travel by unsustainable means. Clustering sites in very close proximity or large-scale developments can also help to increase the viability of energy efficiency schemes such as district heating networks as well as generation schemes such as onsite solar farms. This pattern of development can also serve to increase the viability of tree retention and planting schemes, helping to absorb CO2. A greater amount of growth throughout Telford ought to result in lower per capita emissions compared to similar growth in the rural areas. Therefore, in this respect, positive effects are likely.

Strategic growth to the north of Telford would be expected to benefit from a concentration of growth, including improved sustainable transport offerings and an increased potential for the protection and provision of carbon sequestration schemes.

These benefits would also be expected to be realised for nearby existing residents. Whilst uncertainties remain surrounding the exact location of this larger scale growth, new and improved services in regards to sustainable transport, alongside the existing access to local shops, services and sustainable transport offerings, ought to promote positive effects on whichever broad area for growth is selected for allocation.

The small-scale growth in Newport and Rural Areas would not be likely to offer substantial opportunities to deliver energy generation and efficiency schemes, nor would it be as likely that tree planting would be achieved on a substantial scale. There would be some expected small-scale improvements to sustainable transport provisions, but not enough to significantly alter behavioural norms in terms of transport modal choices.

Some uncertainty regarding the location of unplanned for growth in Newport may lead to residential development on appeal-led or windfall sites. This may lead to residential development on less accessible sites, potentially driving up per-capita transport related carbon emissions; though, this is uncertain and the low amount of potential growth would not be expected to lead to significant effects.

Whilst the development under this approach would offer opportunities relating to carbon sequestration, energy generation and efficiency and sustainable transport options, it would still be expected that there would be an increase in car use as more households are formed. This would be expected to result in short to medium-term increases in GHG emissions for the Borough, leading to negative effects.

Development management

Policies outlined in the Local Plan ought to help to ensure that future developments are supported by services and infrastructures which may facilitate an increase in modal shifts towards both active and public forms of transport. Further to this, renewable energy infrastructures and carbon sequestration is to be supported through policies attached to new development for housing and employment uses, as well as for specific renewable energy scheme related policy.

Strategic Policy S3 (Mitigating and adapting to Climate Change) provides high level policy support for developments which include measures designed to support mitigating climate change by reducing per-capita greenhouse gas emissions. Measures of support relate to sustainable transport, energy efficiencies, new technologies and renewable energy, electric vehicle usage and green infrastructure.

Policies CC1 (Sustainable Construction and Carbon Reduction), CC2 (Renewable Energy in Developments) and CC3 (Strategic Renewable Energy Development) specifically focus on measures to help mitigate climate change. This includes through focusing on reducing the embodied carbon through construction stages, providing renewable energy production on developments, reducing the operational carbon emissions through efficiencies as well as supporting (subject to conditions) renewable energy scheme developments.

Policy HO1 (Housing Development Principles) provides high level support for sites of 100+ dwellings which provide measures which support climate change mitigation, including through energy efficiencies and renewable generation.

Policy HO2 (Sustainable Urban Extension Sites) focuses on larger sites (1000+ dwellings), seeking to ensure that these provide onsite shops and services and positive approaches to connectivity by sustainable means both within the site and connecting to the surrounding areas. This should reduce the need to travel and also enable sustainable transport choices. The policy goes on to specify the need for future urban extensions to ensure high levels of building energy efficiency and provide onsite renewable energy generation; these should help to drive down future carbon emissions associated with the operational stages of building usage. These effects should especially benefit transport related emissions from growth to the north of Telford.

Policies ST1 (Active Travel), ST2 (Safeguarding Rail and Transport Corridors), ST4 (Design of Roads and Streets) and ST5 (Electric Vehicle Infrastructure and Parking Design), DD1 (Design Criteria), DD2 (Estate Design) and DD4 (Commercial and Industrial Development Design) focus directly and/or partly on transport, and are expected to reduce per-capita transport related emissions. This is through support for developments which ensure accessibility by active, public and low carbon forms of transport.

Policies S4, S5, NE2, NE4, NE5, NE6 and NE7 relate to green infrastructure and open natural landscapes; whilst they do not specifically aim to mitigate climate change, the policies are expected to increase the amount of land suitable for carbon sequestration as well as creating and protecting spaces which are more attractive for active travel usage.

Overall effects

Overall, the spatial strategy and policies in the Local Plan would see opportunities to reduce per capita GHG emissions through transport related measures as well as energy efficiency and generation schemes and some small scale carbon sequestration efforts. There would also be an anticipated short to medium-term increase GHG emissions related to an increase in car journeys in the Borough, linked to a high concentration of peripheral, less dense development. Overall, the Plan is likely to lead to some **minor positive** effects on climate change mitigation in the longer term (accepting the fact that an increase in development is likely in any case).

Housing

Effects of the spatial strategy

Additional housing development is generally regarded as a driving factor behind improved housing affordability in an area which receives growth; strategically considered and locally relevant housing delivery also has an ability to ensure housing types and tenures are of an appropriate mix to meet local housing need within the housing market area. As such, the large amount of growth in Telford would be expected to partially increase housing affordability, though this is not a significant identified issue in the area and hence significant changes to affordability in this area would not be expected. Telford does, however, have some issues relating to low quality housing and hence new development could offer the opportunity to provide housing of a higher standard to the area.

The town itself hosts the Borough's highest density of shops, services and employment and hence locating the majority of Telford and Wrekin's identified housing need in this area would be beneficial in terms of housing being in sustainable locations, reducing the need to travel longer distances and other issues associated with more isolated settlements.

Housing delivery in Newport would be expected to improve housing affordability in the area, potentially addressing to some extent the current affordability issues in the town. Newport has also been identified as having some issues relating to housing in poor condition; the delivery of new homes would be expected to improve access to higher quality homes in the area as well as providing an appropriate mix of housing types and tenures to meet the locally determined requirements. Whilst these effects would be somewhat likely to materialise in Newport, the relatively low scale of additional growth over the plan period (517) could mean that these effects would progress slowly, and their significance would be limited as a result. The fact that planned for growth would not meet the identified housing split in the town also creates some uncertainties regarding the delivery of housing, and its potential associated benefits.

In terms of housing in rural areas, there would be a low delivery of housing, with 385 homes being split between rural settlements. In general, the more rural areas in the Borough have higher quality housing, however affordability is an issue. This low number of allocations within such areas might serve to provide a small number of homes which are more affordable. The current threshold for providing affordable housing in the Borough (as aligned to national policy) is 10 dwellings. Though this may be set to a lower threshold for designated rural areas; considering the selection of rural sites, the vast majority should deliver an element of housing which helps to address affordability issues.

The strategic area(s) of growth expected in broad areas of growth to the north of Telford ought to be beneficial in delivering a suitable mix of housing types and tenures. That said, strategic developments can see delays to construction, leading to a degree of uncertainty surrounding the timing of housing delivery. The spatial strategy does, however, ensure a range of housing sites across the Borough, providing an increased likelihood that in the short to medium-term, a five-year housing land supply would be possible. The level of planned growth also provides a sufficient buffer over the objectively assessed need, to allow for a degree of flexibility and choice and to account for non-delivery. There is also an allowance made for meeting part of the unmet housing needs in the Black Country. Overall, the amount and distribution of housing is predicted to bring about **major positive effects** with regards to housing, though some uncertainty remains in relation to housing delivery in Newport and at strategic growth sites.

Development management

Policies outlined in the Local Plan ought to help to shape future development in the Borough to ensure that it meets local housing needs and is a desirable place to live. In this sense, the Plan provides a significant positive effect on housing. Policies that play an important role are discussed below.

Housing delivery needs to be carefully considered in terms of the scale, type, size, affordability, tenure and specialist needs (accessibility, adaptability and specific groups), in order to make sure it meets the needs of the Borough's current and future needs.

Housing-specific policies help to ensure that these considerations are robustly made in future development, with Policies HO3 (Housing Mix and Quality), HO4 (Affordable Housing Requirements), HO5 (Affordable Housing Delivery), HO6 (Supported and Specialist Housing), HO7 (Houses in Multiple Occupation) and HO8 (Gypsy, Traveller and Showpeoples Accommodation) helping to proactively shape future housing development in a positive way. In regards to affordability, the approach aligns the threshold for delivery with national policy (10+ dwellings); this would deliver housing at an increased rate compared to the made Local Plan, which sets the threshold at 11+ dwellings. The delivery rate of 25% in Telford and 35% in Newport and other locations (Policy HO4) would be aligned with policy in the made Local Plan. As such, the same rate of delivery can be expected, though this will apply to a marginally wider range of sites. The scale of these effects would not be expected to be significant.

Policies HO1 (Housing Development Principles), HO2 (Sustainable Urban Extension Sites) and HO9 (Estate Regeneration) provide policy to support more substantial developments. The policies seek to ensure that proposals take account of matters which ought to help to promote housing which is supported by local communities and has key infrastructure and enhancement measures in place; making them more attractive to potential residents.

Policy HO10 (Stalled Development Sites) provides policy to help to reduce the potential for delays to housing delivery. This ought to speed up development on problematic sites or those with phasing requirements; which could be particularly helpful for larger urban extensions.

Policy HO11 (Self-build and Custom Housebuilding) provides positive policy to support housing which will increase the type of housing within the local housing stock, though the anticipated scale of this delivery would not be likely to lead to significant effects.

Rural housing is influenced by Policies HO12 (Housing Development in the Rural Area) and HO13 (Affordable Rural Exception Sites); these will somewhat limit the potential for larger developments in rural areas, but will ensure that the rural area's retain a locally distinctive mix of housing types, which can be seen as positive. Affordable rural housing will also be positively encouraged, which is seen as pertinent in rural areas of the Borough, which have some affordability issues. The scale of influence on overall housing delivery across the Borough is unlikely to be significant.

Strategic policy S2 (Housing Delivery Strategy) in the Local Plan provides high level policy which is expected to maintain a housing delivery supply. The policy is linked to more detailed policy throughout the Plan and so its effects are largely accounted for above, and through the spatial strategy.

Overall effects

Overall, the Plan provides a positive spatial strategy and associated policies to deliver the identified housing need across the Borough. The concentration of growth in Telford would see the majority of effects under the strategy experienced there, with some improvements to housing quality and sustainably located housing nearby to jobs and services leading to positive effects. The level of growth in Newport would go some way towards improving housing quality and affordability, though this low number of additional dwellings would likely mean that these effects are minor and there are some uncertainties about meeting the proposed level of housing over the Plan-period.

The level of housing in rural areas would potentially improve rural housing affordability, but the low level of proposed growth means that these effects are uncertain and likely to be minor.

Several policies in the Local Plan seek to ensure that a locally relevant mix of housing types, sizes, affordability, tenures and specialist need is delivered to proactively plan for the needs of current and future residents. Future housing sites are expected (in accordance with policy) to help to deliver supporting infrastructure, services and place-making strategies which help to ensure that Telford and Wrekin remains an attractive place to live. Overall, **major positive effects** are predicted.

Health and wellbeing

Effects of the spatial strategy

A number of factors influence health outcomes when considering the built and natural environment. Of critical importance to health is having access to an affordable home and a job. In addition:

- access to a range of healthcare services may increase the propensity for people to get health check-ups, potentially driving down preventable ill-health and promoting healthy lifestyles;
- sports and recreation facilities are likely to facilitate physical activity, helping to boost mental and physical health outcomes;
- green infrastructures and natural, green spaces are proven to have beneficial impacts for mental health outcomes whilst facilitating active lifestyle choices and their associated improved health outcomes; and,
- further increased physical activity from having a range of shops, facilities, services and infrastructures in accessible locations may be seen from an increased potential for a greater uptake of active travel modal choices; this is likely to have positive effects for mental and physical health.

The focus on growth in and around Telford would be expected to deliver housing in locations which are considered to be broadly accessible to a range of health-related infrastructure, such as leisure centres, recreation facilities, health centres and green and natural spaces. It is noted that Telford has a good level of greenspace across the urban area, making growth focused in this area a positive approach. These locations, especially within the existing built-up area are also accessible to rights of way, active travel infrastructure and shops, facilities and services; this ought to facilitate an increase in active travel rates, helping to improve mental and physical health outcomes.

Peripheral areas of growth (including strategic growth to the north of Telford) may be less accessible to the range of facilities than central sites, though the locations proposed for potential growth are in close proximity to rights of way and active travel infrastructure, helping to promote active and health mobilities. These sites are generally larger (including the strategic growth to the north of Telford) and/or clustered, meaning that it would be likely that accessible shops, services and infrastructures which encourage active lifestyles may be delivered with the housing growth. The additional facilities delivered as a result of this housing growth could help to boost access to active travel routes, green and open space and recreation facilities for residents living nearby to growth, leading to associated potential boosts to mental and physical health outcomes. These peripheral sites would also demonstrate positive access to open and natural countryside.

Newport has a slightly reduced density of formalised greenspace and recreation facilities when compared to Telford. The potential sites are south of the town, closer to some smaller green spaces which would likely be insufficient to cater for additional growth of housing in the area. These areas are well connected to GP surgeries though.

The sites would go some way to meeting the housing split for Newport, however additional growth would be expected to come forward on appeal-led or windfall sites, potentially reducing the Council's ability to maximise housing sites' alignment with its strategic health priorities. This could lead to housing with poorer access to active travel infrastructure, healthcare services or other shops and facilities which may promote health behaviours and consequential mental and physical health outcomes. Uncertainties are expected in this respect.

Rural areas are broadly less accessible to existing healthcare facilities, as well as formalised infrastructures (sports facilities, active travel network) which may make it more difficult to encourage healthy and active lifestyles. They may also be less accessible to formalised green and open space. This would be most likely offset by the availability of an increased number of public rights of way as well as less formal green and open space which is widely available in more rural areas. Where some prospective residents may have poorer levels of accessibility, isolation associated with rural dwellings may lead to some negative implications. Access to GP services is also generally poorer in rural areas, so there would likely be a requirement for residents to travel by car to access services. The small scale of growth under this approach would be unlikely to lead to significant effects

Development management

Policies outlined in the Local Plan ought to help to promote development which facilitates active and health lifestyles. This should be achieved through building in accessible locations, nearby to active travel infrastructure, shops, services (sports, recreation, healthcare) and green spaces. Strategic Policy S6 (Healthy Stronger Communities) seeks to cement this focus in policy, providing high-level policy guidance which supports development that promotes health and active lifestyles, safety and community cohesion.

A range of policies in the Local Plan seek to protect and enhance the provision of green infrastructure, including both formal and more natural open spaces (Policies S4 - Forest Community, S5 - Nature Conservation, HO2 - Sustainable Urban Extension Sites, NE1 - Biodiversity and Geodiversity, NE4 - Greening Factor, NE5 - Green Network, NE6 - Shropshire Hills Area of Outstanding Natural Beauty (AONB) and Strategic Landscapes, NE7 - Strategic Green Gaps, CI2 – Existing Public Open Space, CI3 – Provision and Management of Public Open Spaces). This ought to promote mental and physical health benefits associated with access to green and natural spaces, as well as by providing suitable, attractive spaces to facilitate physical activities within. Design and transport considerations throughout policy in the draft Local Plan are expected to promote active travel choices, with associated positive mental and physical health outcomes. This relates to Policies ST1 (Active Travel) ST4 (Design of Roads and Streets), DD1 (Design Criteria), DD2 (Estate Design) and DD4 (Commercial and Industrial Development Design).

Various policies seek to provide assurance that new development will deliver suitable supporting social infrastructure and facilities, reducing the need to travel long distances to access these and consequentially increasing the potential for an increase in active travel rates. Whilst many policies will assist with this, some policies are likely to be more closely linked, including Policies S6 (Healthy Stronger Communities), S7 (Developer Contributions and Infrastructure Delivery), HO1 (Housing Development Principles), HO2 (Sustainable Urban Extension Sites), CI1 (Community Facilities), CI2 (Existing public open space), CI3 (Provision and management of public open spaces),

CI4 (Leisure, cultural and tourism) and CI5 (Enhancing Communication Networks). These policies are likely to lead to more significant effects on sites of 100+ dwellings, given that there is greater potential to secure social infrastructure and environmental enhancements on site.

Overall effects

Overall, the draft Plan is expected to lead to positive effects, largely related to the ability to concentrate significant amounts of new housing growth around Telford and its periphery. This would bring forward locations that are broadly accessible to health, education and open, green and natural spaces and facilities. There are adjacent communities at the Telford periphery that are experiencing higher levels of deprivation, and therefore, a coordinated approach to growth could lead to spill-over benefits to these areas (for example access to new services, higher quality housing and improved open space). Whilst effects relating to the spatial strategy in Newport and Rural areas would be beneficial, the scales of growth in these locations are considerably smaller, making significant effects less likely. Plan policies provide support for developments which facilitate health lifestyles, including through encouraging active travel and lifestyle choices, providing access to healthcare facilities and maintaining and enhancing the Bourgh's stock of green and natural spaces. This is expected to boost mental and physical health outcomes. **Major positive effects** are predicted.

Economy and Infrastructure

Effects of the spatial strategy

Housing development usually affects local and wider economic structures through a variety of factors. Additional housing tends to lead to an increase in footfall in local centres, boosting the viability of existing shops and services as well as in cases of high growth, leading to the provision of new shops and services (this is more likely with an increase in population, rather than where housing is meeting supressed needs). Wider footfall related benefits of population growth can be seen in more significant built-up centres, for example in Telford and Newport. Larger housing development sites often provide onsite shops and services. Infrastructure (such as improved transport or digital connectivity) which often comes alongside housing development can attract investment which goes on to boost employment, local Gross Value Added (GVA) and acts as a pull factor in attracting additional investment. Local improvements which stem from housing delivery can also contribute towards reductions in local pockets of deprivation, potentially helping towards making areas more equal with more dispersed positive spatial outcomes. Well-targeted housing delivery of appropriate types and tenures can act to attract specific demographics which can help to plug skills gaps in an area. Strategically considered housing delivery in areas which have been identified as key employment centres can also to reduce commuting distances and improve cross-cutting sustainability outcomes.

The draft Plan would be expected to deliver the most pronounced effects in and around Telford, the town would be expected to see benefits from the additional footfall associated with the population growth; this would be likely to manifest itself in smaller local service centres as well as the commercial and retail centres.

As the Borough's key employment area, focusing housing growth in in Telford would be more likely to reduce long-distance commuting and improve rates of sustainable modes of transport use by ensuring that housing is located near to employment. Considering Telford is the best-connected area (in terms of sustainable transport) in the Borough in terms of accessing built-up centres outside of Telford and Wrekin, locating additional housing here is likely to boost cross-boundary sustainable commuting. Well targeted housing delivery may also serve to improve the skills shortage in the Borough and potentially increase the number of high-skilled occupations. Development would be expected to come forward on sites which are found in a variety of levels of deprivation within the built-up area of Telford; however these are relatively small sites and significant effects in this regard are not likely. Peripheral, larger sites around Telford (including strategic growth to the north of the urban area) would have more likelihood of reducing deprivation, however, these sites are mostly located in areas which are not considered to be deprived and as such, effects would not be as pronounced.

Growth of 517 dwellings in Newport would be expected to lead to some minor benefits associated with increased footfall in local service centres. Newport, as the second largest town in the Borough would also be a beneficial host for additional housing due to its high employment density, therefore housing would be located in relative close proximity to jobs and targeted housing types and tenures may attract particular demographics to plug the Borough's skills gap. The low scale of growth would be unlikely to deliver significant additional effects though. Some uncertainty about meeting the identified housing split in full may lead to some negative effects relating to a local hit to GVA and employment problems relating to the potential for an undersupply in local housing, compared to economic growth. These negative effects are uncertain and due to the small scale of related housing, would not be expected to be significant.

Housing growth of 385 dwellings across Rural Areas would not be likely to lead to any significant effects beyond some very minor increased in footfall in local shops due to the low level of growth. These locations are also more likely to encourage longer distance commuting.

The provision of additional employment areas is likely to lead to economic and employment growth and possibly contribute to enhanced infrastructure and services. Locations identified for growth would also benefit from increased footfall particularly in urban areas and in proximity to existing strategic employment areas. Larger employment developments can facilitate better transport and infrastructure provision due to the improved economies of scale. The additional employment opportunities created can also help address deprivation in the more deprived areas of the borough and help reduce inequalities. In this context the brownfield site allocations are considered to lead to minor positive effects due to being located at the centre of the most densely populated area within the borough (urban areas of Telford) and in proximity to the strategic central employment area. The growth proposed at north Telford is likely to facilitate improved employment opportunities at the urban fringe of Telford. The scale of growth involved and proximity to major strategic employment areas should help produce the economies of scale required for improved infrastructure provision and produce increased footfall leading to moderate positive effects. The smaller scale growth at Cluddley and Newport would help bring some local employment opportunities to these locations too, but this is less likely to bring about improved infrastructure due to the small-scale growth proposed.

Development management

Policies outlined in the Local Plan ought to help to promote economic growth and suitable employment opportunities paired with a well-trained workforce and infrastructure delivery to help to meet the growth aspirations of the Borough. Many policies will indirectly help to promote these outcomes, however those which have a more specific focus and likely significant effects in this regard are detailed below.

Effects relating to employment development are likely to be most pronounced around north Telford, nearby to the strategic area(s) of growth, with other effects realised to a lower magnitude around western and central Telford and southern Newport. These effects might be expected to benefit the local area through employment, increased GVA, consequential reductions in deprivation and to some degree infrastructure delivery (though this is likely to be most significantly related to strategic employment growth).

Policy S1 (Economic Delivery Strategy) provides high level, strategic direction which supports employment development of various forms, in suitable locations. Policies aim to direct suitable employment development types to suitable locations, ensuring that infrastructures are delivered and considerations made to ensure that sites are well connected, have sufficient amenities and promote economic growth in sensitive forms which do not cause adverse effects on the local environment (EC1 - Employment Development in the Urban Area and SEAs and EC2 - Employment in the Rural Area).

Policies EC4 (Hierarchy of Centres), EC5 (Telford Town Centre), EC6 (Market Towns and District Centres), EC7 (Local Centres and Rural Services), EC8 (Out of Centre and Edge of Centre Development) and EC9 (Evening and Night Time Economy) help to promote locally appropriate forms of economic activity and suitable growth in various areas across the Borough, taking into account the local characteristics in determining what is suitable for each category of settlement. This ought to help to promote long-term sustainable patterns of economic growth and locally relevant scales of economic activity and employment.

Overall effects

Overall, the spatial strategy is likely to provide effects which are directly related to the scale of growth across different areas of the Borough. These effects are expected to be related to increased local GVA, suitable housing in accessible locations to employment sites, increased local employment, skills development, increased footfall in shops and local/district centres and a degree of alleviated deprivation. These effects would be most pronounced in north Telford and proposed locations for new employment land.

Policy in the Plan provides further support for development which boosts economic growth, infrastructure delivery and skills development, with more specific policy promoting suitable employment developments in specific locations, paying attention to local considerations and the need to meet identified employment land needs. Overall, **major positive effects** are predicted.

Transportation

Effects of the spatial strategy

In relation to transportation, housing delivery can have mixed effects. On the positive side, current policy helps to ensure than connectivity within development sites is broadly favourable for active modes of transport, which is particularly relevant for larger sites. Developer contributions help to fund improvements to sustainable transport to connect housing growth with shops, services and employment; this may come in the form of new or improved active travel infrastructure or public transport services. Active travel infrastructure may include junction safety improvements, increased signage and locking facilities; larger sites may help to fund new segregated walking and cycling routes. Developer contributions and population growth can lead to expansions of existing bus routes, or in some cases, where housing volumes are greater, new routes being provided. In terms of railway improvements, new infrastructure would be unlikely at this scale of planning, however provisions such as timetable improvements and extra carriages may help to cater for population growth. In all cases it is important to ensure a networked approach to the delivery of sustainable transport provisions, focusing on multi-modal interchanges at a multitude of scales to deliver maximised behavioural effects (for example, bicycle locking facilities at bus stops, up to railway and bus station facilities being focused together).

Despite efforts to provide sustainable modes of transport, current behavioural norms mean that car use is the predominant form of day-to-day travel. As such, housing development often provides upgrades to the road network to cater for additional growth and hence greater volumes of traffic using the road network. Smaller scale developments might be more likely to provide work such as junction improvements, whilst larger sites may warrant the delivery of new, strategic transport routes such as link roads and bypasses. Such larger scale improvements may benefit an area's economic growth and favourability as an area to invest in. More negative implications associated with housing and employment growth relates to their associated increase in traffic volumes using the road network. This can result in significant increases in congestion, especially at peak times and at traffic pinch points.

The proposed strategy would place a focus of development in Telford, with some being located within the built-up area and a larger amount on the periphery. These peripheral locations would be larger sites, including some strategic growth in locations to the north of Telford. Broadly speaking, the growth *within* Telford would maximise the potential for the additional growth to make the most of existing infrastructure relating to sustainable modes of transport. The high density of shops, services and employment within the town would reduce the need to travel longer distances for the occupants of the additional housing, making active travel a more viable modal choice for day-to-day journeys. The concentration of growth on Telford's periphery (specifically to the north of the town and somewhat to the west) could facilitate strategic pooling of developer contributions in order to help to fund infrastructure such as segregated cycle lanes. There would be the potential for the significantly increased population to drive up viability for expanding public transport services to and from key areas of population growth, connecting to areas of high shop, service and employment densities (such as Telford and Newport town centres). Should strategic growth come forward on the Land North East of Muxton area, then the National Cycle Network Route 55 could be used and likely improved with developer contributions.

Locating growth in Telford which is relatively well connected (via bus and train) to conurbations outside of the Borough has the potential to drive up sustainable forms of cross boundary commuting. Whilst these effects are positive, the large amount of housing growth would be likely to result in a significant increase in cars on the road, driving up congestion in Telford itself as well as in locations near to higher concentration of growth. This would be expected to be more prevalent as an issue at peak journey times and at traffic pinch points. The focus of substantial growth in the north of Telford is likely to result in increased congestion in this area, though effects are likely to be found more widely also, especially in key local and district centres.

Growth in Newport would be of a relatively small scale and hence effects would be minor. It would be likely that the population growth would increase traffic volumes on the roads, especially at peak times, creating potential issues at pinch points. There are more limited sustainable transport services and infrastructure in Newport compared to Telford, however the proposed growth is in locations which have good access to active travel routes and bus stops. The low scale of growth would not be likely to lead to any additional services (though, it may provide some small-scale active travel facilities (such as locking facilities or junction improvements). The fact that Newport's self-containment is not as good as Telfords may mean that residents of the town have to travel to Telford for access to jobs and services; this may drive up car dependencies and congestion.

The small amount of growth within Rural Areas would not be expected to result in any significant infrastructure improvements beyond potentially some additional local bicycle locking facilities and junction safety improvements (including priority signals). It would not be expected that existing public transport services would see any extensions to services, though some very minor improvements to the viability of peak time services may be seen. Whilst the low scale of growth would be unlikely to lead to significant traffic volume related problems as a result of the relatively low population density in these areas, the lower level of local shops, services and employment may lead to an increase in car dependency.

Development management

Policies outlined in the Local Plan ought to help to reduce the need to travel (for existing and new developments) by ensuring local provisions of services and facilities, provide sustainable modes of transport and ensure that transport infrastructure is adapted to ensure that capacities are capable of meeting any identified excess demand as a result of future housing and economic growth.

Policy is in place to ensure that development is supported by sustainable transport infrastructure and services (S3 - Mitigating and adapting to Climate Change, S6 Healthy Stronger Communities, S7 - Developer Contributions and Infrastructure Delivery, ST1 - Active Travel, ST2 - Safeguarding Rail and Transport Corridors and ST4 - Design of Roads and Streets). This ought to promote an increase in travel by active means (walking, cycling and wheeling) as well as public transport (buses and trains). Larger development sites are more likely to deliver and benefit from such improvements, and as such, these policies are likely to see more pronounced effects to the north of Telford.

Policy is in place to help to mitigate adverse impacts on the road network, stemming from development (S7 - Developer Contributions and Infrastructure Delivery and ST3 - Impact of Development on Highways).

This ensures assessments and relevant mitigations are in place, with specific inclusion of reference to the consideration of cumulative effects. This should help to reduce congestion related issues stemming from new development (though some residual effects are likely to remain).

Policy ST2 (Safeguarding Rail and Transport Corridors) helps to safeguard former and existing railway lines for current and future use as transport corridors. Where lines are not economically viable, active travel routes can be considered alternatives. This strategic and long-term planning ought to help to continue support for sustainable modes of transport in the future.

Policy ST5 (Electric Vehicle Infrastructure and Parking Design) is expected to facilitate the transition to electric vehicles over time; it is important to note that whilst these are more sustainable in terms of carbon emissions (electricity grid generation dependent) and would see a reduction in air quality issues, congestion would still be likely to be an issue linked to housing and employment growth.

Various policies seek to provide assurance that new development will deliver suitable supporting social infrastructures and facilities, reducing the need to travel long distances to access these and consequentially increasing the potential for higher active travel rates. Whilst many policies will assist with this, some policies are likely to be more closely linked, including Policies S6 (Healthy Stronger Communities), S7 (Developer Contributions and Infrastructure Delivery), HO1 (Housing Development Principles), HO2 (Sustainable Urban Extension Sites), CI1 (Community Facilities), CI2 (Existing public open space), CI3 (Provision and management of public open spaces), CI4 (Leisure, cultural and tourism) and CI5 (Enhancing Communication Networks). These policies are likely to result in effects of greater significance on sites of 100+ dwellings.

A range of policies in the Local Plan seek to protect and enhance the provision of green infrastructure, including both formal and more natural open spaces (Policies S4 - Forest Community, S5 - Nature Conservation, HO2 - Sustainable Urban Extension Sites, NE1 - Biodiversity and Geodiversity, NE4 - Greening Factor, NE5 - Green Network, NE6 - Shropshire Hills Area of Outstanding Natural Beauty (AONB) and Strategic Landscapes, NE7 - Strategic Green Gaps, CI2 – Existing Public Open Space, CI3 – Provision and Management of Public Open Spaces). This ought to provide suitable, attractive spaces to facilitate an increase in travel by active means.

Overall effects

Overall, the majority of growth and associated effects would be expected to be seen in Telford, with some more minor effects in Rural Areas and Newport.

There is likely to be an increase in car trips and congestion, particularly to the north of Telford, but policy provisions are also likely to see an increase in sustainable modes of travel and fewer / shorter trips. A range of policies in the draft Plan seek to mitigate adverse effects of congestion stemming from housing and employment development, but it is likely there will be some residual negative effects, particularly during the construction phase of new developments and before infrastructure improvements have been secured.

More positively, growth would be expected to be delivered a manner which reduces the need to travel, and, where sites are clustered or of a large scale, improvements to existing active and public transport infrastructures and services are likely to be seen. Overall, a mix of **moderately positive** and **minor negative** effects are predicted.

Equality and diversity

Effects of the spatial strategy

With regards to equality, accessibility is a key area of focus, where less accessible areas may leave those unable to drive or those without the means to access such means of travel more isolated and unable to access shops, services, or employment. This might encompass educational facilities for younger populations, or healthcare facilities for elderly of disabled people, to name a few. As such this topic has a broad distinction of effects relating to urban and rural development.

Rural development may be better suited to those who have enabling resources, including transport, a higher income, and the ability to work from home, as well as those who are physically more able. Urban development may be more likely to support populations that require good access to services, public transport and jobs without having a car. It may also be more likely that there will be affordable housing that can be accessed by disadvantaged groups (compared to larger expensive housing in rural areas).

With regards to deprivation, (for the purposes of this appraisal, deprivation is determined by the 2019 Index of Multiple Deprivation) there are concentrations of certain communities, particularly in Telford, with the north and eastern parts of the built up area seeing higher proportions of BAME populations. The broad areas for potential strategic growth in the north of Telford show signs of deprivation in term so of their living environment and barriers to housing and services. As such, large-scale growth within this area ought to help to alleviate some aspects of deprivation (for example through the provision of affordable housing, open space and social infrastructure).

Growth within the urban areas of Telford and Newport would be likely to come forward under any approach. These sites are mostly small to medium sized and would not be likely to lead to the delivery of significant infrastructure improvements. Many of the sites are brownfield in nature, and hence their regeneration could lead to some improvements to public realm, which may be especially beneficial in more deprived areas which may have struggled to see investment in recent years. There could be benefits for women if the public realm is improved, and areas that are ‘inactive’ are brought into use. These effects within the urban areas would be expected to be realised under all approaches and are minor positives.

Growth on more peripheral areas of both Telford and Newport may lead to some additional infrastructures being delivered to support the increases in population, especially to the north of Telford. The level of provisions would be influenced by the scale of proposed growth. This is important for Telford because whilst it is connected to existing urban areas, some of the peripheral locations may have relatively poor accessibility, meaning that those with poor mobility (personal and access to automotive means to travel) may suffer from forms of isolation. Growth to the north of the urban area would be relatively close to concentrations of BAME communities.

This could have benefits with regards to new homes and supporting social infrastructure being introduced in areas that may be attractive to such communities. There may also be benefits through improved access to open space, public services and transport. The strategic area of growth in a location to the north of Telford would be expected to deliver some additional services and facilities, helping to reduce some accessibility related inequalities. This might also have benefits for certain BAME populations in areas to the north of Telford.

Growth in Newport would be of a fairly small scale and hence this would be unlikely to deliver significant supporting infrastructure. Equally, it would be unlikely to result in any groups of the population being negatively or disproportionately affected.

Rural growth under this option would be of a small scale. This would be unlikely to deliver any new infrastructure or significantly leave any groups of the population being disproportionately affected. However, it would do little to address current issues such as poor access to services.

Development management

Policies outlined in the draft Local Plan ought to help ensure that development proposals have considered protected groups, ensuring that accessibility, inclusion and equality in relation to the site and its functional relationship to the wider area are factored into decision making. Policy S6 (Healthy Stronger Communities) provides high level support for developments which take account of the different needs of communities through design and site selection, including paying close attention to the needs of older and younger people, those who are less abled bodies and those who have dementia.

Housing policies (HO3 - Housing Mix and Quality, HO4 and 5 – relating to Affordable Housing Delivery, HO6 - Supported and Specialist Housing and HO8- Gypsy, Traveller and Showpeoples Accommodation) encourage planning positively for people with special needs and disabilities, people of different incomes, specific vulnerabilities and from all community, religious and ethnic backgrounds.

Policy EC10 (Shopfront and Advertisement Design) provides wording to ensure that certain developments do not cause obstruction to people with disabilities, focusing on their mobility through the public realm.

Throughout the Plan policies, design is a focus which is directed towards approaches which are accessible and provide considerations for people with a range of abilities. Policy DD1 (Design Criteria) specifically focuses on this, ensuring that the needs of those with mental and physical health limitations are met through housing mix and layouts.

Overall effects

Overall, a broadly positive approach to the distribution of development is taken, with effects relating to development and its ability to provide infrastructure, services and facilities which help to reduce equality related issues realised most significantly to the north of Telford, nearby to larger areas of growth.

Further effects will be seen within Telford, with a reduced magnitude of significance and more isolated effects in Newport and Rural areas given the smaller scale of growth involved.

A range of policies promote positive effects, which should ensure that development targets the needs of a range of people from minority backgrounds and with varying specialist needs relating to physical and mental abilities. Overall, **moderate positive effects**

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