Integrated Impact Assessment for the Sheffield Local Plan (2022-2039)

Update and Addendum

Non-Technical Summary

April 2025

Sheffield City Council

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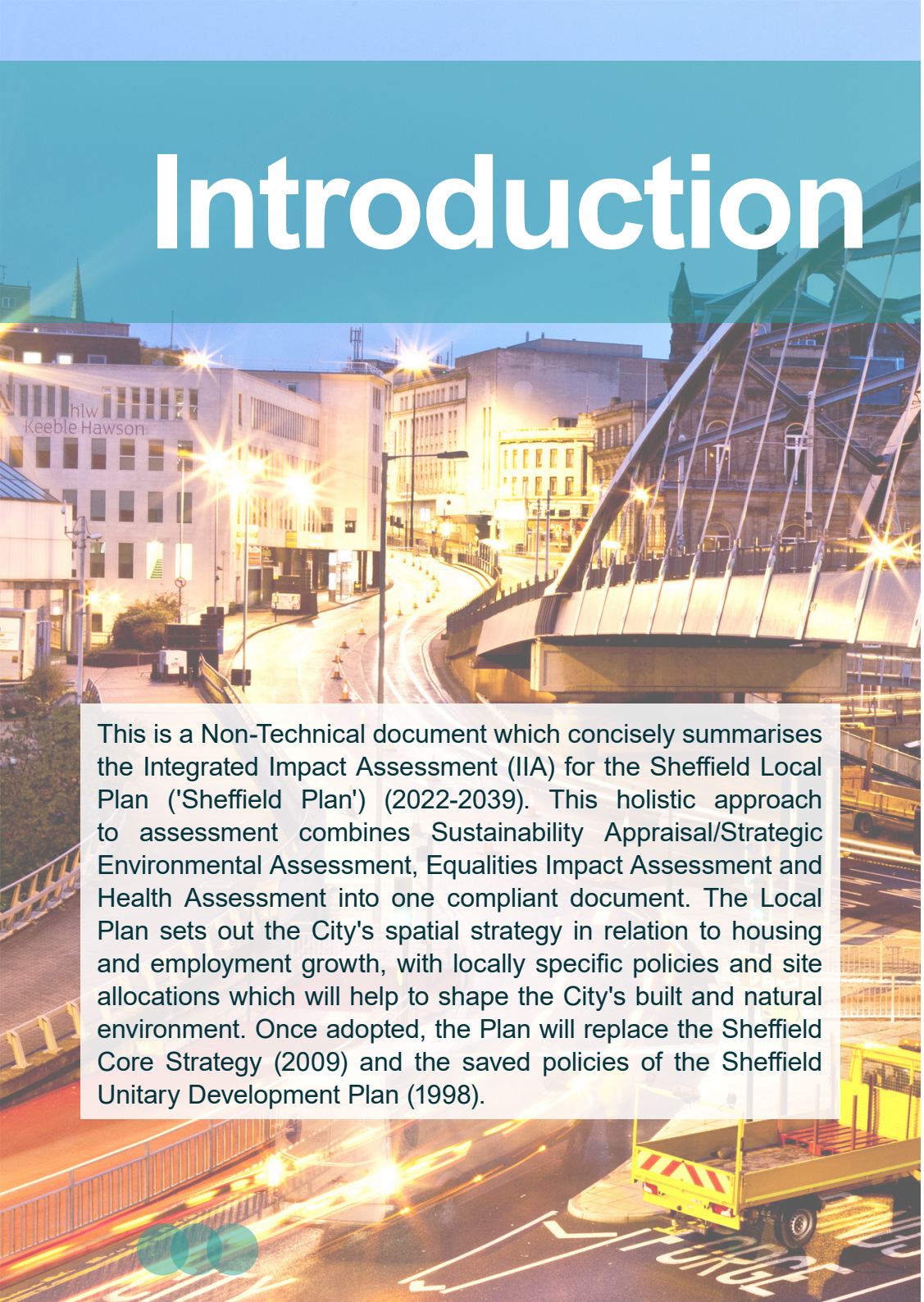
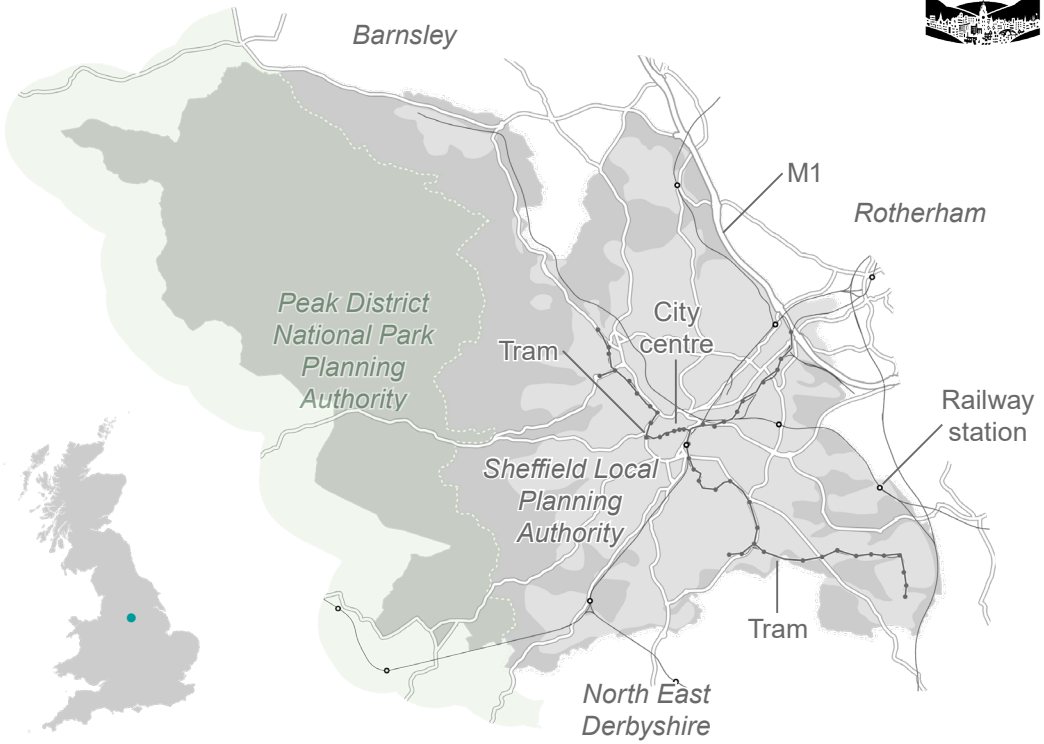
Contents

Introduction



This is a Non-Technical document which concisely summarises the Integrated Impact Assessment (IIA) for the Sheffield Local Plan ('Sheffield Plan') (2022-2039). This holistic approach to assessment combines Sustainability Appraisal/Strategic Environmental Assessment, Equalities Impact Assessment and Health Assessment into one compliant document. The Local Plan sets out the City's spatial strategy in relation to housing and employment growth, with locally specific policies and site allocations which will help to shape the City's built and natural environment. Once adopted, the Plan will replace the Sheffield Core Strategy (2009) and the saved policies of the Sheffield Unitary Development Plan (1998).



Sheffield is one of four local authorities within the South Yorkshire Mayoral Combined Authority, it sits to the east of the Peak District National Park with Leeds and Huddersfield to the north, Chesterfield, Nottingham and Derby to the south and Doncaster and Rotherham to the east. To the west, beyond the Peak District is Manchester. The area has a population of over 550,000 (Census, 2021) and is predominantly urban, with more rural areas found in the west, adjacent to the Peak District National Park. Sheffield Authority is bordered by Derbyshire Dales, North East Derbyshire, Rotherham, Barnsley and the Peak District National Park Planning Authority.

Scoping

Process summary

A scoping exercise was carried out in order to establish the key sustainability issues and objectives for the Plan area. The crosscutting topics reflect broad areas of sustainability which could be significantly affected by the Sheffield Local Plan.

The sustainability topics which have been 'scoped in' for consideration within this Integrated Impact Assessment are listed below.

Integrated Impact Assessment Themes

- Economy
- Housing
- Health and wellbeing
- Transport and accessibility
- Soil and land
- Historic environment
- Landscape and townscape
- Biodiversity and geodiversity
- Climate change resilience
- Natural resources and pollution
- Climate change mitigation and resource efficiency

Scoping

Integrated Impact Assessment Framework

The scoping stage establishes the baseline position and policy context for the Integrated Impact Assessment. This helps to identify the key issues that should be the focus of the appraisal and the methodology that will be used to undertake the appraisal. These form a framework which provides a way in which the sustainability effects of the Local Plan and alternatives can be identified and analysed based on a structured and consistent approach. The following information sets out the Integrated Impact Assessment objectives under each theme.

Economy

SA1: A vibrant and competitive economy with good job opportunities available to the whole community.

SA2: Education and training opportunities.

Housing

SA3: Decent and appropriate housing available to everyone.

Health and Wellbeing

SA4: Health services provided for the health needs of the whole population and which tackle health inequalities.

SA5: Open space and cultural, leisure and recreational facilities available for all.

SA2. Education and training opportunities.

Transport and Accessibility

SA6: Significant development focused in locations that reduce the need to travel and make the fullest possible use of public transport, walking and cycling.

SA7: An efficient network which maximises access and minimises impacts.

SA2. Education and training opportunities.

Soil and Land

SA8: Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.

Scoping

Historic Environment

SA10: The historic environment protected and enhanced.

Landscape and Townscape

SA11: High quality natural landscapes protected and poor landscapes enhanced.

SA9: An attractive, high quality built environment that works well and lasts.

Biodiversity and Geodiversity

SA12: Ecological and geological assets created, conserved, managed and enhanced.

SA9: An attractive, high quality built environment that works well and lasts.

Climate Change Resilience

SA14: Greenhouse gas emissions minimised and the impact of climate change effectively managed.

Natural Resources and Pollution

SA15: Environmental pollution improved and impacts on air quality minimised or mitigated.

SA13: Water resources protected and enhanced.

Climate Change Mitigation and Resource Efficiency

SA14: Greenhouse gas emissions minimised and the impact of climate change effectively managed.

SA16: Energy consumption minimised and use of sustainable energy sources maximised.

SA17: Minimal production of waste and the re-use, recycling and recovery of waste maximised.

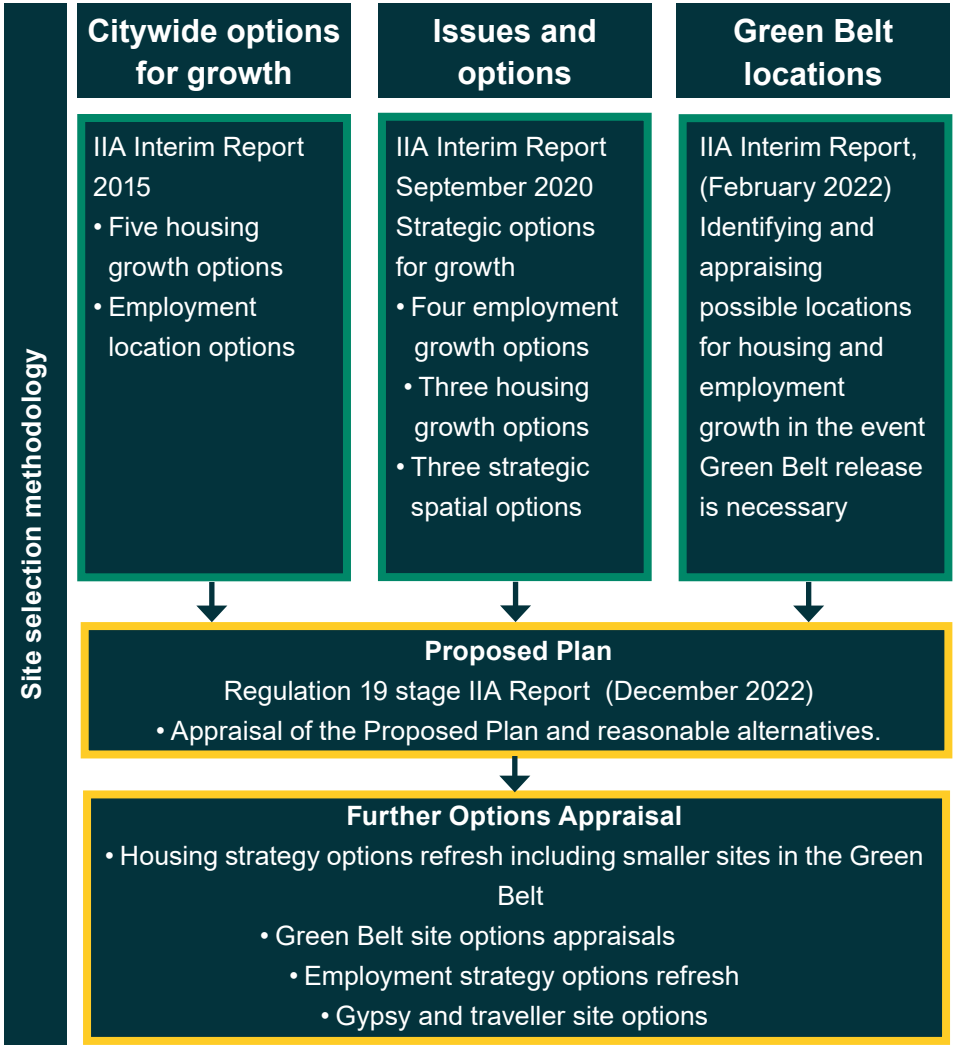
SA2: Education and training opportunities.

The framework provides a means to ascertain whether and how specific sustainability issues (established through scoping) are being addressed, and to understand the social, economic and environmental implications of options, policies and proposals.

Reasonable Alternative Growth Options

Development of Reasonable Alternatives

The Council has considered and appraised a range of options throughout the plan-making process. The focus has been on the strategic matters of housing and employment delivery as these are at the heart of the Plan. The diagram below illustrates the **options that have been appraised throughout the different stages of plan-making**.



Options Development

Citywide Options for Growth

The Citywide Options for Growth to 2034 Document (November 2015) was the first published stage of the Sheffield Plan. It set out the challenges and opportunities for the city identified at that time and provided a range of options for the nature and scale of development in Sheffield over the following 15-20 years. The Integrated Impact Assessment was used to appraise two key aspects of the document in relation to its likely impacts on the key sustainability issues for Sheffield, these were:

- The emerging Vision, Aims and Objectives of the Sheffield Plan.
- The housing and employment growth options.

The appraisal findings helped to inform later stages of Plan making. The appraisal of the emerging Vision, Aims and Objectives was superseded by subsequent appraisals of updated versions.

Issues and Options Stage

An interim IIA Report was published in September 2020, setting out the appraisal findings at the Issues and Options stage. This focused on reconsidering the potential options relating to key plan-related issues, including the re-appraisal of updated elements of the earlier Citywide Options for Growth. This appraisal focused on the following options which helped to inform the development of the Local Plan:

- An appraisal of the updated Vision, Aims and Objectives.
- Updated strategic options for the scale of growth – Employment.
- Updated strategic options for the scale of growth – Housing.
- Updated strategic spatial distribution options.

Options Development

Green Belt Location Assessment

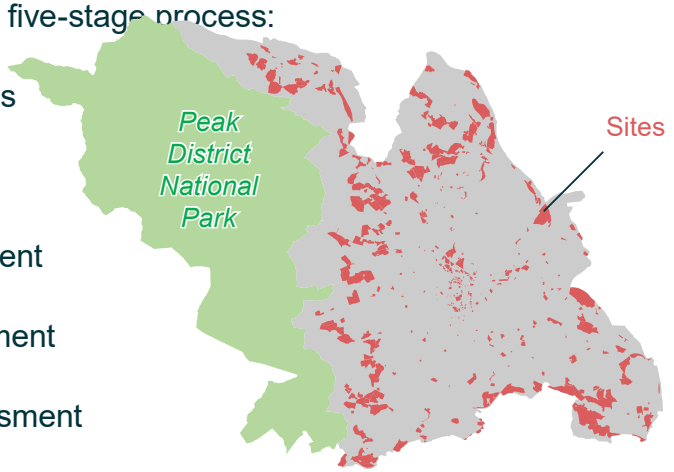
Although the Council had made the decision to focus the development of new homes within the existing built-up area (and on sustainably located previously developed sites in the Green Belt), it remained important to consider the impact if Green Belt locations were needed. To evidence which parcels could be considered reasonable for development and what the implications of growth would be in these areas, Green Belt land was systematically appraised according to the following process:

- Site identification: 24 clusters identified which could support strategic growth
- Consideration of constraints, including sensitivity testing:
  - Landscape sensitivity
  - Green Belt function
  - Biodiversity
  - Flood risk
- Short-listing and further appraisal

Site Appraisals

A total of 483 sites were considered through a Site Selection Methodology which followed a five-stage process:

- Identification of sites
- Initial checks
- Suitability assessment
- Availability assessment
- Achievability assessment



Reasonable Alternatives

Employment Land

Eight strategic locations for employment land have been identified and appraised through the Integrated Appraisal. This helped to establish the sustainability credentials of each site on an individual basis, as well as providing an indication of the locations that could be involved to meet identified needs (this fed into the appraisal of strategic options for employment - see below).

Strategic Location	*Economy*	Housing	Health and wellbeing	*Transport*	*Soil and Land*	*Historic Environment*	*Landscape and Townscape*	*Biodiversity and Geodiversity*	*Climate Resilience*	*Natural Resources*	*Resource efficiency*
A: Hesley Wood	✓✓✓?	-	-	✓	✓✓	-	×	××?	×?	-	×?
B: East of Smithywood	✓✓✓	-	✓	-	×	-	××	×	×	×	×?
C: Norton	✓	×?	✓✓	✓	✓	-	✓	×?	-	-	×?
D. Handsworth	✓✓✓	×?	✓	✓	×	-	×	-	×	-	-?
E. Warren Lane	✓✓✓?	-	✓	✓	×	-	××	×	×?	×	×?
F. Beighton	✓✓	×?	✓✓	✓	×	-	×	-	×	×	-?
G. Owlthorpe	✓	×?	✓✓	✓	×	-	×	×	×?	-	-?
H. Ecclesfield	✓✓	×?	-	✓	×	-	××	×	×	×	-?

Reasonable Alternatives

Employment Land

Strategy

The Council identified six scales of growth based on different methods of calculating need for both general/local employment land and for large scale logistics. These figures are derived from the Employment Land Review Update (2021) and the Sheffield Logistics Study (2022) and also take account of the Inspectors post hearings letter.

Options	Total Local Plan Figure (ha)
1. Short-term take up rates	**157.42**
2. Long-term take up rates	**205.36**
3. Recommendations from SLS and ELRU (Submitted Plan)	**217.6**
4. Inspectors' preliminary conclusions on identified need	**237.2**
5. Conclusions on identified need from SLS and ELRU	**277.44**
6. Maximum identified need from SLS and ELRU	**296.31**

A range of assumptions were made about the distribution of employment land for each option. As the scale of growth increased, there was a greater need to consider the release of Green Belt land.

Summary of findings

A growth strategy based on short term take up rates is likely to be detrimental to the economy, with knock on negative effects in relation to health and wellbeing. In this regard, this strategy would not meet the Plan objectives. It would also likely lead to higher amounts of commuting and secondary effects on neighbouring authorities.

The main benefit of taking this approach would be the minor positive effects predicted for environmental factors. However, this is on the presumption that additional land is not released through speculative development.

The next scale of growth represents long term take-up rates and is more likely to reflect the baseline position. The potential for positive effects increases with regards to the economy, and negative effects on health and wellbeing are less likely compared to the lowest growth scenario. However, this approach would still fall short in terms of supporting the Plan vision with regards to economic growth and social betterment. There is potential for some moderate negative effects on landscape and townscape as a result of additional development.

Reasonable Alternatives

For growth scenario 3, the significance of positive effects is predicted to be greater than lower growth scenarios in terms of economics and health benefits. This would be possible to achieve without increasing negative effects on environmental factors, as the scale of growth and development sites involved could be selected so as to avoid sensitive locations and limit cumulative impacts.

For growth scenario 4, the significance of positive effects increases to potentially major for the economy topic, and positive effects on health are likely to increase in significance to moderate. This higher scale of growth does bring with it some minor negative effects though that do not arise under growth scenario 3. This includes transport and accessibility, biodiversity, natural resources and pollution, and soil and land. For all other topics, the effects are likely to remain similar to those identified under scenario 3.

At a higher scale of growth still, the economy is likely to experience major positive effects, and this will have increased benefits in the long term on health and wellbeing and on reducing inequalities. However, this could be at the expense of negative effects against a range of other sustainability factors. In particular, there would be a need for more Green Belt release, which will have negative effects on soil and land, landscape, biodiversity, climate change and natural resources. The cumulative increase in employment land and its location at the urban periphery is also likely to have implications in terms of increased traffic and amenity concerns. Ultimately, the significance of effects would be dependent upon the development sites involved, and proposed mitigation / enhancement. However, there are constraints and sensitivities that cannot be ignored, and these have been reflected in the strategic assessment of the highest two growth scenarios.

Rationale

The Council's preferred approach established at Pre-Submission stage aligned with growth scenario 3, which takes the recommendations in the ELRU and SLS to inform the employment land strategy in the Local Plan. Given the availability of land for logistics uses in the wider market area and the fact that logistics uses do not necessarily have to locate in Sheffield, the Council was of the opinion that exceptional circumstances did not exist to justify Green Belt release (as reflected in the Submission Plan).

Following the 2024 examination hearings, the Inspectors concluded that there is a shortfall in the identified supply of approximately 52.8 hectares. After exploring opportunities to increase supply in the urban area, the Council accepts that there are exceptional circumstances to release Green Belt land for employment uses.

Following consultation on the proposed changes to the Plan, there will be further opportunity for discussion before the Inspectors propose any modifications that are needed to make the Plan sound.

Reasonable Alternatives

Housing Need

Issues and Options stage: 40,000

Uplift of 35% for housing need in largest urban centres: 53,500

Prior to Regulation 19 consultation, the Council considered a range of growth options through the Integrated Impact Assessment. This process built upon earlier stages of appraisal and retained a hierachy of preferences for delivering growth.

1. Brownfield sites in the urban area
2. Greenfield sites in the urban area
3. Brownfield Green Belt sites
4. Other Green Belt sites

Options

The following options for the delivery of housing growth were explored through the Integrated Impact Assessment. Each of the options includes the earlier options' growth alongside alternative approaches to delivering an uplift; this applies the hierarchy outlined to the left.

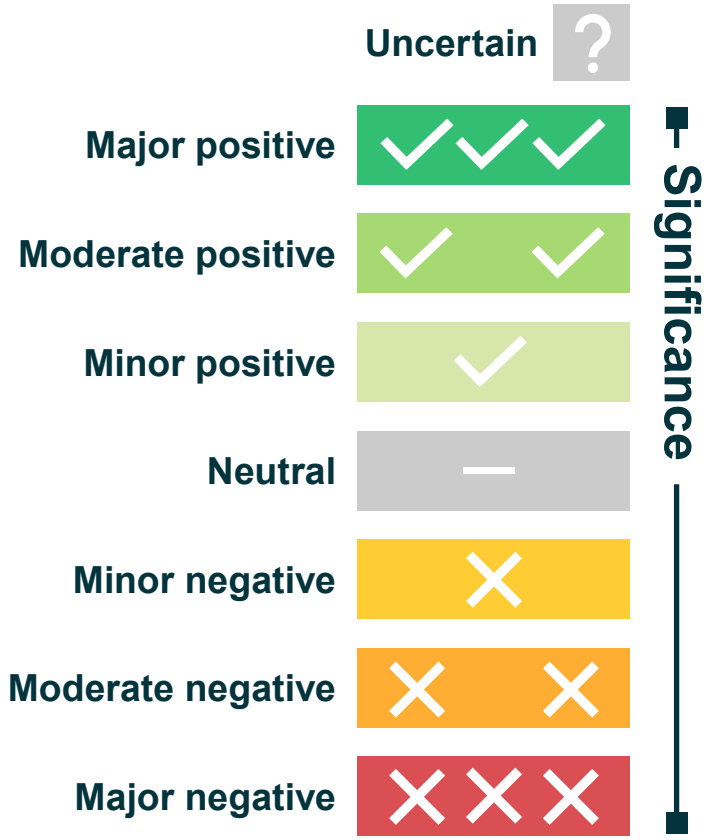
1. Urban capacity led – Brownfield sites in the urban area. **31,822**
2. Urban capacity led – Brownfield sites and undeveloped sites in the urban area. **34,203**
3. The Reg19 Submitted Plan – As above plus asustainably located brownfield sites in Green Belt. **34.473**
4. Need based on the Inspectors feedback – Further growth in the Green Belt on strategic sites. **38,012**
5. Need based on the Inspectors feedback – Further growth in the Green Belt on small sites. **38,012**
6. Need based on the Inspectors feedback – Further growth on a mix of strategic and small sites. **38,012**
7. Need with 35% uplift included – Higher Green Belt release making use of strategic sites only. **49,473**
8. Need with 35% uplift included – Higher Green Belt release on a mix of strategic and small sites. **49,473**

Appraisal Findings

Appraisal Process

The appraisal process considered the Plan ‘as a whole’ (i.e. the proposed strategy including the site allocations and all of the supporting policies that will shape future development). The process also appraised the reasonable alternative options alongside the Plan policy. It was considered unnecessary to explore alternatives for all of the Plan's policies at this stage; as such, each of the reasonable alternatives were treated as different versions of the Proposed Plan.

Consistency was ensured across the entire appraisal process and the magnitude of anticipated effects were measured according to significance, the levels of which can be seen below.



Appraisal Findings

Proposed Plan approach

	Option One	Option Two	Option Three	Option Four	Option Five	Option Six	Option Seven	Option Eight
Economy	✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓?	✓✓✓?
Housing	✓	✓✓?	✓✓?	✓✓✓	✓✓✓	✓✓✓	✓✓✓?	✓✓✓?
Health and wellbeing	✓	✓✓	✓✓	x ✓✓✓?	x ✓	x ✓✓	xx? ✓✓✓?	xx? ✓✓✓?
Transport and accessibility	✓✓?	✓✓	✓✓	x ✓✓✓	x ✓	x ✓✓	xx? ✓✓✓	xx? ✓✓✓
Soil and land	✓✓✓	✓✓	✓✓	x	x	-	xx	xx
Historic environment	x? ✓✓✓?	x ✓✓✓?	x ✓✓✓?	x ✓✓✓?	x ✓✓✓?	x? ✓✓✓?	xx? ✓✓✓?	xx? ✓✓✓?
Landscape and townscape	✓✓?	✓	✓	-	x	✓	xx	xx?
Biodiversity and geodiversity	✓	x ✓✓	x ✓✓	x ✓✓✓	x ✓✓	x ✓✓✓?	xx? ✓✓✓	xx? ✓✓✓
Climate change resilience	xx?	xx?	xx?	xx?	xx?	xx?	xx?	xx?
Natural resources and pollution	x? ✓✓✓	x ✓✓✓	x ✓✓✓	xx? ✓✓✓	xx? ✓✓✓	x ✓✓✓	xx? ✓✓✓?	xx ✓✓✓?
Climate change mitigation and resource efficiency	✓✓✓	✓✓	✓✓?	✓	✓	✓	-	x?

Appraisal Discussion

Appraisal of the Plan and Reasonable Alternatives

The Proposed Plan approach at Reg 19 stage to housing growth (Option 3) is predicted to have significant positive effects for a range of SA topics. In particular, major positive effects are predicted with regards to the economy, as there will be support for growth in the Innovation District, and the Council's view is that this will be facilitated by sufficient housing in sustainable locations. The strong focus on regeneration is also likely to bring about moderate positive effects with regards to health and wellbeing, housing and accessibility but housing options 4-8 (described below) offer greater potential benefits in terms of the overall supply and mix of housing. With additional growth in the Green Belt the effects on health and wellbeing are also likely to increase, unless a wholly dispersed approach to development is taken.

The spatial strategy and supporting policies are predicted to be positive overall with regards to landscape, soil and land. Whilst there would be some loss of green space in the wider urban area, a range of supporting policies should help to ensure that effects upon landscape character are minimised.

The focus on regeneration is also likely to lead to improvements to the townscape, particularly in the City Centre; whilst protecting sensitive land in the Green Belt.

The Plan approach is predicted to be positive in terms of climate change and transport, as development is proposed in areas that are accessible to services and employment by sustainable modes of transport. Development is also likely to be denser and could support low carbon energy schemes. Overall, this is likely to lead to lower per capita carbon emissions.

The main negative effects associated with the Plan are due to the location of large amounts of development in areas at risk of flooding. Though there are Plan policies that seek to minimise and mitigate flood risk, residual negative effects are predicted.

There are likely to be mixed effects with regards to natural resources, pollution and biodiversity. In some respects, minor negative effects will arise as some development is adjacent to local wildlife sites, and / or contain features that may have ecological value. The increase in development in areas of poor air quality could also contribute towards more people being exposed to poor air quality. Conversely, the Plan offers the opportunities to achieve net gain in biodiversity, and remediation of contaminated land.

With regards to the historic environment, there could be some minor negative effects in terms of effects on the setting of heritage assets. However, the effects are considered more likely to be positive as development will bring buildings into productive use that may otherwise deteriorate. There is also likely to be benefits with regards to improvements to the public realm.

Appraisal Discussion

Option 1, which proposes the lowest amount of growth, is the most positive in terms of land and soil, landscape, and climate change objectives. This is due to development being limited to brownfield sites. However, the positive socio-economic effects in terms of housing, economy and health are likely to be of lower significance compared to the Proposed Plan. Only minor positive effects are predicted for these topics, reflecting the amount and range of housing.

The effects for Option 2 are very similar to the Proposed Plan (i.e. Option 3), as the only difference is the release of sustainably located brownfield land in the Green Belt. The effects of additional growth are positive in terms of housing and wellbeing but are not likely to lead to a significant difference in the effects for the other SA topics.

Option 4 would see an increase in the significance of positive effects relating to housing, health and wellbeing, transport and biodiversity. This relates to increased investment in wider urban areas. However, with more Green Belt release, negative effects upon soil, land and landscape arise. Development in less accessible locations also reduces positive effects for climate change, while potentially leading to minor negative effects on health and transport.

Option 5 is more favourable than Option 4 regarding housing delivery, as a wider range of sites in different Green Belt locations would be supported. A dispersed approach would likely be no more negative than a strategic focus across SA topics. However, opportunities to secure strategic infrastructure enhancements would be reduced, so positive effects for transport, health, wellbeing and biodiversity are predicted to be of lesser significance.

Option 6 performs similarly to Option 4, but with greater scope to avoid negative effects on environmental factors such as air quality. There would be slightly less potential to achieve strategic improvements in biodiversity, transport and community infrastructure. However, this approach is more favourable for housing delivery, as it provides both strategic and smaller sites in a range of Green Belt locations.

Option 7 involves further growth in the Green Belt, at a level that could result in more negative effects. Regarding socio-economic factors, significant Green Belt growth could detract from regeneration efforts. It would also be more likely to lead to negative effects on landscape, the loss of agricultural land, and place development in less accessible locations (though strategic growth could still support infrastructure enhancements in some areas).

Option 8 performs very similarly to Option 7, with the same significance predicted for all SA topics except climate change mitigation and resource use. Here, greater emissions from travel associated with dispersal and reduced potential for strategic carbon mitigation lower performance. Infrastructure benefits from strategic growth are still likely but with added uncertainty due to the dispersal element.

Proposed Plan Approach

Rationale for the Proposed Plan approach (At Reg 19 Stage)

The discussions surrounding the spatial options received considerable input from various stakeholders and were informed by multiple studies which helped to evidence and justify the preferred approach. This included advice from the Climate Change, Economy and Development Transitional Committee, which recommended that Option Three should be taken forward.

Rationale for the Proposed Plan approach (Following Inspectors post-hearings letter)

The Council accept that [to ensure the Plan is sound] it will need to plan for the higher level of housing need as recommended by the Inspectors. Having exhausted growth opportunities in the urban area, it is considered necessary to explore suitable locations for growth in the Green Belt to meet the supply shortfall.

The Integrated Appraisal has tested several strategic options that involve Green Belt release, including a focus on strategic growth, smaller sites in a dispersed pattern of growth, and a combination of these two approaches.

The Council will identify a suite of proposed additional site allocations (that will be the subject of consultation) to meet the shortfall when working towards a target of 2,236 dpa. These site options will be in the Green Belt on a mix of smaller sites and strategic locations, which broadly corresponds with Option 6 in the IIA.

Following consultation on the proposed changes to the Plan, there will be further opportunity for discussion before the Inspectors propose any modifications that are needed to make the Plan sound.

Mitigation and Monitoring

Mitigation and Enhancement

The Integrated Impact Assessment recommended potential mitigation and enhancement measures designed to reduce any potential adverse effects, and enhance any potential positive effects relating to the implementation of the Plan. This was carried out in an iterative manner throughout the plan-making process. The degree to which measures are achievable will depend on various factors, including the location and design of development, economic viability, national policy, funding availability and technical advancements.

Draft Plan mitigation

The number of recommendations made through the IIA process is relatively limited at this stage. This reflects the fact that the Plan and supporting policies have been refined throughout its development, taking into account mitigation and enhancement suggestions. The further recommendations link to the Integrated Impact Assessment themes of climate change resilience and the historic environment.

Climate change resilience

Include explicit policy measures seeking a net decrease in the rates of surface water run-off on brownfield sites in the City Centre.

Introduce a hierarchy of SUDs, which prioritises natural 'soft' solutions wherever possible.

Historic environment

Retention of boundary walls could be explicitly required for several sites (with such detail added to Annex A).

Encourage reuse of buildings rather than demolition on sites with outline permission (as well as non-permitted sites).

Monitoring

Monitoring and next steps

There is a requirement to outline the measures envisaged to monitor the predicted effects of the Plan. In particular, there is a need to focus on the significant effects that are identified. It is important to track predicted effects to ensure that positive effects are actually realised and to identify any unforeseen negative effects that may occur.

The following text sets out monitoring measures under each Integrated Impact Assessment topic which are intended to be used to monitor any significant effects and to track the baseline position more generally.

At this stage the monitoring measures have not been finalised, as there is a need to confirm the feasibility of collecting information for the proposed measures. The monitoring measures will be finalised once the Plan is adopted, and will be set out in an Integrated Impact Assessment Statement in accordance with the SEA Regulations. Wherever possible, measures have been drawn from the Local Plan monitoring framework to reduce duplication.

Economy

- Employment land supply by type and location.
- Amount of new office and industrial floorspace completed (sqm).

Housing

- Number of new homes completed.
- Number of years' supply of deliverable housing sites.
- Numbers of different house types completed (apartments, houses, bungalows, by number of bedrooms).

Health and Wellbeing

- Net change in the total area of open space.
- Number of affordable homes completed by tenure.
- Completions of wheelchair adaptable and wheelchair accessible homes.
- Amount of developer contributions paid through the Community Infrastructure Levy and other developer contributions.

Transport and Accessibility

- Transport modal split.
- Number of people within 30 minutes travel by public transport to the City Centre/Sheffield Business Park/Advanced Manufacturing Park – annual.

Monitoring

Soil and Land

- Number of new homes completed on previously developed (brownfield) land.
- Hectares of Best and Most Versatile Agricultural land lost to development.

Historic Environment

- Change in the number of designated heritage assets (Scheduled Ancient Monuments, Listed Buildings, Registered Parks and Gardens, Conservation Areas).
- Change in the heritage at risk list.

Landscape and Townscape

- Percentage of applications refused on design grounds.

Biodiversity and Geodiversity

- Hectares of designated wildlife sites lost as a result of development.
- Percentage of new developments achieving at least 10% net gain.
- Net change in the number of street trees.

Climate Change Resilience

- Number of permissions granted contrary to the advice of the Environment Agency on flood risk grounds.
- Number of de-culverting schemes implemented.
- Number of new properties located within Flood Zones 2 and 3.

Natural Resources and Pollution

- Mean nitrogen dioxide emissions and mean particulate (PM10) concentrations – annual.
- Contaminated land remediation schemes delivered through new development.

Climate Change Mitigation and Resource Efficiency

- Amount of renewable and low carbon energy generated.
- Per capita emissions of carbon emissions.

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