

THE SHEFFIELD PLAN

Our City, Our Future

**Interim Integrated Impact Assessment Sustainability
Appraisal/Strategic Environmental Assessment of
the Issues and Options Report – Main Report
September 2020**



Contents

1. Introduction	1
The Need for this Report.....	1
Meeting Stage A of the Sustainability Appraisal Process	3
Meeting Stage B.....	4
Meeting Stages C-E	4
Meeting the SEA Regulations.....	4
Realistic Alternatives and "business as usual" approach.....	5
Appraising the effects of each alternative.....	5
Accuracy of Prediction.....	5
2. Sustainability Appraisal of the Local Plan Objectives	7
B1: Testing the Sheffield Plan Objectives against the Sustainability Aims (Article 5(1)(a) of the SEA Regulations).....	7
Introduction and purpose of this chapter	7
Any previous appraisals	7
Sheffield Plan Draft Objectives.....	7
Appraising Objectives.....	8
Appraisal Findings.....	8
3. Sustainability Appraisal of the Strategic Options for the Scale of Growth. 16	
Economic Growth.....	16
Housing.....	17
4. Sustainability Appraisal of Strategic Spatial Options	25
5. Conclusion and Next Steps	68
Impact of Sustainability Appraisal Process on Decision Making	68
Overall Effects, and Cumulative and Synergistic Effects	68
Mitigation	68
Habitats Regulations Assessment	68
Cross-boundary Issues.....	69
Monitoring the Effect of Implementing the Plan	69
Next Steps.....	69
Appendix 1: Sustainability Appraisal Framework 2020	70
Appendix 2: Proposed Framework for Monitoring the Implementation of the Plan	78

List of Tables

Table 1: Compatibility of the Sheffield Plan Objectives in comparison with Sustainability Aims.....	9
Table 2: Strategic Options: Scale of Growth: Economic Growth and Jobs ...	19
Table 3: Strategic Options: Scale of Growth: Housing Land	21
Table 4: Option A: High density, vibrant walkable neighbourhoods with a wide choice of homes	27
Table 5: Option B: Mid-rise and vibrant central area and some new houses with private gardens in the suburbs	40
Table 6: Option C: Less dense central area, more new houses with private gardens in the suburbs	55



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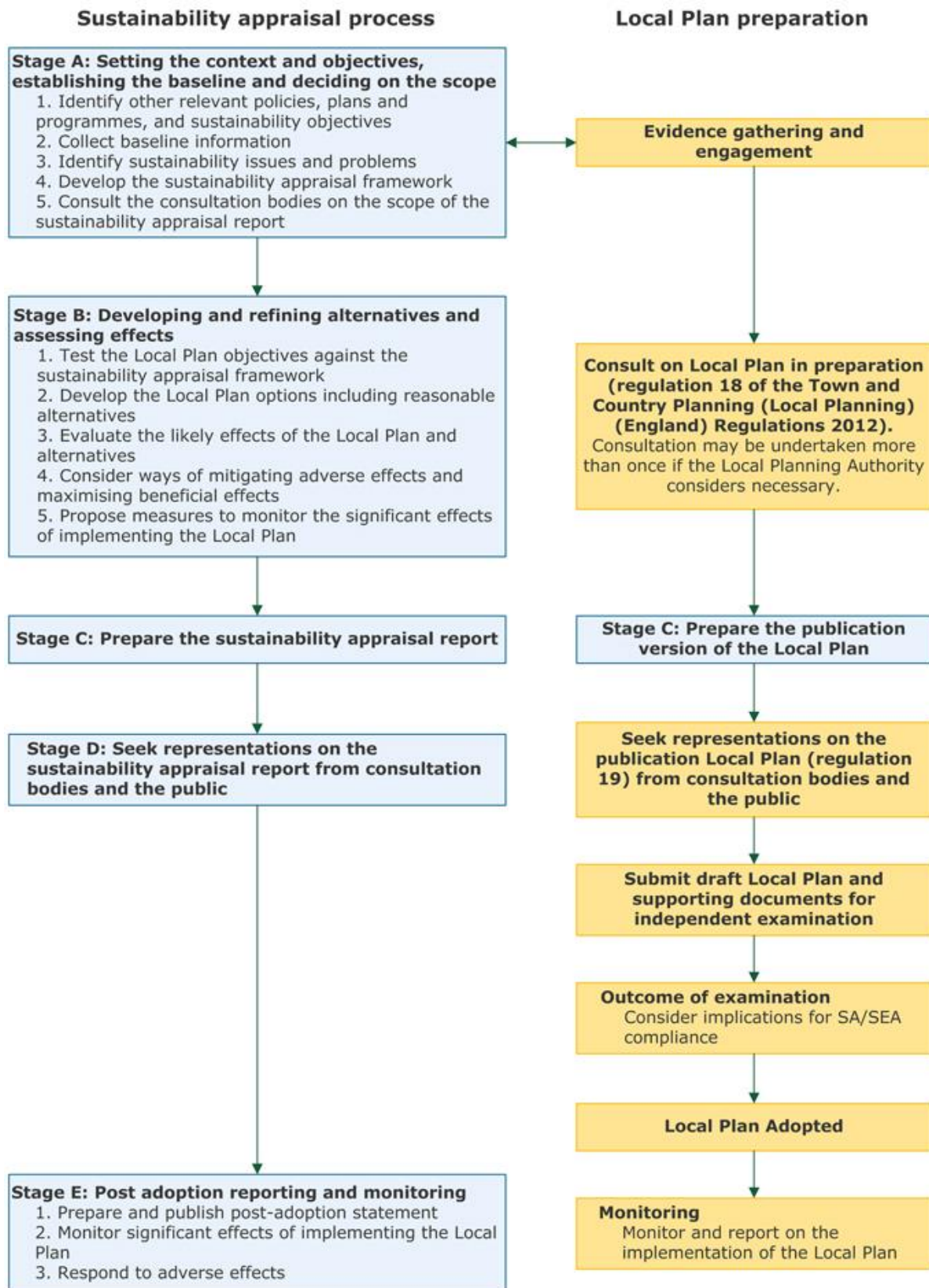


1. Introduction

The Need for this Report

- 1.1 This report relates to the Sustainability Appraisal (SA) and Strategic Environment Assessment (SEA) required for the [Sheffield Plan Issues and Options document](#) (prepared under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012). The Sheffield Plan will be the city's statutory development covering the whole of the district except the area within the Peak District National Park. It will set out the spatial policies, guidance, land use designations and site allocations for the plan period against which all planning applications and development proposals in Sheffield planning authority area will be assessed. The Issues and Options document sets out the Sheffield Plan draft objectives and the strategic spatial options for accommodating future development.
- 1.2 SA of local plans is required by Government. This is to ensure that plans contribute to the statutory objective of contributing to the achievement of the three dimensions of sustainable development: social, economic and environmental. In addition to this, EU legislation requires that Strategic Environmental Assessment (SEA) is carried out for Local Plans.
- 1.3 The legal requirement for undertaking a SA and SEA on Local Plans is described in more detail in the *Integrated Impact Assessment Sustainability Appraisal and Strategic Environmental Assessment Scoping Report (September 2020)* (from here on referred to as the Scoping Report).
- 1.4 The overall SA process is summarised in Figure 1 overleaf.

Interim Integrated Impact Assessment Sustainability Appraisal/Strategic Environmental Assessment of the Issues and Options Report – Main Report Introduction



Meeting Stage A of the Sustainability Appraisal Process

- 1.5 Stage A of the process is detailed in the *Sustainability Appraisal and Strategic Environmental Assessment Scoping Report (September 2020)*. It has informed the approach taken in this SA report and relates to Articles 5(1)(a), (b), (c), (d), (e) of The Environmental Assessment of Plans and Programmes Regulations 2004 (commonly known as the SEA Regulations).
- 1.6 A *Sustainability Appraisal and Strategic Environmental Assessment Scoping Report* was published in November 2015 in association with publication of the Sheffield Plan document 'Citywide Options for Growth to 2034' (also produced under Regulation 18). Consultation took place from November 2015 to January 2016. The revised *Scoping Report (2020)* has been informed by consultation comments received on the 2015 document (hereafter known as the *Scoping Report*).
- 1.7 The *Scoping Report (2020)* covers:
- The need for SAs and SEAs and other assessments.
 - The five-stage SA Process, as outlined in the Planning Practice Guidance¹ (as summarised in Figure 1 above).
- 1.8 It outlines, for Stage A:
- The current status of the Sheffield Plan;
 - Relevant plans, programmes and strategies that will inform the development of the Sheffield Plan;
 - Social, economic and environmental baseline characteristics of Sheffield
 - Sheffield's key sustainability issues;
 - The SA Framework, to be used to predict, appraise and monitor the effects of the Plan;
 - The approach to assessing how impacts will be assessed in relation to Annex II of the SEA Directive;
 - How the approach to the SA meets the SEA Directive.
- 1.9 From this scoping exercise, 17 Sustainability Aims, as part of the SA Framework (hereafter referred to as the SA Framework), have been established, covering the social, economic and environmental aspects of sustainability for Sheffield. These aims and accompanying appraisal criteria will be used to test Sheffield Plan options to ensure that they are addressing the issues Sheffield faces and to assess the likely impacts of the options.

¹ Planning Practice Guidance on Sustainability appraisal requirements for Local Plans
Paragraph: 013Reference ID: 11-013-20140306

- 1.10 The baseline given in the Scoping Report is the base position from which the impact and effect of the Sheffield Plan (and its policies) are determined. The baseline will only be updated nearer the end of the Plan-making process, or at points where there have been fundamental and significant changes.
- 1.11 Further national advice has been released since the 2015 Scoping Report was published². A review of the Scoping Report, in the light of this, has taken place with the baseline review.
- 1.12 The Scoping Report (2020) outlines the purpose of the Sheffield Plan, sets out what assessments have been previously undertaken and explains what assessments form part of the Integrated Impact Assessment. It also explains the purpose of the *Issues and Options* document which is the subject of this appraisal.

Meeting Stage B

- 1.13 This Report addresses Stage B in the SA Process.

Meeting Stages C-E

- 1.14 Stages C-E will be undertaken as part of preparing the *Publication Draft Sheffield Plan* (prepared under Regulation 19). Consequently, those stages are not covered in this report. The local plan process is set out in the [Local Development Scheme](#) on the Council's website.

Meeting the SEA Regulations

- 1.15 Some comments were received on the 2015 Scoping Report but the general approach to assessing the impacts and meeting the SEA Directive is unchanged. In addition to that, in the 2020 Scoping Report, the general evaluation methodology remains the same as undertaken on the [Sustainability Appraisal](#) undertaken and consulted upon in 2015.

2020 SA Methodology

General Evaluation Methodology and its Evolution (*Articles 5(1) (h) of SEA Regulations*) for Steps of Stage B of the Sustainability Appraisal

This Sustainability Appraisal Report relates to the appraisal of the Sheffield Plan objectives and the 3 spatial options presented in the Issues and Options document. It also includes appraisals of the alternatives for the future scale of growth for economic development and housing.

² RTPI Practice Advice: Strategic Environmental Assessment: Improving the effectiveness and efficiency of SEA/SA for land use plans (Jan 2018)

Realistic Alternatives and "business as usual" approach

1.16 For the Strategic Alternatives, a "business as usual" approach has been assessed, which is taken to be the current local plan (comprising the [Sheffield Core Strategy](#) (2009) and 'saved' policies in the [Sheffield Unitary Development Plan](#) (UDP) (1998). The current Core Strategy approach would not have needed reviewing if it was fully consistent with the current National Planning Policy Framework (NPPF)³ and there had been no significant changes to economic, social or environmental circumstances since it was adopted. For the avoidance of doubt, the SA has not assessed what would be the situation if there was no current local plan (i.e. no Core Strategy and 'saved' UDP policies and proposals).

Appraising the effects of each alternative

- 1.17 The SA Framework (the origin and development of which can be seen in the Scoping Report) has been used to appraise the performance of the alternatives and identification of any likely effects (this has been included in Appendix 1 of this report for ease of reference). The appraisal is a qualitative exercise undertaken by planning officers with responsibility for the relevant topic specialisms in the Planning Service and Transport Planning Service.
- 1.18 For each of the alternatives, the appraisal identifies and evaluates the "likely significant effects" on the baseline/likely future trends, drawing on the sustainability issues identified through the 2020 *Scoping Report*. Where possible, potential mitigation measures have been identified.

Accuracy of Prediction

1.19 In any appraisal, every effort was made to predict effects accurately, however it is recognised that this is inherently challenging with strategic alternatives over a significant time period such as that covered by the Plan period. By using the topic specialist experts, the latest baseline statistics and knowledge of the latest strategies, plans and programmes related to each of those topics it is considered that a reasonable judgment has been drawn from the evidence. There are incidences where there is little additional information which can help with the appraisals, and therefore there are a large number of Sustainability Aims, for which the impact is uncertain. The Uncertainty symbol (shown with a '?' in the appraisals) indicates that additional appraisals require more information when undertaken at a later SA stage; to provide greater certainty about identifying impacts.

³ National Planning Policy Framework (February 2019).

- 1.20 At the Regulation 18 stage (which is the stage this SA Report covers), there is still a degree of uncertainty about some of the likely impacts and the potential for mitigation. More precision in the appraisals will be possible once specific development sites and locations are being considered and when the local plan development management policies are available. The development management policies will play a key role in mitigating potential adverse impacts of development.

2. Sustainability Appraisal of the Local Plan Objectives

B1: Testing the Sheffield Plan Objectives against the Sustainability Aims (Article 5(1)(a) of the SEA Regulations)

Introduction and purpose of this chapter

- 2.1 This chapter sets out the Sheffield Plan objectives and the findings from appraising the objectives against the SA Framework. It refers back to previous appraisals of these objectives.

Any previous appraisals

- 2.2 The Sheffield Plan draft Vision and objectives were first presented for consultation in the 2015 Citywide Options for Growth to 2034 document. A SA was undertaken and reported in the Interim SA/SEA Report (November 2015).
- 2.3 The Sheffield Plan draft vision, aims and objectives have been updated in the Sheffield Plan Issues and Options document. They draw upon a number of existing strategies and plans, as well as what people told us when the Council consulted on the 2015 Citywide Options for Growth to 2034 document. They also reflect further engagement with elected Members as part of developing the new document.

Sheffield Plan Draft Objectives

- 2.4 The *Sheffield Plan draft objectives* need to be understood within the context of its Vision. The Vision is set out in the Issues and Options document:

In 2038 Sheffield will be a fair, inclusive and environmentally sustainable city. It will be playing a nationally significant economic role at the heart [of] its region, with thriving neighbourhoods and communities, and have a distinct urban and rural identity.

- 2.5 Eight aims flow from the Vision:

A fair, inclusive and sustainable city.

An environmentally sustainable city.

Thriving neighbourhoods and communities with good access to open space, local services and facilities.

A strong and growing economy based on lifelong learning, innovation and enterprise that delivers decent living standards for everyone.

A vibrant city centre which is a great place to work, live and visit.

A connected city which has a sustainable, efficient and safe transport network and excellent digital connectivity.

A green city that continues to cherish, protect and enhance its green infrastructure and heritage assets.

The Sheffield Plan

**Interim Integrated Impact Assessment Sustainability Appraisal/Strategic
Environmental Assessment of the Issues and Options Report – Main Report
Sustainability Appraisal of the Local Plan Objectives**

A well-designed city with a reputation for quality buildings with a strong local identity.

- 2.6 The Sheffield Plan draft objectives are grouped under the eight aims and are shown in Table 1 below.

Appraising Objectives

- 2.7 The appraisal of the Sheffield Plan draft objectives against the sustainability aims is shown in Table 1 below. The appraisal criteria for each Sustainability Aim, as set out in the SA Framework (Appendix 1) have been considered in the appraisal.
- 2.8 This appraisal identifies the compatibility between the Sustainability Aims and the draft objectives and, any potential synergies but also any conflicts and tensions.

Appraisal Findings

- 2.9 The Sheffield Plan draft objectives are well-balanced in that they include environmental, social and economic aims, as well as objectives that include an element of all three. They also explore the relationship between the physical environment and economy and the effect that can have on creating a fairer, more inclusive city. An overriding objective of the plan is to seek sustainable development, fairness and inclusiveness and meet the needs of the population (e.g. in terms of housing, jobs, community infrastructure and access to green space). The SA Scoping Report also emphasises that health and equality cut across all the Sustainability Aims.
- 2.10 All Sustainability Aims relate well to the draft objectives listed in the Issues and Options document.
- 2.11 The appraisal does, however, recognise that any growth or development within Sheffield could have environmental impacts (particularly in terms of climate change, traffic congestion, air pollution) unless mitigated. The Issues and Options document highlights some of the interrelationships between the different aims. It has been assumed that any adverse impact from development upon environmental or social objectives would be mitigated to some degree, although this will depend on the specific location and nature of the development. The compatibility discussion in the Scoping Report discusses where potential conflicts may occur.

Table 1: Compatibility of the Sheffield Plan Objectives in comparison with Sustainability Aims (See Appendix 1 for the full Sustainability Aims: A key word is set out below for each to save space)

Key: Likely Impact

Y Minor positive	YY Significant Positive
N Minor negative	NN Significant Negative
- Neutral or neither negative or positive dominate	N/A No link with Aim ? Uncertain

	LIKELY impact in relation to Sustainability Aim
YY	Strong support for Aim (i.e. significant positive impact is likely)
Y	Some support for Aim (i.e. minor positive impacts likely to outweigh negative impacts)
-	Option likely to have no or neutral impact insofar as the benefits and drawbacks appear equal and neither is considered significant. This may include partial assessments at interim stages where there is still a degree of uncertainty and further work is needed before the final SA Report
N	Some minor conflict with Aim (i.e. minor negative impact(s) likely not to be outweighed by positive impacts)
NN	Significant conflict with Aim (i.e. significant negative impact is likely)
?	Insufficient information on which to base an assessment at this stage.
N/A	No link with this Sustainability Aim.

	1. Economy	2. Education and Training	3. Housing	4. Healthy Population	5. Open Space, Cultural and Leisure	6. Locations affecting Travel	7. Transport Network	8. Use of Land	9. Built Environment	10. Historic Environment	11. Landscapes	12. Ecology & Geology	13. Water	14. Climate Change	15. Pollution	16. Energy	17. Waste
Objectives for a fair, inclusive and healthy city																	
1. To develop and grow the city in a way which is fair and inclusive, maximising the benefits for disadvantaged communities and vulnerable people – meaning the gap is closed between the wealthiest and poorest areas of the city.	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY	YY
2. To develop the city in ways which improve the health and wellbeing of all Sheffield’s residents and which reduce health inequalities.	Y	Y	Y	YY	Y	Y	Y	?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Objectives for an environmentally sustainable city																	
3. To work towards making Sheffield zero carbon by 2030.	Y	Y	Y	Y	Y	YY	YY	YY	YY	N/A	Y	YY	YY	YY	YY	YY	YY
4. To create a city that makes efficient use of natural resources, mitigates climate change, and is resilient to likely future changes to our climate (including increased risk of flooding).	N/A	N/A		?	Y	?	Y	YY	?	?	?	?	Y	YY	YY	YY	YY

Interim Integrated Impact Assessment Sustainability Appraisal/Strategic Environmental Assessment of the Issues and Options Report – Main Report

Sustainability Appraisal of the Local Plan Objectives

	1. Economy	2. Education and Training	3. Housing	4. Healthy Population	5. Open Space, Cultural and Leisure	6. Locations affecting Travel	7. Transport Network	8. Use of Land	9. Built Environment	10. Historic Environment	11. Landscapes	12. Ecology & Geology	13. Water	14. Climate Change	15. Pollution	16. Energy	17. Waste
5. To protect and enhance Sheffield's water resources, and minimise the pollution of water, air and soil	N/A	N/A	?	N/A	Y	?	YY	YY	?	?		Y	YY	YY		Y	Y
6. To enable vital mineral resources to be safeguarded and extracted but without causing unacceptable harm to the environment (including climate change)	Y	N/A	N/A	N/A	?	N/A	Y	YY	Y	Y	YY	YY	YY	YY	YY	N/A	N/A
Objectives for thriving neighbourhoods and communities																	
7. To create a housing market that works for everyone and which provides quality, choice and affordability across the city.	N/A	N/A	YY	?	?	?	?	?	?	?	?	?	?	?	?	?	?
8. To ensure Sheffield has an adequate supply of residential development land so the city can meet its requirement for new housing.	N/A	N/A	YY	?	?	?	?	?	?	?	?	?	?	?	?	?	?
9. To significantly increase the supply of affordable housing, accessible market housing and specialist housing for older people, disabled people and other vulnerable groups, particularly in places of greatest need.	N/A	N/A	YY	YY	?	?	?	?	?	?	?	?	?	?	?	?	?

Interim Integrated Impact Assessment Sustainability Appraisal/Strategic Environmental Assessment of the Issues and Options Report – Main Report

Sustainability Appraisal of the Local Plan Objectives

	1. Economy	2. Education and Training	3. Housing	4. Healthy Population	5. Open Space, Cultural and Leisure	6. Locations affecting Travel	7. Transport Network	8. Use of Land	9. Built Environment	10. Historic Environment	11. Landscapes	12. Ecology & Geology	13. Water	14. Climate Change	15. Pollution	16. Energy	17. Waste
10. To provide sites for Gypsies and Travellers in appropriate locations to meet the current needs and to guide the provision of additional pitches if further need arises.	N/A	N/A	YY	?	?	?	?	?	?	?	?	?	?	?	?	?	?
11. To create neighbourhoods that work for everyone, with a mix of housing and access to a range of local facilities, services and open space, offering all residents the best life chances regardless of age, health or disability.	Y	Y	YY	YY	YY	YY	?	?	?	?	?	?	?	?	?	Y	Y
Objectives for a strong economy																	
12. To enable more and better quality jobs to be created in the city's economy in order to raise average incomes and build a future based on Sheffield's competitive advantages in the areas of advanced manufacturing; education, learning and knowledge; creative and digital industries; advanced technology; research and innovation; medical technology and services; sports science; outdoor leisure.	YY	YY	-	Y	YY	?	?	?	?	?	?	?	?	?	?	?	?
13. To ensure there is a sufficient range of locations and premises available for new businesses and those relocating from within the city and elsewhere.	YY	YY	N/A	N/A	?	?	?	?	?	?	?	?	?	?	?	?	?
14. To support the growth and development of the city's universities, colleges and training providers to enable	YY	YY	N/	N/	N/	N/	?	?	N/	N/	N/	N/	N/	N/	N/	N/	N/

	1. Economy	2. Education and Training	3. Housing	4. Healthy Population	5. Open Space, Cultural and Leisure	6. Locations affecting Travel	7. Transport Network	8. Use of Land	9. Built Environment	10. Historic Environment	11. Landscapes	12. Ecology & Geology	13. Water	14. Climate Change	15. Pollution	16. Energy	17. Waste
an increase in the skills and capacity of the workforce.			A	A	A	A			A	A	A	A	A	A	A	A	A
Objectives for a vibrant city centre																	
15. To make Sheffield City Centre the main business, shopping and cultural centre for the wider City Region, providing vital jobs and high quality urban living, and creating a welcoming and attractive visitor destination.	YY	?	YY	Y	YY	YY	YY	YY	YY	Y	N/A	Y	Y	Y	Y	?	?
Objectives for a connected city																	
16. To create an integrated and sustainable transport network that promotes and enables walking, cycling and public transport, in order to reduce congestion, improve air quality and safety, and enable healthier lifestyles.	N/A	N/A	N/A	Y	Y	YY	YY	N/A	Y	?	N/A	?	N/A	?	Y	?	N/A
17. To develop excellent connections with the rest of the City Region and national and international transport networks, including developing new and faster road and rail connections: <ul style="list-style-type: none"> between Sheffield and Leeds and Manchester, including a High Speed rail service with a City Centre station; between Sheffield and Doncaster Sheffield Airport 	Y	N/A	N/A	N/A	?	N/A	YY	?	?	?	?	?	?	?	?	?	N/A

	1. Economy	2. Education and Training	3. Housing	4. Healthy Population	5. Open Space, Cultural and Leisure	6. Locations affecting Travel	7. Transport Network	8. Use of Land	9. Built Environment	10. Historic Environment	11. Landscapes	12. Ecology & Geology	13. Water	14. Climate Change	15. Pollution	16. Energy	17. Waste
18. To locate new development where it minimises the distances that people and goods need to travel, by mixing land uses to increase opportunities for people to make single journeys that serve several purposes.	N/A	Y	N/A	Y	?	YY	N/A	Y	N/A	N/A	N/A	?	N/A	YY	YY	Y	N/A
19. To create a digitally connected city with comprehensive broadband coverage, including in rural areas, and to make efficient use of telecommunications infrastructure.	YY	YY	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Objectives for a green city																	
20. To safeguard and enhance Sheffield’s unique natural landscape setting of valleys, woodlands, trees, rivers, wetlands, urban green spaces and open countryside, in order to: <ul style="list-style-type: none"> provide excellent opportunities for outdoor recreation; improve health and wellbeing protect and enhance habitats and biodiversity mitigate climate change 	N/A	N/A		N/A	YY	N/A	N/A	YY	N/A	N/A	YY	YY	?	YY	YY	N/A	N/A
21. To make efficient use of land by maximising the use of previously developed land and promoting higher density development in accessible locations.	N/A	N/A	?	N/A	?	YY	Y	YY	?	?	Y	?	N/A	Y	Y	N/A	N/A
Objectives for a well-designed city																	

Interim Integrated Impact Assessment Sustainability Appraisal/Strategic Environmental Assessment of the Issues and Options
Report – Main Report

Sustainability Appraisal of the Local Plan Objectives

	1. Economy	2. Education and Training	3. Housing	4. Healthy Population	5. Open Space, Cultural and Leisure	6. Locations affecting Travel	7. Transport Network	8. Use of Land	9. Built Environment	10. Historic Environment	11. Landscapes	12. Ecology & Geology	13. Water	14. Climate Change	15. Pollution	16. Energy	17. Waste
22. To create attractive, safe places with distinct identities, and to enhance the character of urban and rural areas in Sheffield by requiring high quality design of new neighbourhoods, buildings, public spaces, and streets.	N/A	N/A	N/A	N/A	Y	N/A	N/A	?	YY	Y	?	?	?	?	?	?	?
23. To achieve inclusive design of buildings, streets and public spaces so that they can be easily accessed and used by everyone, regardless of health, age or disability.	Y	Y	Y	Y	Y	Y	Y	?	Y	Y	?	?	?	N/A	N/A	N/A	N/A
24. To protect, conserve and enhance buildings, landmarks and areas that are attractive, distinctive and/ or of heritage or archaeological value.	N/A	N/A	N/A	N/A	Y	N/A	N/A	N/A	YY	YY	Y	Y	?	N/A	N/A	N/A	N/A

3. Sustainability Appraisal of the Strategic Options for the Scale of Growth

Economic Growth

- 3.1 The *Citywide Options for Growth to 2034* document (2015) included two options for the employment land requirement that represented a range that varied depending on the method of assessment of the requirement. This continues to be required by the NPPF (2019) which states⁴ that the local plan should assess the need for land for economic development. Details of how this should be done are set out in national Planning Practice Guidance (PPG), specifically in the PPG on Housing and Economic Development Needs Assessments.
- 3.2 The alternatives reflected the recommendations in the *Sheffield and Rotherham Joint Employment Land Review (ELR)* (2015) and the most recent work on the Sheffield City Region *Strategic Economic Plan (SEP)*. The ELR did not include many additional potential site allocations other than those being consulted on in the Pre-Submission Version. The **full outline of the issues and justification of the alternatives** was set out in sections 4.1 and 4.2 (pages 26-35) of the *Citywide Options for Growth to 2034* document.
- 3.3 The *Citywide Options for Growth to 2034* document sought comments on the possibility that some of Sheffield's employment land requirement could be accommodated outside of the city. The ELR considered land supply outside of Sheffield in the rest of the city region. It also identified available sites that could meet a total of 12 years' supply of the higher target figure. However, other city region local plans have not planned to accommodate any of Sheffield's demand.
- 3.4 While there were a variety of comments on the options put forward during the *Citywide Options for Growth to 2034* consultation, there were no specific alternative figures suggested by consultees. As such, no alternative options have stemmed from the consultation responses.
- 3.5 Since the publication of the *Citywide Options for Growth to 2034* document in 2015, we have considered two further options for determining a target for employment land have also been considered. This is to ensure that the other reasonable alternatives have been considered. These additional alternatives are to:

Continue with the Core Strategy approach;
Set a target based on past rates of take-up of employment land.

- 3.6 Therefore, the 4 reasonable alternatives that have been appraised are:

⁴ NPPF (2019), paragraph ##

- (a) *10 hectares of land per year for B1, B2 and B8 uses in order to meet the higher growth options of the Sheffield City Region Strategic Economic Plan; or*
- (b) *8 hectares per year, which reflects the lower requirement forecast set out in the Employment Land Review analysis; or*
- (c) *continuing with the 2009 Core Strategy approach of requiring 29 hectares per year of land for B1, B2, B8 and other sui generis general industrial uses; or*
- (d) *basing need solely on past take-up rates of around 12 hectares per year.*

Housing

- 3.7 A key requirement of a local plan is to set out how much housing will be planned for and therefore where it will be located. The latest NPPF (2019) requires that strategic policies in local plans should be informed by a local housing need assessment, conducted using the standard method in national planning guidance – unless exceptional circumstances justify an alternative approach which also reflects current and future demographic trends and market signals⁵.
- 3.8 The 2015 *Citywide Options for Growth to 2034* document suggested that housing need in Sheffield was based on the range 2,000-2,300 homes per year. The best estimate for Sheffield was 2,150 homes per year. This was based on a combination of evidence from the Strategic Housing Market Assessment (SHMA), and demographic modelling carried out at the Sheffield City Region level. It implied the following options for the housing requirement:
- 2,000 homes/year
 - 2,150 homes/year (our best estimate)
 - 2,300 homes/year
- 3.9 Consultation comments at the November 2015 consultation did not strongly support the housing target put forward at that time. Consultees were divided between those who felt the target was too high and those who felt it was too low. There was support from some adjacent local authorities. Broadly speaking community and conservation organisations considered the figure to be too high, linking this to a risk of unnecessarily having to release Green Belt land. A large number of landowners and developers thought the target should be more aspirational and questioned whether the level of housing growth would be sufficient to support economic growth. In 2018, the Council wrote to all local planning authorities in the Sheffield City Region to ask if they were able to meet some of Sheffield's housing need. They all responded to say that they were unable to do so.

⁵ NPPF, 2019, paragraph 60

The Sheffield Plan

**Interim Integrated Impact Assessment Sustainability Appraisal/Strategic
Environmental Assessment of the Issues and Options Report – Main Report
Sustainability Appraisal of the Strategic Options for the Scale of Growth**

- 3.10 Since consulting in 2015, the Government has introduced a new standard methodology for calculating the local housing need (LHN). The figure is updated annually to reflect the latest affordability ratio (house prices: incomes). The most recent figure for Sheffield is 2,131 homes per year (reflecting the affordability ratio published in March 2020). This is very close to the best estimate suggested in 2015.
- 3.11 Our 2015 best estimate of 2,150 new homes per year was considered by the City Council to be consistent with the jobs growth target in the SCR Strategic Economic Plan. It also considered social factors (e.g. the need to improve the affordability of housing) and what could reasonably be achieved without unacceptably harming the environment.
- 3.12 For the purposes of the Sheffield Plan Issues and Options document (2020), we have therefore appraised alternative options which we consider to be **reasonable alternatives based on the city's jobs growth aspirations**. These options are:
- a) *Lower than the LHN – continuing with the 2009 Core Strategy target (1,425 per year) – equating to **25,650 additional homes** over the period 2020-2038*
 - b) *LHN using the new Government methodology (2,131 per year) – equating to **38,358 additional homes** over the period 2020-2038*
 - c) *Higher than the Government OAHN (2,660 p.a. which reflects the highest number of new homes needed to meet the Sheffield City Region Strategic Economic Plan aspirational jobs growth target with no improvement in economic activity rates) - **equating to 47,880 additional homes** over the period 2020-2038*
- 3.13 In the 2015, we noted that as the requirement was increased, there would be a significantly greater risk of having to make more allocations on land currently designated as Green Belt. Our provisional view was that *the majority of the Green Belt is too environmentally sensitive to be suitable for development*. There was also the potential for not all Sheffield's housing target to be met within Sheffield. The appraisal of the spatial options for accommodating the preferred level of growth is set out in the next section of this report.
- 3.14 The following tables set out the appraisal of the scale of growth options.

Table 2: Strategic Options: Scale of Growth: Economic Growth and Jobs

The following alternatives for the scale of employment land provision have been appraised:

- 10 hectares of land per year for B1, B2 and B8 uses in order to meet the higher growth options of the Economic Plan;
- 8 hectares per year, which reflects the lower requirement forecast set out in the Employment Land Review analysis;
- Continue with the Core Strategy approach of requiring 29 hectares per year of land for B1, B2, B8 and other sui generis general industrial uses;
- Need based solely on past take-up rates of around 12 hectares per year.

Likely Impact of Alternatives:

Key: Likely Impact

Y Minor positive	YY Significant Positive
N Minor negative	NN Significant Negative
- Neutral or neither negative or positive dominate	N/A No link with Aim ? Uncertain

	LIKELY impact in relation to Sustainability Aim
YY	Strong support for Aim (i.e. significant positive impact is likely)
Y	Some support for Aim (i.e. minor positive impacts likely to outweigh negative impacts)
-	Option likely to have no or neutral impact insofar as the benefits and drawbacks appear equal and neither is considered significant. This may include partial assessments at interim stages where there is still a degree of uncertainty and further work is needed before the final SA Report
N	Some minor conflict with Aim (i.e. minor negative impact(s) likely not to be outweighed by positive impacts)
NN	Significant conflict with Aim (i.e. significant negative impact is likely)
?	Insufficient information on which to base an assessment at this stage.
N/A	No link with this Sustainability Aim.

Sustainability Aim		a	b	c	d	Commentary / Explanation of Impact
1	A vibrant and competitive economy with good job opportunities available to the whole community	YY	Y	Y	Y	All four alternatives would have a significant positive impact in the short-medium term, but Alternative (a) has more positive impact as it will deliver the maximum possible economic benefits represented by the higher job targets set out in the SCR Strategic Economic Plan (SEP). By ensuring that sufficient employment land is safeguarded and made available to meet future demand for office and industrial development will encourage growth within these sectors to meet the jobs and economic growth ambitions set out in the SEP. Alternatives (c) and (d) would represent an over-supply that would stifle options for alternative uses and have less of a positive economic impact.
2	Education and training opportunities provided which build the skills and capacity for the whole population and which encourage lifelong learning.	Y	Y	Y	Y	All alternatives will have positive impact in the long term. Economic growth has potential to indirectly deliver investment in local training programmes.
3	Decent and appropriate housing available to everyone.	Y	Y	NN	NN	Both of the lower alternatives will have positive impact in the medium term. Policy has potential to enhance delivery of housing sites in areas within commuting distance of new employment sites by improving site viability. However, the higher two alternatives would require more land to be allocated for employment, much of which would be at the expense of housing.
4	Health services provided for the health needs of the whole population and which tackle health inequalities	Y	Y	Y	Y	All alternatives will have positive impact in the long term. Economic growth has potential to indirectly deliver financial resources to enable investment in health care infrastructure and services.
5	Open space and cultural, leisure and recreational facilities available for all.	Y	Y	Y	Y	All alternatives will have some positive impact in the medium term. Promotion of economic development will include delivery of new cultural, leisure and recreational opportunities.
6	Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling.	N/A	N/A	N/A	N/A	No link with sustainability aim – the impact will depend on the location of development.
7	An efficient transport network which maximises access and minimises detrimental impacts.	Y	Y	Y	Y	All alternatives will have positive impact in the long term. Economic growth has potential to indirectly deliver financial resources to enable investment in transport and other infrastructure, for example through CIL and other developer contributions.
8	Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.	N/A	N/A	N/A	N/A	No link with sustainability aim - the impact will depend on the location of development.
9	An attractive, high quality built environment that works well and lasts.	N/A	N/A	N/A	N/A	No link with sustainability aim.
10	The historic environment protected and enhanced	N/A	N/A	N/A	N/A	No link with sustainability aim.
11	High quality natural landscapes protected and poor landscapes enhanced.	N/A	N/A	N/A	N/A	No link with sustainability aim.
12	Ecological and geological assets created, conserved, managed and enhanced.	N/A	N/A	N/A	N/A	No link with sustainability aim.
13	Water resources protected and enhanced.	N/A	N/A	N/A	N/A	No link with sustainability aim.

14	Greenhouse gas emissions minimised and the impact of climate change effectively managed.	N/A	N/A	N/A	N/A	No link with sustainability aim.
15	Air quality improved and impacts of environmental pollution minimised or mitigated.	N	N	N	N	All alternatives will have some negative impact in the short-medium term. Development of employment sites has potential to increase pollution levels and reduce air quality, as a result of the processes being undertaken on site and increases in vehicle movements. Other development management policies are in place which will mitigate these impacts on a site-by-site basis.
16	Energy consumption minimised and use of sustainable energy sources maximised.	Y	Y	Y	Y	All alternatives will have positive impact in the long term. Economic growth has potential to deliver financial resources to enable investment in District Heating Network and other sustainable energy infrastructure.
17	Minimal production of waste and the reuse, recycling and recovery of waste maximised.	-	-	-	-	All alternatives will have a neutral impact in the medium term. Levels of industrial waste produced within the City may increase as a result of this policy. However, the associated economic growth will also improve the viability of and provide greater opportunity for investment in waste management facilities within the City.

Summary

All alternatives deliver a generally positive outcome. Alternative (a) (10 hectares per year) is marginally more economically sustainable than alternative (b) (8 hectares per year), specifically in terms of Sustainability Aim 1 for a vibrant economy and job opportunities. Both options have minor benefits relating to education and training, housing, health services, open space & cultural, leisure and recreational facilities and energy (Aims 2 to 5, 7 and 16), but the difference of impact between the two options is marginal. However, both are more beneficial than alternatives (c) and (d), which have negative impacts relating to the alternative provision of sufficient housing land (Aim 3).

Table 3: Strategic Options: Scale of Growth: Housing Land

The options for the scale of housing growth that have been appraised are:

- a) Lower than the Government local housing need assessment (LHN) – continuing with the current Core Strategy target (1,425 homes per year.)
- b) LHN based on new Government methodology (2,095 homes per year)
- c) Higher than the Government LHN (2,660 per year - reflecting the highest number of new homes needed to meet the Sheffield City Region Strategic Economic Plan aspirational jobs growth target but with no improvement in economic activity rates).

Likely Impact of Alternatives:

Key: Likely Impact

Y Minor positive	YY Significant Positive
N Minor negative	NN Significant Negative
- Neutral or neither negative or positive dominate	N/A No link with Aim ? Uncertain

	LIKELY impact in relation to Sustainability Aim
YY	Strong support for Aim (i.e. significant positive impact is likely)
Y	Some support for Aim (i.e. minor positive impacts likely to outweigh negative impacts)
-	Option likely to have no or neutral impact insofar as the benefits and drawbacks appear equal and neither is considered significant. This may include partial assessments at interim stages where there is still a degree of uncertainty and further work is needed before the final SA Report
N	Some minor conflict with Aim (i.e. minor negative impact(s) likely not to be outweighed by positive impacts)
NN	Significant conflict with Aim (i.e. significant negative impact is likely)
?	Insufficient information on which to base an assessment at this stage.
N/A	No link with this Sustainability Aim.

The Sheffield Plan

Interim Integrated Impact Assessment Sustainability Appraisal/Strategic Environmental Assessment of the Issues and Options Report
– Main Report

Sustainability Appraisal of the Strategic Options for the Scale of Growth

Sustainability Aim		a	b	c	Commentary / Explanation of Impact
1	A vibrant and competitive economy with good job opportunities available to the whole community	N	Y	YY	Options (b) and (c) would have a positive indirect impact in the long term. Delivery of new homes will ensure that there continues to be a sufficiently large working population to support and sustain economic growth. Higher housing targets would result in a larger workforce which would have a more positive impact for the economy. A lower than trend requirement could have a negative impact on the economy by not supporting a sufficiently sized workforce.
2	Education and training opportunities provided which build the skills and capacity for the whole population and which encourage lifelong learning	-	-	-	The options would have a neutral impact in the medium term. Delivery of new housing may place an additional strain on existing educational establishments. This impact could be mitigated through the development management process and requirements for new developments to deliver adequate community facilities to support the new population, including school places.
3	Decent and appropriate housing available to everyone	N	YY	YY	Options (b) and (c) would have a significant positive impact in the short-medium term. It would ensure the provision of sufficient new homes to meet local needs. Delivering insufficient numbers of new homes could restrict the ability of the plan to meet the housing needs of people in Sheffield.
4	Health services provided for the health needs of the whole population and which tackle health inequalities	-	-	-	Policy will have a neutral impact in the medium term. Delivery of new housing may place an additional strain on existing health services. This impact will be mitigated through the development management process and requirements for new developments to deliver adequate community facilities to support the new population, including healthcare provision.
5	Open space and cultural, leisure and recreational facilities available for all	-	-	-	Policy will have a neutral impact in the medium term. Delivery of new housing will result in an increased demand for open space provision to serve the new communities. This impact will be mitigated through the development management process and requirements for new developments to deliver adequate open space to serve the new population.
6	Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling	N/A	N/A	N/A	No link with sustainability aim - impact depends on the location of sites for new housing.
7	An efficient transport network which maximises access and minimises detrimental impacts	-	-	-	Policy will have a neutral impact in the medium term. Delivery of large numbers of new houses has potential to increase traffic congestion, but also provides opportunities for improving transport infrastructure and promoting increased use of public transport, through the development management and design stage.
8	Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.	N/A	N/A	N/A	No link with sustainability aim – impact depends on the location of sites for new housing.

Sustainability Appraisal of the Strategic Options for the Scale of Growth

Sustainability Aim		a	b	c	Commentary / Explanation of Impact
9	An attractive, high quality built environment that works well and lasts.	N/A	N/A	N/A	No link with sustainability aim.
10	The historic environment protected and enhanced	N/A	N/A	N/A	No link with sustainability aim.
11	High quality natural landscapes protected and poor landscapes enhanced.	?	?	?	Impact will depend on locations for growth, however it is likely that a lower growth option (a) would have less impact on this indicator, as that amount of new homes are more likely to be able to be accommodated wholly within the existing built up area.
12	Ecological and geological assets created, conserved, managed and enhanced.	N/A	N/A	N/A	No link with sustainability aim.
13	Water resources protected and enhanced.	N/A	N/A	N/A	No link with sustainability aim.
14	Greenhouse gas emissions minimised and the impact of climate change effectively managed.	-	-	-	Policy will have a neutral impact in the short-medium term. Delivery of large numbers of new homes has potential to increase greenhouse gas emissions, particularly during the construction stage, and increasing surface run-off and flood risk. These impacts will be mitigated through the development management process via requirements to incorporate sustainable design and construction practices, including SUDS.
15	Air quality improved and impacts of environmental pollution minimised or Mitigated.	-	-	-	Policy will have a neutral impact in the short-medium term. Delivery of large numbers of new homes has potential to reduce environmental quality through increased traffic movements, dust emissions and noise pollution. These impacts will be mitigated as far as possible through the development management process via requirements to demonstrate assessment of impacts and appropriate monitoring and mitigation measures.
16	Energy consumption minimised and use of sustainable energy sources maximized.	-	-	-	Policy will have a neutral impact in the short-medium term. Delivery of a large number of new homes means that energy consumption is likely to increase during the construction process. There will be opportunities to mitigate these impacts through the development management process by encouraging use of renewable energy and expansion of District Heating Networks.
17	Minimal production of waste and the reuse, recycling and recovery of waste maximized.	N/A	N/A	N/A	No link with sustainability aim.

Summary

All of the options would result in an increase in the number of new homes in the city. However, planning for fewer new homes than needed (Option a) would have a negative impact. This option would deliver insufficient new housing to meet the identified need and would restrict the ability of households to access decent, appropriate housing, including affordable housing (Aim 3). The other key

Sustainability Appraisal of the Strategic Options for the Scale of Growth

impact relates to the ability of new housing to support a vibrant and competitive economy (Aim 1). Options (b) and (c) would ensure a sufficiently large working population could be accommodated to support and sustain economic growth. Whereas a lower than trend requirement (a) would have a negative impact on the economy by not supporting a sufficiently sized workforce. No comment is made on the relative sustainability of locations to accommodate different levels of housing growth, as this is considered in relation to those options. However it might be assumed that a lower housing target (a) would be less likely to have a negative impact on the environment as it would probably require less land to be used for house building.

Option (b) is considered to be the most sustainable approach. It combines positive impacts for housing and economic growth with a likely lower negative environmental impact when compared to the high growth option (c).

4. Sustainability Appraisal of Strategic Spatial Options

4.1 The 3 spatial options set out in the Sheffield Plan Issues and Options document (2020) are:

- Option A: High density, vibrant walkable neighbourhoods with a wide choice of homes.
- Option B: Mid-rise and vibrant central area and some new houses with private gardens in the suburbs.
- Option C: Less dense central area, more new houses with private gardens in the suburbs.

Key:

- ✓✓ = Significant positive impacts likely
- ✓ = Some positive impacts likely
- O = Neutral impact likely
- X = Some negative impact likely
- XX = Significant negative impact likely
- ? = Impact uncertain/unknown

Summary of Impacts

Sustainability Aims	Option A	Option B	Option C
1. A vibrant and competitive economy with good job opportunities available to the whole community.	✓	✓✓	✓
2. Education and training opportunities.	✓	✓✓	✓✓
3. Decent and appropriate housing available to everyone.	✓	✓✓	✓✓
4. Health services provided for the health needs of the whole population and which tackle health inequalities.	X	O	O
5. Open space and cultural, leisure and recreational facilities available for all.	✓/?	✓/?	?
6. Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling.	✓✓	✓ X ?	✓ X ?
7. An efficient transport network which maximises access and minimises detrimental impacts.	✓ X	?	?
8. Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.	✓✓	✓ X	✓ X

The Sheffield Plan

**Interim Integrated Impact Assessment Sustainability Appraisal/Strategic
Environmental Assessment of the Issues and Options Report – Main Report
Sustainability Appraisal of Strategic Spatial Options**

Sustainability Aims	Option A	Option B	Option C
9. An attractive, high quality built environment that works well and lasts.	✓/X/?	✓/X/?	✓/XX/? ?
10. The historic environment protected and enhanced.	✓/X	?	?
11. High quality natural landscapes protected and poor landscapes enhanced.	✓✓	✓/X	✓/X
12. Ecological and geological assets created, conserved, managed and enhanced.	✓/X	✓/X/?	✓/XX/? ?
13. Water resources protected and enhanced.	✓/X	✓/ X	✓/ X
14. Greenhouse gas emissions minimised and the impact of climate change effectively managed.	✓✓/X	✓/X	✓/XX
15. Environmental pollution improved and impacts on air quality minimised or mitigated.	✓✓	✓/X	✓/XX
16. Energy consumption minimised and use of sustainable energy sources maximised.	✓✓	✓	✓
17. Minimal production of waste and the reuse, recycling and recovery of waste maximised.	X/?	X/?	X/?

Table 4: Option A: High density, vibrant walkable neighbourhoods with a wide choice of homes

Distribution of new homes:

- a) Central area: 20,000 homes
- b) In existing urban area (outside the City Centre): 20,000 homes
- c) Green Belt: 0 homes*

(*Though under national planning policies we estimate that 250-750 homes would be developed in the Green Belt through conversion of existing buildings or redevelopment of brownfield sites (a continuation of current policy).

Sustainability Aims	Impact	Comments on Impact
<p>1. A vibrant and competitive economy with good job opportunities available to the whole community.</p>	<p>✓</p>	<p>The city centre is one of two key Growth Areas within the city and is the main office location within the city region. As such, it is the most important economic and employment location in the city. Therefore, in order to maximise the economic potential of the city, we must also ensure that the city centre is promoted and supported as much as possible in order to maximise its economic potential. To do this, there has to be sufficient land and sites allocated to business use. An option that seeks to maximise the capacity of the Central Area for residential uses has the potential to create competition for land between residential and business uses. Given that residential uses are generally more viable than other uses, this option could lead to a shortage of land for business use, with a resulting negative economic impact.</p> <p>On the other hand, the presence of a large and vibrant city centre residential community will also support businesses by providing a local labour supply and demand for services from the local population.</p> <p>On balance, it is considered that the high density option will be beneficial to the city centre and therefore, city economy. However, some of this benefit may be reduced by a resultant shortage in options for land and sites to help meet the demand for new businesses. Concentrating high quality professional and financial services in the city centre will allow a focus on modern manufacturing jobs in the Advanced Manufacturing and Innovation District (AMID).</p>

Sustainability Aims	Impact	Comments on Impact
<p>2. Education and training opportunities.</p>	<p>✓</p>	<p>An increased Central Area population may require the provision of new early years and school capacity within or close to the City Centre. This could be problematic if expansion of existing schools in the Central area is required due to physical site constraints and, if a new secondary school is required due to the size of site that is likely to be needed.</p> <p>The type of housing and therefore demographic profile of those living in the Central area, will impact on the number of school aged children likely to live in the Central area. For example an increase in young couples with a small family could see greater demand for early year's childcare provision in the short term close to places of work/living, and consequently primary school capacity if residents stay in the Central area.</p> <p>Central area location allows for flexibility to travel by public transport to a variety of secondary schools, however this could place pressure on existing school places from pupils from the suburbs as well as the inner city. Schools in the city centre may also serve more diverse catchments, including deprived areas of the city, than they would on the edge of the urban area.</p> <p>Provision of new schools, where required, could be more difficult to achieve than under Options B and C (which both offer the potential to utilise undeveloped land on the edge of the built-up areas).</p> <p>The potential need for new school places (alongside demographic modelling to more accurately predict future school age population) will need to be modelled as part of the site selection process.</p> <p>The Option will need to ensure the city's universities' and colleges' land holdings and expansion aspirations are not hindered by competition land and property for new homes.</p> <p>Option A could lead to a more vibrant city centre with associated opportunities for job growth and scope for business, incubator and start-up links to the universities and colleges.</p>

Sustainability Aims	Impact	Comments on Impact
<p>3. Decent and appropriate housing available to everyone.</p>	<p>✓</p>	<p>Provides the opportunity for developing a more balanced population, and a more sustainable housing market, in the central area with some larger housing suitable for families and housing for older people. However, it will be necessary to explore different models of high density housing; supply is currently dominated by apartments which are unlikely to attract families.</p> <p>Might not meet the demand for family-sized housing in the suburbs. The Strategic Housing Market Assessment indicates that the greatest demand is for 2 and 3-bedroom houses with gardens, rather than apartments. However, the SHMA is based on a survey of existing households in Sheffield so does not take account of the fact that about half the city's household growth is likely to be due to migration to Sheffield. Migrants are likely to be younger people who are more likely to want to live in the central area. More homes in the City Centre can therefore ensure that changes in the housing market supports the economy.</p> <p>Opportunities to remodel former industrial areas are likely to require public sector support to be economically viable. This could impact on the ability to deliver the level of affordable homes that may be needed in those locations and citywide.</p> <p>People wanting larger homes might move to other parts of the City Region if there is insufficient supply in Sheffield as focussing a large proportion of new homes in the City Centre is less likely to deliver a wide range of housing, especially to serve the needs of those who require more spacious accommodation, or specialist accommodation, for example for older people, or people wishing to build their own homes.</p> <p>The private rented sector is a growing part of the housing market, and provision of modern, decent, rental properties will be focussed in the City Centre and main urban area, which will be beneficial to certain groups, particularly those who value access to the City Centre; however it may not significantly increase the range of new, quality rental accommodation provided in a wider range of locations to meet a greater range of needs.</p>

Sustainability Aims	Impact	Comments on Impact
<p>4. A healthy population, with health services available to meet the needs of everyone.</p>	<p>X</p>	<p>This Option seeks to maximise the capacity of existing buildings, land and new sites for residential development in the Central Area. This will have the impact of increasing the Central Area population significantly, which will put greater pressure on existing primary care facilities, of which the city centre is relatively short. Developing at high densities could also limit the potential to provide new health facilities on these sites as developers seek to maximise development values. This will be a significant negative impact unless it can be mitigated by the provision of new facilities.</p> <p>However, there will be pressure to provide services and facilities for this increased population, otherwise the new dwellings may not be attractive to the market. This demand could lead to opportunities to provide primary healthcare facilities, including as part of shared communal facilities alongside other uses such as retail, leisure and other community facilities (meeting rooms, etc.). This is one potential positive impact. Increased demand may also create the critical mass /volume of patients needed to make development of a new centre professionally and financially viable. This would have the benefit of enhancing facilities for the existing central area residential population as well as newcomers.</p> <p>However, any new facilities or improvements in provision may not be accessible to the most deprived communities where poor health is a particular issue.</p> <p>Overall we consider this Option will have a negative impact due mainly to the limited opportunities to provide new facilities to meet the needs of the new population, and the limited potential to address the particular needs of the most deprived areas.</p>

Sustainability Aims	Impact	Comments on Impact
<p>5. Open space and cultural, leisure and recreational facilities available for all.</p>	<p>✓/!</p>	<p>This option focuses on maximising the use of land within the Central Area for new residential development. In terms of access to open space, provided that there are clear restrictions in place to prevent building on good quality open space, a strategy that focuses on intensification of residential areas and allows residential use on other types of unused or underused land within this area would allow a greater number of people to access open space without needing to travel far. In light of the Covid-19 pandemic, it's become increasingly important for people to be able to gain easy access, ideally by walking, to open space both for recreational purposes and for physical and mental wellbeing. Another integral part of the strategy both for the Central Area and for the remainder of the urban area – where there are fewer opportunities for larger new residential developments – will be to make existing neighbourhoods more sustainable which, for open space, leisure and culture, means seeking to protect and improve existing facilities many of which will be local in nature and serve relatively small catchment areas but are within easy walking distance.</p> <p>In terms of the viability of this Option, it could be argued that the need to release land for housing could increase development pressure on existing open spaces and also result in fewer and/or smaller new open spaces being provided. However, particularly in light of the Covid-19 pandemic, open space will become more important, so the land value of a site for an open space use will increase, as could the value of a site if it has potential to provide some green space. There is also a view that the upcoming changes to the Use Classes Order and PD rights will give more opportunity and impetus to converting existing space of all uses to residential, so there may be more potential to use existing buildings for residential and thus reduce the level of expectations on new sites. Demand for commercial uses may fall, although given the future need for lower densities (fewer workers per square metre) this may not necessarily happen.</p> <p>The main areas of open space are primarily the city's parks and the major river valleys and countryside that surround the city (the majority of the latter being within the Green Belt). Accessibility to a park depends very much on the area of the city in which people live – the strategy of putting forward 20,000 new homes within the rest of the urban area includes a significant number of existing commitments; one of the key elements of such a strategy would therefore be to seek to improve accessibility to open spaces through walking and cycling and general promotional/marketing highlighting the benefits to health and the merits of parks and other significant areas of greenspace whilst at the same time seeking to protect and enhance those greenspaces for the benefit of all through programmes such as the Better Parks Initiative. In terms of built leisure facilities, which includes leisure centres, gyms, cinemas and concert halls, these are well represented in and around the City Centre and the Lower Don Valley (Valley Entertainment) although such facilities are also located within other parts of the city which enables good access for those neighbourhoods, for example, leisure centres at Hillsborough, Graves (Norton/Meadowhead), Stocksbridge and Springs (Arbourthorne/Gleadless). A strategy which prioritises new residential development within the Central Area, where many of the main built leisure facilities are, would enable excellent, sustainable access to such facilities for new and existing residents in this area.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>With regard to the city's cultural offer, the majority of the city's main facilities lie in and around the City Centre. These include theatres such as the Lyceum and the Crucible, art galleries such as Graves, the Site Gallery, Millennium Gallery and Yorkshire Art Space, the museums of Weston Park and Kelham Island, live entertainment venues such as the City Hall and the Leadmill, the Showroom cinema/workstation complex and many others. A strategy of focusing new homes on the central area would therefore provide residents with excellent, relatively easy access to all of these destinations. Furthermore, ongoing projects in and around the City Centre which are helping to improve the physical environment and accessibility within the centre such as Heart of the City II, Castlegate, the Kelham Island District and Neepsend and the "Grey to Green" project which seeks to open up and improve walking routes in the area would also play a key role in complementing such a strategy.</p>
<p>6. Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling.</p>	<p>✓✓</p>	<p>This spatial strategy focusses on higher density residential areas within the Central Area and in the urban area. This could lead to greater concentrations of traffic on the Inner Ring Road, however it would also mean that a greater number of people would be living closer to job opportunities, services, retail and leisure facilities, and potentially have shorter distances to travel to access these locally. With investment in infrastructure, it becomes more viable for more people to make those shorter journeys by walking or cycling. There is also the potential to enable cycling from the City Centre to wider reaching employment areas (for example the Lower Don Valley), given attractive distances and topography. This option would support the creation of low-traffic, liveable and connected communities, and enable more households to be less car dependent, in alignment with the SCC Transport Strategy and SCR Active Travel Implementation Plan.</p>
<p>7. An efficient transport network which maximises access and minimises detrimental impacts.</p>	<p>✓/X</p>	<p>For longer journeys, the city centre is very well connected by public transport, with access to bus, tram, tram-train and rail services. Most of the main employment centres and priority areas for economic development are accessible by public transport from the City Centre, with Midland Rail Station providing greater opportunity for promoting rail for inter-urban travel. This option would also provide increased patronage to support the viability of the existing tram system.</p> <p>Proximity to the City Centre will continue to be important and if there are more people who are able to move around and gain access to services and facilities in the centre, then this will contribute towards a more sustainable future, including improvement in key areas such as reducing air pollution, carbon emissions and energy use, and improving public health. Such a strategy would also tie in with development initiatives such as Heart of the City II, the Castlegate redevelopment and the ongoing Grey to Green project which seeks to create and improve pedestrian and cycle access including along river corridors.</p>

Sustainability Aims	Impact	Comments on Impact
8. Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.	✓✓	<p>Under this option, we estimate that around 95% of new homes would be built on brownfield sites. A small number of greenfield sites on the edge of the existing built up areas would potentially be developed (the majority have previously been allocated for housing in the Unitary Development Plan).</p> <p>Potential for mineral extraction could be assessed on a site by site basis, prior to non-mineral development occurring. This would prevent the sterilisation of any viable mineral reserves. Maximising the reuse of brownfield land would increase the feasibility of recycled aggregates (e.g. from demolitions) being used.</p> <p>This option would result in very little, if any, loss of agricultural land, and would protect soil resources.</p>
9. An attractive, high quality built environment that works well and lasts.	✓/X/?	<p>Option A will densify the city centre, concentrating a higher percentage of residents within the city core where the greatest concentration of facilities, employment opportunities and transport hubs are located. This could help to promote more sustainable, active lifestyles, with reduced car dependency, potentially contributing towards reducing carbon emissions within the city. This approach could also offer greater opportunities for development to connect to the district heating system.</p> <p>A higher density centre, could lead to an increase in average building heights which could have an adverse impact on the character of the city centre, listed buildings and conservation areas. Measures to deliver higher density should be explored through medium scale buildings providing a more sensitive response, allowing tall buildings to be used in specific key locations which aid legibility within the city centre.</p> <p>A higher density core using on average taller buildings could have negative impacts on local microclimate conditions within the city centre.</p> <p>Option A could provide an opportunity to use new development and environmental improvements to improve the living environment in areas that are rundown or that lack distinctiveness within the city centre.</p> <p>An increased population within the city centre offers scope to create a safer environment bringing more activity and surveillance onto streets and spaces.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>While option A would help to protect the green belt increasing density within the city centre could potentially have an adverse impact on open space. This could limit opportunities to create new public space as available sites are used to provide new development potentially resulting in overcrowding of existing open space. New developments would need to ensure they provide sufficient accessible public, communal and private amenity space within schemes and individual dwellings.</p> <p>Option A will help to protect important sites of ecological and geological importance within the green belt; but adversely may limit opportunities to increase biodiversity within the city centre while losing urban habitats. Opportunities to increase biodiversity within a densified city centre need to be maximised to help provide habitats for wildlife, increase green infrastructure, help reduce flood risk and air pollution, combat the urban heat island effect, help improve the quality and character of the public realm, while bringing benefits to residents' health and well being.</p> <p>Option A would likely limit the types of dwellings within the city centre to predominantly apartments. Measures will need to be adopted to ensure they function well for residents now and in the future including generous space standards, being flexible, adaptable and accessible while ensuring they have access to sufficient communal space as well as private amenity space within dwellings. Not only will it be important to apply these standards to apartments but they should be applied to all new dwelling types across the city to ensure they are fit for purpose and reduce the potential for any negative impacts on residents' health and well being.</p> <p>While the options identify alternative approaches to where new housing could be located within the city, the inevitability is that whichever option is preferred the city will undergo a huge development drive to meet the housing needs of a growing population. This will put increased pressure on natural resources, which highlights the importance of ensuring that all new homes are future proofed against climate change. New homes will need to encompass sustainable design principles being energy and thermally efficient, water efficient, well ventilated and incorporate measures to reduce overheating. Materials should be sustainably sourced, minimising waste and their impact on the environment, while homes at risk of flooding should be designed to be flood resilient and resistant. Schemes should also incorporate SuDs to help manage flood risk and water quality.</p>

Sustainability Aims	Impact	Comments on Impact
10. The historic environment protected and enhanced.	✓/X	Possible adverse impact on Conservation Areas and Listed Buildings through higher density development and pressure to assemble sites. But, overall, the impact on heritage assets will depend on the location of allocated sites. Redevelopment of the existing urban area, including the City Centre may provide opportunities to restore heritage assets or better reveal their significance through new development.
11. High quality natural landscapes protected and poor landscapes enhanced.	✓✓	The high quality landscapes around Sheffield are all currently within the Green Belt. This option would lead to little, if any, Green Belt release and would strongly protect those landscapes.
12. Ecological and geological assets created, conserved, managed and enhanced.	✓/X	<p>Option A will help protect designated ecological and geological sites within the green belt. Where potential development sites within the city centre or wider urban area may be sited adjacent to designated sites e.g. River Don, schemes should sensitively respond to these ecologically and geologically important habitats and protect them through appropriate mitigation measures.</p> <p>Development across the city should help deliver and expand the future Nature Recovery Network (NRN), which will be developed and mapped as part of the Local Nature Recovery Strategy. Opportunities within a high density city centre may be somewhat limited, but where they arise should be maximised, while scope within the wider urban area may be more achievable and should positively help to expand the NRN wherever possible.</p> <p>Creating a high density city centre may likely limit opportunities to significantly increase biodiversity within it while it could also risk losing urban habitats. Opportunities to increase biodiversity within a densified city centre need to be maximised to help provide habitats for wildlife and increase green infrastructure e.g. green roofs, street trees, pocket parks, SuDs etc. Scope to increase biodiversity within the wider urban area should be more readily achievable on site and delivered through a wide range of measures to provide opportunities for nature.</p> <p>Implementing measures to achieve a net gain in biodiversity will bring benefits to wider environmental gains in helping to reduce flood risk and air pollution, increase tree canopy cover, combat the urban heat island effect, help improve the quality and character of the public realm, while bringing benefits to residents' health and well being.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>Development will need to ensure it minimises its impact on habitats and the wider environment, as a result of flooding, pollution from run-off and emissions, damage, removal, over exploitation of natural resources and inappropriately located uses. Incorporating measures that would avoid or minimise the risk of these occurrences happening can also contribute to wider environmental gains and provide overall improvements in water and air quality, habitats and an increase in biodiversity. Opportunities within a high density city centre may be more limited, but where they arise should be maximised e.g. SuDs, tree planting, while measures should be more achievable within the wider urban area. Proposals should be identified and fully incorporated from the start of the design process regardless of where the site is located within the city and not deemed as an after thought. Where measures are implemented they should be accompanied by long term maintenance plans and also monitored where required e.g. Biodiversity Net Gain.</p> <p>Development across the city will need to ensure measures are taken to avoid the introduction of and reduce the spread of disease, pests and invasive non native species that may be harmful to our flora and fauna e.g. buy British grown stock.</p> <p>Opportunities to increase public access to nature within a high density city centre will be limited so, where they may arise they should be capitalised on e.g. riverside walks and public space, green roofs, street trees, pocket parks, SuDs etc. Greater scope will exist within the wider urban area and should be achieved more readily through the retention of existing landscape/habitat features, provision of street trees, hedgerows, gardens and multi functional public open space including SuDs. Increasing access to nature will provide people with opportunities for recreation and bring added benefits to their health and well being.</p> <p>While opportunities to increase public access to nature should be capitalised on, it should be provided in a way which continues to protect and avoid damage to habitats and wildlife.</p>

Sustainability Aims	Impact	Comments on Impact
13. Water resources protected and enhanced.	✓/X	<p>Compared to Options B and C, Option A may result in:</p> <ul style="list-style-type: none"> • Increased opportunity to promote Sheffield and its waterways and use them to help celebrate the heritage, culture and rich history of Sheffield because the city centre is at the confluence of the Rivers Don, Sheaf and Porter with sites close to the rivers likely to be considered suitable and available. • Increased opportunity to secure access along a city wide network of riverside parkways because linking such initiatives to central location will reap benefits to the highest number of people visiting, living and working in the city centre. <p>(Sheffield Waterways Strategy 2014)</p> <p>The development of 40,000 additional homes, commercial development and other community facilities will increase the water usage and water treatment needs, but this can be partly mitigated by incorporating water conservation and water efficiency measures into new development (NPPF 2019, and Humber River Basin Management Plan, 2015). However this is true for all 3 Options.</p> <p>New development will also increase hard-surfacing and run-off of pollutants into water courses which may be increased under Option A because of fewer gardens and a more densely packed urban environment. Option A would also limit the range of sustainable urban drainage (SuDS) methods available, which can help reduce pollutants into water courses, compared with Options B and C where there are more opportunities, though it is observed by the Lead local Flood Authority that developers are less willing to adopt SuDS in suburban locations.</p> <p>Focussing population increase in the central area associated with Option A may have greater implications for water demand and sewerage capacity pressures as opposed to spreading population in smaller pockets across the city (implications for Water Resource Management Plan and Drought Plans by Yorkshire Water).</p>

Sustainability Aims	Impact	Comments on Impact
<p>14. Greenhouse gas emissions minimised and the impact of climate change effectively managed.</p>	<p>✓✓/X</p>	<p>Potentially lower greenhouse gas emissions and air pollution than options B and C, due to both reduced travelling distances from new homes to jobs and facilities and a higher proportion of apartments (which have an overall lower carbon footprint than a comparable number of houses)</p> <p>Potential problems could arise due to 'urban heat island' effect due to buildings heating up and retaining heat. Impact on people could be mitigated to some extent through design.</p> <p>Parts of the Central Area of Sheffield are in high flood risk areas so any risks of flooding would need to be mitigated to protect both new and existing developments.</p> <p>Policies to promote energy conservation through sustainable design and the use of renewable energy would help to minimise emissions from new development.</p> <p>Option A may result in more site allocation options in Flood Zones 2 and 3 when compared to Options B and C because such flood zones cover around a third of the city centre. This will lead to a greater reliance on measures to adapt to climate change and the management of flood risk, and implications for the sequential and exception testing of site allocation options.</p> <p>New development will increase hard-surfacing which may increase surface water run-off and associated flood risk under Option A because of fewer gardens and a more densely packed urban environment. Option A would also limit the range of sustainable urban drainage (SuDS) methods available compared with Options B and C where there are more opportunities, though it is observed by the Lead local Flood Authority that developers are less willing to adopt SuDS in suburban locations.</p>
<p>15. Environmental pollution improved and impacts on air quality minimised or mitigated.</p>	<p>✓✓</p>	<p>Overall, this option is likely to have the least adverse impact on air quality because it enables more people to travel using sustainable modes. But as the number of electric vehicles increase over the period of the plan, this advantage over Options B and C will diminish.</p> <p>Redevelopment of brownfield land will enable specific sources of land contamination or environmental pollution to be addressed as sites are developed.</p> <p>Policies could help protect from unacceptable levels of noise and light pollution and to ensure suitable distances between any hazardous installations and environmentally sensitive uses.</p>

Sustainability Aims	Impact	Comments on Impact
16. Energy consumption minimised and use of sustainable energy sources maximised.	✓✓	<p>Apartments offer greater opportunities for renewable and low-carbon features such as solar panels or building wide heat and power generation; they can be more cost effective to implement than features on individual houses. Apartments are also more energy efficient than houses, resulting in lower energy consumption.</p> <p>Maximises opportunities for development to utilise the district heating (energy from waste) network.</p>
17. Minimal production of waste and the reuse, recycling and recovery of waste maximised.	X/?	<p>Although the overall levels of household waste have reduced over the last 10 years, the development of 40,000 additional homes and the associated population growth (projections show an additional 49,000 people by 2038), together with significant commercial development, is likely to increase the amount of waste generated.</p> <p>This can be partly mitigated by incorporating recycling measures into new development (For example, more on-site recycling facilities, clearer signage to those facilities).</p> <p>A separate waste management plan is being considered by the 4 South Yorkshire local planning authorities. Until this is produced, it is not possible to say with any certainty how the reuse, recycling and recovery of waste is to be maximised.</p>

Table 5: Option B: Mid-rise and vibrant central area and some new houses with private gardens in the suburbs

Distribution of new homes:

- a) Central area: 15,000 homes
- b) In existing urban area (outside the City Centre): 20,000 homes
- c) Green Belt: 5,000 homes*

*Including 250-750 homes which would be developed in the Green Belt through conversion of existing buildings or redevelopment of brownfield sites (a continuation of current policy).

Sustainability Aims	Impact	Comments on Impact
<p>1. A vibrant and competitive economy with good job opportunities available to the whole community.</p>	<p>✓✓</p>	<p>As explained above, the city centre is one of two key Growth Areas within the city and is the main office location within the city region. As such, it is the most important economic and employment location in the city. Therefore, in order to maximise the economic potential of the city, we must also ensure that the city centre is promoted and supported as much as possible in order to maximise its economic potential. To do this, there has to be sufficient land and sites allocated to business use. This Option does not pursue the maximum possible residential capacity in the Central Area, but still seeks to deliver a significant level of residential uses in the Central Area whilst freeing up some capacity for other uses.</p> <p>As such, the potential for competition between business and residential uses is less than Option A, so the potential for negative economic impacts is less. We consider this option would still provide sufficient residential development to deliver the economic benefits of a large and vibrant city centre residential community, but will also allow the maximum potential for new and expanding businesses to locate in the city centre. The enhanced population in the existing urban area could provide a workforce within a reasonable distance of the centres of employment, including the Growth Area around the AMID.</p> <p>Overall we consider that this Option provides for the best balance between residential and business uses and therefore offers the greatest economic benefit.</p>

Sustainability Aims	Impact	Comments on Impact
2. Education and training opportunities.	✓✓	<p>Development on Green Belt sites potentially provides more opportunity (than Option A) to allocate land for new early years and schools to meet any shortfall in school places (due to the ability to utilise undeveloped land on the edge of the built-up areas). Schools on the edge of the built-up area may have opportunity for larger outdoor spaces with wider sports provision leading to greater learning outcomes. However, schools in the city centre under Option A may serve more diverse catchments, including deprived areas of the city, than they would on the edge of the urban area. The potential need for new school places (alongside demographic modelling to more accurately predict future school age population) will need to be modelled as part of the site selection process.</p> <p>The Option poses less risk for competition for land and property between new homes and the universities' and colleges' plans and aspirations for expansion.</p> <p>Option B could still lead to a vibrant city centre with associated opportunities for job growth and scope for business, incubator and start-up links to the universities and colleges.</p>

Sustainability Aims	Impact	Comments on Impact
<p>3. Decent and appropriate housing available to everyone.</p>	<p>✓✓</p>	<p>Provides more opportunity to address the specific housing needs of each housing market area than Option A (though this would depend on the distribution of allocated sites). In particular there would be more scope to broaden the housing mix in areas that are further from the City Centre.</p> <p>Potential to deliver more affordable housing than Option A as Green Belt development is more likely to deliver affordable housing than city centre development (due to lower development costs and higher residential values).</p> <p>Green Belt sites would deliver suburban family housing for which there is an evidenced demand.</p> <p>Less reliance on delivery of apartments in the central area is more likely to ensure that the number of new homes needed is deliverable, as delivery is spread more widely and less heavily reliant on potentially complex City Centre sites.</p> <p>Lower risk of people wanting larger family homes moving out of Sheffield.</p> <p>Potential to deliver more homes at less high densities which would more easily enable accessible housing, and housing with higher space standards to be built.</p> <p>More homes delivered in the outer housing market areas will enable a greater mix of housing to be offered in those areas, including homes for private rent, affordable homes, and accommodation for older people.</p>

Sustainability Aims	Impact	Comments on Impact
<p>4. A healthy population, with health services available to meet the needs of everyone.</p>	<p>○</p>	<p>This Option seeks to provide a significant number of new dwellings within the Central Area, but not the maximum possible that is proposed by Option A. It will also spread some of the new residential development required more evenly around the city. However, the number of new dwellings proposed for the Central area is still significant and will still increase the Central Area population significantly, also putting pressure on existing primary care facilities, though to lesser degree. Densities are proposed to be lower so there may be some potential to provide new health facilities on these sites, also potentially as part of shared communal facilities.</p> <p>However, the same negative impact may result, in that any new facilities or improvements in provision are unlikely to be accessible to the most deprived communities where poor health is a particular issue. But increasing the population more widely across other parts of the city may help to create demand for new or improved primary care facilities in these locations.</p> <p>Overall we consider this Option will deliver some positive and some negative impacts and the overall impact will be neutral.</p>

Sustainability Aims	Impact	Comments on Impact
<p>5. Open space and cultural, leisure and recreational facilities available for all.</p>	<p>✓/!</p>	<p>The main difference between this option and Option A is that there would be less new residential development within the Central Area, although still significant, and instead some new housing would be on land released from the Green Belt through the Local Plan process.</p> <p>In terms of how this affects open space, leisure and culture considerations, the issues for the Central Area and for the remainder of the urban area remains broadly the same as for Option A, with perhaps the main difference being that this Option may not be maximising the potential of the Central Area in terms of introducing new housing in sustainable locations where there are concentrations of existing services and facilities. On the other hand, however, introducing less housing into the Central Area may be more realistic (depending on further assessment viability and land availability) and create less pressure to develop on land that could be used for improved open space and new leisure and cultural facilities as part of the mix of new neighbourhoods being created. However, as stated in Option A above, the increasing importance of open space and future increased opportunities for new residential development as a result of changes to the Use Classes Order and PD rights may in any event lessen that pressure to develop on open spaces.</p> <p>The biggest difference would be the introduction of new housing into areas on the edge of the city. The key to this Option's success would be to ensure that any new housing is located in sustainable locations with good access to public transport, and that new services and facilities are introduced alongside new residential developments to ensure easy access for both new and existing residents in the area as part of comprehensive masterplanning. This Option would provide considerable scope for the introduction of new open space and leisure facilities and in addition, being on the edge of the city, these new neighbourhoods would benefit from the existing open countryside and its extensive network of footpaths and cycleways which are predominantly in the Green Belt. However, the release of significant areas of what are likely to be predominantly greenfield land in the countryside clearly would have an impact on the open nature of the area, biodiversity in those areas and affect/intensify how people currently use those areas, which may contain walking and cycling routes; these would need to be factored in to any masterplanning exercises for comprehensive development. The majority of built leisure and cultural facilities are also focussed in and around the City Centre and Lower Don Valley, away from the more peripheral locations. There would also be a greater likelihood of insufficient critical mass to support built leisure – economics places those in the city centre and in and around Lower Don Valley because of the fact these areas are accessible to the whole city population and/or there is already a conglomeration/cluster of such facilities.</p>

Sustainability Aims	Impact	Comments on Impact
6. Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling.	✓/X/?	<p>This spatial strategy would distribute more of the housing into areas outside of the central area, including some in Green Belt. As this would mean more people living outside the central area it is likely to result in a greater need to travel, and journeys that are more likely to be made by car, and would therefore be more likely to impact negatively on carbon and energy use. This could be particularly so in areas on the edge of the city, however in this option it is more likely that development would be in the form of a small number of larger Green Belt releases providing the required number of homes, and with a greater number of new residents they would be more likely to support new or extended public transport services.</p>
7. An efficient transport network which maximises access and minimises detrimental impacts.	?	<p>Aligning the specific growth proposals with the existing tram and high frequency bus network would support a growth in patronage to enable continuation of services and future expansion of frequency and capacity on existing routes. Improved public transport connections would offer an alternative to the car for some journeys, as acknowledged in the Sheffield Transport Strategy (2019). Large Green Belt sites located close to rail stations would provide some opportunity to promote rail travel for inter urban trips.</p> <p>The impact on the existing network will depend on the location of allocated sites. There would be less pressure on the City Centre but more demand for travel across the City in this scenario for work, leisure and other services would likely result in more infrastructure requirements. There are existing pressures on the Inner Ring Road, identified in the Sheffield Transport Strategy, and any major housing development on the western side of the city could impact further as increased numbers of people commute to the main employment areas within and to the east of the City Centre. Development on the eastern side of the city could reduce this impact, although it should be noted that this could increase pressure on the already congested Motorway junctions on the M1.</p> <p>Whilst to some extent this option with a high level of development in the central area would still support the creation of some low-traffic, liveable and connected communities and enable more households to be less car dependent, for those locations well outside the central area cycling for commuting trips is likely to be a less viable option as journey distances will be greater. However, cycling and walking will still be important for shorter trips to access local facilities and services, and there would still be the potential to promote cycling from the City Centre to wider reaching employment areas (such as the Lower Don Valley), given attractive distances, and topography. This would support the approach in the Sheffield Transport Strategy which prioritises investment in cycling infrastructure in areas where there is greatest potential to increase the mode share and enable more people to make some of their journeys by cycling.</p>

Sustainability Aims	Impact	Comments on Impact
<p>8. Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.</p>	<p>✓/X</p>	<p>Under this option, over 85% of new homes would be built in the existing urban area, with a continued focus on brownfield sites.</p> <p>There is some risk that developers will favour Green Belt sites rather than brownfield sites within the existing urban areas, which could result in a greater impact on soil resources than option A. But some Green Belt sites could be held in reserve (“safeguarded”) and delivered later in (or after the end of) the plan period, in order to promote building on brownfield sites first.</p> <p>Would result in the loss of some agricultural land, though relatively little land in Sheffield is classified as Best and Most Versatile Land, so the impact on soils and the economic impact on agriculture are both likely to be low.</p> <p>Potential for mineral extraction could be assessed on a site by site basis, prior to non-mineral development occurring. This would prevent the sterilisation of any viable mineral reserves. Although less brownfield land would be developed than under Option A, there would still remain the feasibility of recycled aggregates (e.g. from demolitions) being used in some construction.</p>
<p>9. An attractive, high quality built environment that works well and lasts.</p>	<p>✓/X/?</p>	<p>Option B will densify the city centre, concentrating a high percentage of residents within the city core where the greatest concentration of facilities, employment opportunities and transport hubs are located. This could help to promote more sustainable, active lifestyles, with reduced car dependency, which may result in a reduction in carbon emissions within the city centre. In contrast to the city centre, the inclusion of development within the green belt would likely increase car dependency and result in an increase in carbon emissions across the city. Opportunities should be explored to locate any green belt sites within the most sustainable locations nearest to existing transport hubs. Option B could offer significant opportunities for development to connect to the district heating system within the city centre.</p> <p>A higher density centre, could lead to an increase in average building heights which could have an adverse impact on the character of the city centre, listed buildings and conservation areas. Measures to deliver higher density should be explored through medium scale buildings providing a more sensitive response, allowing tall buildings to be used in specific key locations which aid legibility within the city centre.</p> <p>Option B could provide an opportunity to use new development and environmental improvements to improve the living environment in areas that are rundown or that lack distinctiveness within the city centre.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>The inclusion of development within the green belt, will likely impact on the sensitive character of the landscape. This will need a considered response to help integrate it within the landscape setting including appropriate mitigation measures, integration of existing landscape features, provision of extensive green infrastructure, use of local materials and potential restrictions on building heights.</p> <p>A higher density core could have negative impacts on local microclimate conditions within the city centre.</p> <p>An increased population within the city centre offers scope to create a safer environment bringing more activity and surveillance onto streets and spaces.</p> <p>Option B would see some development in the green belt, which would likely have an impact on landscape character. This would need to be mitigated through design measures to minimise its impact. Increasing density in the city centre could potentially have an adverse impact on open space as opportunities to create new public space could be limited as available sites are used to provide new development. This could potentially result in overcrowding of existing open space. New developments would need to ensure they provide sufficient accessible public, communal and private amenity space within schemes and individual dwellings.</p> <p>Option B would result in the loss of habitats due to there being some development within the green belt; however development would be located to avoid designated sites of ecological or geological importance. If development is located adjacent to a designated site then an appropriate buffer would be included to reduce any impact of the development on the designated site. Development within the green belt would need to provide extensive green infrastructure to increase biodiversity, while creating opportunities for habitat creation to compensate for any loss. Densifying the city centre may limit opportunities to increase biodiversity within this location while potentially losing urban habitats. Opportunities to increase biodiversity within a densified city centre need to be maximised to help provide habitats for wildlife, increase green infrastructure, help reduce flood risk and air pollution, combat the urban heat island effect, help improve the quality and character of the public realm, while bringing benefits to residents' health and well being.</p> <p>Option B would likely limit the types of dwellings within the city centre to apartments, while offering a wider range of larger family homes within the suburbs and green belt. Measures will need to be adopted to ensure all new homes function well for residents now and in the future including generous space standards, being flexible, adaptable and accessible while ensuring they have access to sufficient communal space as well as private amenity space within dwellings or their boundaries. These standards would help to set a baseline ensuring new homes are fit for purpose and reduce the potential for any negative impacts on residents' health and well being.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>While the options identify alternative approaches to where new housing could be located within the city, the inevitability is that whichever option is preferred the city will undergo a huge development drive to meet the housing needs of a growing population. This will put increased pressure on natural resources, which highlights the importance of ensuring that all new homes are future proofed against climate change. New homes will need to encompass sustainable design principles being energy and thermally efficient, water efficient, well ventilated and incorporate measures to reduce overheating. Materials should be sustainably sourced, minimising waste and their impact on the environment, while homes at risk of flooding should be designed to be flood resilient and resistant. Schemes should also incorporate SuDs to help manage flood risk and water quality.</p>
<p>10. The historic environment protected and enhanced.</p>	<p>?</p>	<p>Impact on heritage assets will depend on the location of allocated sites.</p> <p>Under this option there would still be significant levels of development and redevelopment of the existing urban area, including the City Centre, which may provide opportunities to restore heritage assets or better reveal their significance through new development.</p> <p>Some development in the Green Belt may impact on heritage assets, including historic landscapes.</p>

Sustainability Aims	Impact	Comments on Impact
<p>11. High quality natural landscapes protected and poor landscapes enhanced.</p>	<p>✓/X</p>	<p>The high quality landscapes around Sheffield are all currently within the Green Belt. The Green Belt covers around 9,070 ha, though not all of it would be regarded as valued landscape.</p> <p>Areas close to, and visible from, the Peak District National Park would be particularly sensitive and may form part of the National Park's fringe landscape, where development could potentially have a negative impact. Although most of the built-up areas of Sheffield are more than 1km from the National Park boundary some areas south of Stockbridge, west of Dore and Totley, north of Lodge Moor and west of Wharnccliffe Side are within 1km of the National Park where the impact may be greater.</p> <p>We estimate that this option would affect less than 1.5% of the Green Belt (based on 5,000 homes at 50dph = requirement for 100ha, plus an assumed requirement of 30ha (equivalent to 30% of developed area) for open space and other uses).</p> <p>There are a small number of derelict brownfield sites in the Green Belt which are currently detrimental to landscape character and where poor landscapes could potentially be improved through redevelopment, though some of these are poorly related to the existing urban areas.</p> <p>Overall, this option would have a greater adverse impact on landscape character than Option A.</p>
<p>12. Ecological and geological assets created, conserved, managed and enhanced.</p>	<p>✓/X/?</p>	<p>Option B would include development within the green belt which would have a negative impact on the environment resulting in the loss of existing habitats and biodiversity. Measures would need to be taken to ensure designated sites of ecological and geological importance continue to be protected within the green belt. Where potential development sites within the city centre or wider urban area may be sited adjacent to designated sites e.g. River Don, schemes should sensitively respond to these ecologically and geologically important habitats and protect them through appropriate mitigation measures.</p> <p>Development across the city should help deliver and expand the future Nature Recovery Network (NRN), which will be developed and mapped as part of the Local Nature Recovery Strategy. Opportunities within a high density city centre may be somewhat limited, but where they arise should be maximised, while scope within the wider urban area may be more achievable and should positively help to expand the NRN wherever possible. While development in the green belt will cause a loss of habitat it may also result in the isolation of habitats or impact on the ability to connect them. Where this may occur measures should be implemented to minimise this risk.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>Creating a high density city centre may likely limit opportunities to significantly increase biodiversity within it while it could also risk losing urban habitats. Opportunities to increase biodiversity within a densified city centre need to be maximised to help provide habitats for wildlife and increase green infrastructure e.g. green roofs, street trees, pocket parks, SuDs etc. Scope to increase biodiversity within the wider urban area should be more readily achievable on site and delivered through a wide range of measures to provide opportunities for nature.</p> <p>Development within the green belt will inevitably result in the loss of habitat and biodiversity. To reduce the impact of this loss, the importance of providing a biodiversity net gain on site will be paramount.</p> <p>Implementing measures to achieve a net gain in biodiversity will bring benefits to wider environmental gains in helping to reduce flood risk and air pollution, increase tree canopy cover, combat the urban heat island effect, help improve the quality and character of the public realm, while bringing benefits to residents' health and well being.</p> <p>Development will need to ensure it minimises its impact on habitats and the wider environment, as a result of flooding, pollution from run-off and emissions, damage, removal, over exploitation of natural resources and inappropriately located uses. Incorporating measures that would avoid or minimise the risk of these occurrences happening can also contribute to wider environmental gains and provide overall improvements in water and air quality, habitats and an increase in biodiversity. Opportunities within a high density city centre may be more limited, but where they arise should be maximised e.g. SuDs, tree planting, while measures should be more achievable within the wider urban area. The inclusion of development within the green belt in option B would have a negative effect on habitats and the environment, so the importance of minimising its impact is essential. Proposals should be identified and fully incorporated from the start of the design process regardless of where the site is located within the city and not deemed as an after thought. Where measures are implemented they should be accompanied by long term maintenance plans and also monitored where required e.g. Biodiversity Net Gain.</p> <p>Development across the city will need to ensure measures are taken to avoid the introduction of and reduce the spread of disease, pests and invasive non native species that may be harmful to our flora and fauna e.g. buy British grown stock.</p> <p>Opportunities to increase public access to nature within a high density city centre will be limited so, where they may arise they should be capitalised on e.g. riverside walks and public space, green roofs, street trees, pocket parks, SuDs etc. Greater scope will exist within the wider urban area and should be achieved more readily through the retention of existing landscape/habitat features, provision of street trees, hedgerows, gardens and multi functional public open space including SuDs. Green belt development will have the greatest scope to provide access to nature and so should be easily achieved. Increasing access to nature will provide people with opportunities for recreation and bring added benefits to their health and well being.</p>

Sustainability Aims	Impact	Comments on Impact
		While opportunities to increase public access to nature should be capitalised on, it should be provided in a way which continues to protect and avoid damage to habitats and wildlife.
13. Water resources protected and enhanced.	✓/X	<p>The population increase under Option B would still present an opportunity to promote Sheffield and its waterways and use them to help celebrate the heritage, culture and rich history of Sheffield. There would still also be an opportunity to reap the benefits of securing access along a city wide network of paths and riverside parkways from a central location (Sheffield Waterways Strategy 2014).</p> <p>The development of 40,000 additional homes, commercial development and other community facilities will increase the water usage and water treatment needs, but this can be partly mitigated by incorporating water conservation and water efficiency measures into new development (NPPF 2019, and Humber River Basin Management Plan, 2015). However this is true for all 3 Options.</p> <p>New development will increase hard-surfacing and run-off of pollutants into water courses which may be increased under Option B compared to C but less so than Option A. This is because a more densely packed urban environment with fewer gardens may make sustainable urban drainage (SuDS) methods (which can help reduce pollutants into water courses) more challenging. The range of SuDS methods available is also limited in central compared with suburban locations, though it is observed by the Lead local Flood Authority that developers are less willing to adopt SuDS in suburban locations.</p> <p>Focussing population increase in the central area associated with Option B may have greater implications for water demand and sewerage capacity pressures, but less so than Option A. This is when compared to Option C which would seek to spread population increase in smaller pockets across the city (implications for Water Resource Management Plan and Drought Plans by Yorkshire Water).</p>

Sustainability Aims	Impact	Comments on Impact
<p>14. Greenhouse gas emissions minimised and the impact of climate change effectively managed.</p>	<p>✓/X</p>	<p>Potentially higher greenhouse gas emissions than Option A, due to increased travelling distances from new homes to jobs and facilities. However, the majority of new homes would still be built within the existing urban area where access to sustainable modes of travel. A lower proportion of apartments would result in a larger carbon footprint than in Option A.</p> <p>Larger housing sites on Green Belt land can be accommodated without the need to build in high flood risk areas.</p> <p>There would potentially be opportunities to build flood alleviation works into new open spaces on larger sites, protecting both new and existing developments.</p> <p>Policies to promote energy conservation through sustainable design and the use of renewable energy would help to minimise emissions from new development.</p> <p>Compared to Option A, there would be less pressure to include site allocations options in Flood Zones 2 and 3 because such flood zones cover around a third of the city centre, and therefore less reliance on measures to adapt to climate change and the management of flood risk; making it easier for the Local Plan to pass the sequential and exception tests of site allocation options.</p> <p>New development will increase hard-surfacing which may increase surface water run-off and associated flood risk under Option B because of fewer gardens and a more densely packed urban environment. Option B would also limit the range of sustainable urban drainage (SuDS) methods available compared with Option C where there are more opportunities, though it is observed by the Lead local Flood Authority that developers are less willing to adopt SuDS in suburban locations.</p>

Sustainability Aims	Impact	Comments on Impact
15. Environmental pollution improved and impacts on air quality minimised or mitigated.	✓/X	<p>Potentially higher air pollution than Option A, due to increased travelling distances from new homes to jobs and facilities. However, the majority of new homes would still be built within the existing urban area where access to sustainable modes of travel.</p> <p>As the number of electric vehicles increase over the period of the plan, the negative impact on air quality will diminish.</p> <p>Could lead to an overall lower amount of reclamation and decontamination of brownfield sites reducing the regeneration of certain areas of the city/city centre/inner city as more greenfield sites in suburban areas would be available for development than in Option A. Those are likely to be developed in preference to those where land contamination is an issue. Greenfield sites are generally easier and cheaper to develop with less risk of land contamination.</p> <p>Potential of an increase in light pollution on some rural areas adversely affecting wildlife and ecology. Policies could help protect from unacceptable levels of noise and light pollution and to ensure suitable distances between any hazardous installations and environmentally sensitive uses.</p>
16. Energy consumption minimised and use of sustainable energy sources maximised.	✓	<p>Less potential to connect new homes to the District heating Network than under Option A.</p> <p>A lower number of overall apartments than in Option A may mean there is less opportunity for some renewable and low-carbon features such as solar panels or building wide heat and power generation facilities. Apartments are also more energy efficient than houses, resulting in lower energy consumption.</p> <p>Policies to promote energy conservation and use of renewable energy would help to minimise emissions from new development.</p>

Sustainability Aims	Impact	Comments on Impact
<p>17. Minimal production of waste and the reuse, recycling and recovery of waste maximised.</p>	<p>X/?</p>	<p>Although the overall levels of household waste have reduced over the last 10 years, the development of 40,000 additional homes and the associated population growth (projections show an additional 49,000 people by 2038), together with significant commercial development, is likely to increase the amount of waste generated.</p> <p>This can be partly mitigated by incorporating recycling measures into new development (for example, more on site recycling facilities, clearer signage to those facilities).</p> <p>A separate waste management plan is being considered by the 4 South Yorkshire local planning authorities. Until this is produced, it is not possible to say with any certainty how the reuse, recycling and recovery of waste is to be maximised.</p>

Table 6: Option C: Less dense central area, more new houses with private gardens in the suburbs

Distribution of new homes:

- a) Central area: 10,000 homes
- b) In existing urban area (outside the City Centre): 20,000 homes
- c) Green Belt: 10,000 homes*

*Including 250-750 homes would be developed in the Green Belt through conversion of existing buildings or redevelopment of brownfield sites (a continuation of current policy).

Sustainability Aims	Impact	Comments on Impact
<p>1. A vibrant and competitive economy with good job opportunities available to the whole community.</p>	<p>✓</p>	<p>This Option will allow for the maximum potential level of new business development in the city centre, so there will be few constraints on business location and expansion in the key Growth Area of the city centre. However, a relatively low provision of new residential development in the Central Area will result in a smaller residential population in the city centre that could lead to a shortage in the potential workforce and demand for city centre services. The greater population proposed for the urban area will provide an enhanced workforce within a reasonable distance. However, this could result in additional congestion and a reduction in air quality due to the need for more people to make journeys into the central area and to the AMID.</p> <p>On the other hand, there will be additional economic benefits from a spread of new residential development around the city. Smaller businesses and those in local and district centres will benefit from a greater catchment population.</p> <p>Overall, we consider that the economic impacts of this Option will still be positive, as there will be an increase in population in many areas that will benefit most local businesses.</p>

Sustainability Aims	Impact	Comments on Impact
2. Education and training opportunities.	✓✓	<p>Development on Green Belt sites potentially provides even more opportunity (than Options A and B) to allocate land for new early years and schools to meet any shortfall in school places (due to the ability to utilise undeveloped land on the edge of the built-up areas). Schools on the edge of the built-up are may have opportunity for larger outdoor spaces with wider sports provision leading to greater learning outcomes. However, schools in the city centre under Option A may serve more diverse catchments, including deprived areas of the city, than they would on the edge of the urban area.</p> <p>Greater flexibility than Option A and B to fill existing city wide surplus school places, as demand would be spread wider (and not concentrated in the Central area). This will depend of the location of Green Belt development sites, and the existing school capacities. The potential need for new school places (alongside demographic modelling to more accurately predict future school age population) will need to be modelled as part of the site selection process.</p> <p>The Option poses little risk for competition for land and property between new homes and the universities' and colleges' plans and aspirations for expansion in the City Centre.</p> <p>Option C is less likely lead to a vibrant city centre leading to fewer opportunities for job growth and scope for business, incubator and start-up links to the universities and colleges.</p>

Sustainability Aims	Impact	Comments on Impact
<p>3. Decent and appropriate housing available to everyone.</p>	<p>✓✓</p>	<p>Provides significantly more opportunity to address the specific housing needs of each housing market area than Options A or B (though this would depend on the distribution of allocated sites).</p> <p>This option is likely to deliver the most affordable housing due to the better viability of sites in suburban locations (though this will vary depending on the market area), and simultaneously broaden the housing mix in those locations.</p> <p>Additional Green Belt sites would deliver higher numbers of larger homes suitable for families that we know are in higher demand.</p> <p>Including a greater mix of Green Belt sites in the housing supply would spread new homes across the city, and be most likely to ensure consistent delivery of homes regardless of changes in the housing market.</p> <p>Increases the likelihood of being able to deliver new homes in some areas of Sheffield that have few urban site options. This will improve the prospects for meeting a wider range of needs (both type and tenure) in those areas.</p> <p>Significantly less reliance on delivery of apartments in the central area, although still sufficient emphasis on City Centre delivery to ensure a supply of housing in that location to meet the needs of people, especially younger people, who move to the city to work and want to live centrally.</p> <p>Less risk of people wanting larger homes moving out of Sheffield.</p>
<p>4. A healthy population, with health services available to meet the needs of everyone</p>	<p>○</p>	<p>This option doubles the amount of development in the Green Belt compared with Option B. Larger Green Belt sites could potentially provide a critical mass for health facilities to be provided, although smaller Green Belt sites have less potential to do that. Also the location of the Green Belt sites will be a key factor. Some Green Belt near existing populations may create a critical mass for delivery of more health facilities, enhancing provision for existing and new residents. For others it would create a pressure on existing services to the detriment of existing and new residents.</p> <p>Given this, overall we consider this Option will deliver some positive and some negative impacts on balance.</p>

Sustainability Aims	Impact	Comments on Impact
<p>5. Open space and cultural, leisure and recreational facilities available for all.</p>	<p>?</p>	<p>This Option would mean that there would only be around half of the new housing in the Central Area when compared with Option A and double the amount of new housing in the more peripheral areas when compared with Option B which would again include releasing land from the Green Belt but at a significantly higher level.</p> <p>In terms of sustainability, there is a greater risk that new housing in the suburbs would not be in the most sustainable of locations and clearly there would be a significant impact in terms of greenfield development, affecting the Green Belt and the recreational opportunities that lie within and cross over biodiversity /intensification of existing recreation and leisure uses/places. Furthermore, this would mean locating significant new housing development away from the concentrations of built leisure and cultural facilities in and around the City Centre and in the Lower Don Valley. Even with comprehensive masterplanning and aiming to ensure that new residential developments also include new services and facilities as appropriate, and aiming to locate new peripheral housing development in the more sustainable outlying locations, this Option presents much more of a challenge when seeking to meet the overall aim of achieving sustainable development.</p>
<p>6. Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling.</p>	<p>✓/X/?</p>	<p>This spatial option would result in a more dispersed population, and with more people living well outside the City Centre it is likely to lead to a greater need to travel. Of the three options, this is likely to result in the most and longest carbon and energy related trips and have greatest adverse impact. Because of that it could also require the greatest level of investment in mitigations and new infrastructure.</p> <p>As this option would require much more of the housing growth in peripheral areas it is more likely that some sites would need to be considered that are less well served by existing public transport infrastructure. This is likely to result in more journeys being made by car. Not only would this impact negatively on carbon and energy use it is also likely to exacerbate existing barriers to accessing opportunities for those households in Sheffield who do not have access to a car.</p>

Sustainability Aims	Impact	Comments on Impact
<p>7. An efficient transport network which maximises access and minimises detrimental impacts.</p>	<p>?</p>	<p>Significant investment in new public transport services and infrastructure would be required to mitigate the impacts. However, as with the other options, where growth proposals are aligned with the existing tram and high frequency bus network these would support a growth in patronage to enable increased viability of services and future expansion of frequency and capacity on existing routes. Improved public transport connections would offer an alternative to the car for some journeys. Large Green Belt sites located close to rail stations would provide some opportunity to promote rail travel for inter urban trips.</p> <p>It is important to note that under this option it is likely that some smaller Green Belt releases would also be required to achieve the growth required. It will depend which sites were brought forward, but as a general principle smaller peripheral sites are less likely to be well connected by existing public transport services, and are unlikely to provide sufficient passenger demand to sustain new services, or even extensions to existing ones. Journeys are likely to be longer meaning that cycling, particularly for commuting purposes, may not be an option for many people. Without a viable alternative, it is likely that these areas would default to becoming more reliant on the car, resulting in an increased contribution to the negative impacts upon air quality, carbon emissions and energy use.</p> <p>As with option B, the impact on the existing network will depend on the location of allocated sites. There would be less pressure on the City Centre but much more demand for travel across the city, resulting in greater infrastructure requirements. There are existing pressures on the Inner Ring Road, as acknowledged in the Sheffield Transport Strategy, and any major housing development on the western side of the city could impact further as increased numbers of people commute to the main employment areas within and to the east of the City Centre. Development on the eastern side of the city could reduce this impact, although it should be noted that this could increase pressure on the already congested Motorway junctions on the M1.</p>

Sustainability Aims	Impact	Comments on Impact
<p>8. Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.</p>	<p>✓/X</p>	<p>Under this Option, 75% of new homes would still be built in the existing urban area, with a continued focus on brownfield sites.</p> <p>There is a further risk (compared to Option B) that developers will favour Green Belt sites rather than brownfield sites within the existing urban areas, which would result in a greater impact on soil resources. But some Green Belt sites could be held in reserve (“safeguarded”) and delivered later in (or after the end of) the plan period, in order to promote building on brownfield sites first.</p> <p>It would result in further loss of agricultural land compared to Option B, though as noted under Option B, relatively little land in Sheffield is classified as Best and Most Versatile Land, so the impact on soils and the economic impact on agriculture are both likely to be low.</p> <p>Potential for mineral extraction could be assessed on a site by site basis, prior to non-mineral development occurring. This would prevent the sterilisation of any viable mineral reserves. Although less brownfield land would be developed than under Option A and B, there would still remain the feasibility of recycled aggregates (e.g. from demolitions) being used in some construction.</p>
<p>9. An attractive, high quality built environment that works well and lasts.</p>	<p>✓/XX/?</p>	<p>Option C will densify the city centre though to a lesser degree than the previous options, but still concentrate a significant percentage of residents within the city core where the greatest concentration of facilities, employment opportunities and transport hubs are located. This could help to promote more sustainable, active lifestyles, with reduced car dependency, which may result in a reduction in carbon emissions within the city centre. Option C promotes the largest increase of homes within the green belt, which would likely see greater car dependency and significant increase in carbon emissions across the city. Opportunities should be explored to locate any green belt sites within the most sustainable locations nearest to existing transport hubs. Option C could offer opportunities for development to connect to the district heating system within the city centre.</p> <p>Although less than previous options density within the city centre would still be increased under Option C, which could lead to an increase in average building heights and have an adverse impact on the character of the city centre, listed buildings and conservation areas. Measures to deliver increased density should be explored through medium scale buildings providing a more sensitive response, allowing tall buildings to be used in specific key locations which aid legibility within the city centre.</p> <p>Option C could provide an opportunity to use new development and environmental improvements to improve the living environment in areas that are rundown or that lack distinctiveness within the city centre.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>The inclusion of significant development within the Green Belt will have an impact on the sensitive character of the landscape. This will need a considered response to help integrate it within the landscape setting including appropriate mitigation measures, integration of existing landscape features, provision of extensive green infrastructure, use of local materials and potential restrictions on building heights.</p> <p>A high density core could have negative impacts on local microclimate conditions within the city centre.</p> <p>An increased population within the city centre offers scope to create a safer environment bringing more activity and surveillance onto streets and spaces.</p> <p>Option C would see significant development in the green belt, which would likely have an impact on landscape character. This would need to be mitigated through design measures to minimise its impact. Although option C would see an increase in density within the city centre, it would be less intense than previous options so there may be greater scope to provide opportunities for new public open space within schemes or on individual sites as a whole within the central core. These opportunities along with a reduction in potential homes built could potentially reduce the risk of overcrowding on existing open space. New developments would still need to ensure they provide sufficient accessible public, communal and private amenity space within schemes and individual dwellings.</p> <p>Option C would result in the significant loss of habitats due to there being a greater extent of development within the green belt; however development would be located to avoid designated sites of ecological or geological importance. If development is located adjacent to a designated site then an appropriate buffer would be included to reduce any impact of the development on the designated site. Development within the green belt would need to provide extensive green infrastructure to increase biodiversity, while creating opportunities for habitat creation to compensate for any loss. Densifying the city centre may limit opportunities to increase biodiversity within this location while potentially losing urban habitats, though this impact may be reduced to some degree through option C. Opportunities to increase biodiversity within a densified city centre need to be maximised to help provide habitats for wildlife, increase green infrastructure, help reduce flood risk and air pollution, combat the urban heat island effect, help improve the quality and character of the public realm, while bringing benefits to residents' health and well being.</p> <p>Option C would likely limit the types of dwellings within the city centre to apartments, while offering a wider range of larger family homes within the suburbs and green belt. Measures will need to be adopted to ensure all new homes function well for residents now and in the future including generous space standards, being flexible, adaptable and accessible while ensuring they have access to sufficient communal space as well as private amenity space within dwellings or their boundaries. These standards would help to set a baseline ensuring new homes are fit for purpose and reduce the potential for any negative impacts on residents' health and well being.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>While the options identify alternative approaches to where new housing could be located within the city, the inevitability is that whichever option is preferred the city will undergo a huge development drive to meet the housing needs of a growing population. This will put increased pressure on natural resources, which highlights the importance of ensuring that all new homes are future proofed against climate change. New homes will need to encompass sustainable design principles being energy and thermally efficient, water efficient, well ventilated and incorporate measures to reduce overheating. Materials should be sustainably sourced, minimising waste and their impact on the environment, while homes at risk of flooding should be designed to be flood resilient and resistant. Schemes should also incorporate SuDs to help manage flood risk and water quality.</p>
<p>10. The historic environment protected and enhanced.</p>	<p>?</p>	<p>Impact on heritage assets will depend on the location of allocated sites.</p> <p>Under this option there would still be development and redevelopment within the existing urban area, including the City Centre, which may provide opportunities to restore heritage assets or better reveal their significance through new development.</p> <p>Some development in the Green Belt may impact on heritage assets, including historic landscapes.</p>
<p>11. High quality natural landscapes protected and poor landscapes enhanced.</p>	<p>✓/X</p>	<p>The high quality landscapes around Sheffield are all currently within the Green Belt. The Green Belt covers around 9,070 ha, though not all of it would be regarded as valued landscape.</p> <p>Areas close to, and visible from, the Peak District National Park would be particularly sensitive and may form part of the National Park's fringe landscape, where development could potentially have a negative impact. Although most of the built-up areas of Sheffield are more than 1km from the National Park boundary, some areas south of Stockbridge, west of Dore and Totley, north of Lodge Moor and west of Wharncliffe Side are within 1km of the National Park where the impact may be greater. The impact in this option would be greater than option B as the number of homes proposed in this option is double that in Option B. We estimate that this option would affect less than 3% of the Green Belt (based on 10,000 homes at 50dph = requirement for 200ha, plus an assumed requirement of 60ha (equivalent to 30% of developed area) for open space and other uses).</p> <p>As with Option B, some Green Belt sites could be held in reserve ("safeguarded") and delivered later in (or after the end of) the plan period, in order to promote building on brownfield sites first.</p> <p>There are a small number of derelict brownfield sites in the Green Belt which are currently detrimental to landscape character and where poor landscapes could potentially be improved through redevelopment, though some of these are poorly related to the exiting urban areas.</p> <p>Overall, this option would have a greater adverse impact on landscape character than Options A or B.</p>

Sustainability Aims	Impact	Comments on Impact
<p>12. Ecological and geological assets created, conserved, managed and enhanced.</p>	<p>✓/XXI/?</p>	<p>Option C would include increased development within the green belt over option B, which would have a significant negative impact on the environment resulting in a greater loss of existing habitats and biodiversity. Measures would need to be taken to ensure designated sites of ecological and geological importance continue to be protected within the green belt. Where opportunities may exist to provide waterside development within the city centre e.g. River Don, schemes should sensitively respond to these designated ecologically important habitats and protect them through appropriate mitigation measures.</p> <p>Development across the city should help deliver and expand the future Nature Recovery Network (NRN), which will be developed and mapped as part of the Local Nature Recovery Strategy. Option C may provide some opportunities within the city centre in comparison to A and B, if fewer homes are required potentially offering more space for nature in this location. Scope within the wider urban area may be more achievable and should positively help to expand the NRN wherever possible. Development in the green belt in option C will cause a significant loss of habitat and it may also result in the isolation of habitats or impact on the ability to connect them. Where this may occur measures should be implemented to minimise this risk.</p> <p>Option C may provide some scope to increase biodiversity in the city centre in comparison to A and B due to fewer homes and potential sites being required in this location. It may also result in the loss of fewer urban habitats. Opportunities to increase biodiversity within the city centre need to be maximised wherever possible to help provide habitats for wildlife and increase green infrastructure e.g. green roofs, street trees, pocket parks, SuDs etc. Scope to increase biodiversity within the wider urban area should be more readily achievable on site and delivered through a wide range of measures to provide opportunities for nature. Option C will further increase development within the green belt and will inevitably result in greater loss of habitat and biodiversity. To reduce the impact of this loss, the importance of providing a biodiversity net gain on site will be paramount.</p> <p>Implementing measures to achieve a net gain in biodiversity will bring benefits to wider environmental gains in helping to reduce flood risk and air pollution, increase tree canopy cover, combat the urban heat island effect, help improve the quality and character of the public realm, while bringing benefits to residents' health and well being.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>Development will need to ensure it minimises its impact on habitats and the wider environment, as a result of flooding, pollution from run-off and emissions, damage, removal, over exploitation of natural resources and inappropriately located uses. Incorporating measures that would avoid or minimise the risk of these occurrences happening can also contribute to wider environmental gains and provide overall improvements in water and air quality, habitats and an increase in biodiversity. Opportunities within the city centre may be more limited, but where they arise should be maximised e.g. SuDs, tree planting, while measures should be more achievable within the wider urban area. The negative impact on habitats and the environment as a result of increased green belt development could be significant, so the importance of minimising its impact is essential. Proposals should be identified and fully incorporated from the start of the design process regardless of where the site is located within the city and not deemed as an after thought. Where measures are implemented they should be accompanied by long term maintenance plans and also monitored where required e.g. Biodiversity Net Gain.</p> <p>Development across the city will need to ensure measures are taken to avoid the introduction of and reduce the spread of disease, pests and invasive non native species that may be harmful to our flora and fauna e.g. buy British grown stock.</p> <p>Opportunities to increase public access to nature within the city centre will be limited so, where they may arise they should be capitalised on e.g. riverside walks and public space, green roofs, street trees, pocket parks, SuDs etc. Greater scope will exist within the wider urban area and should be achieved more readily through the retention of existing landscape/habitat features, provision of street trees, hedgerows, gardens and multi functional public open space including SuDs. Green belt development will have the greatest scope to provide access to nature and so should be easily achieved. Increasing access to nature will provide people with opportunities for recreation and bring added benefits to their health and well being.</p> <p>While opportunities to increase public access to nature should be capitalised on, it should be provided in a way which continues to protect and avoid damage to habitats and wildlife.</p>

Sustainability Aims	Impact	Comments on Impact
<p>13. Water resources protected and enhanced.</p>	<p>✓/X</p>	<p>A more modest population increase would still present an opportunity to promote Sheffield and its waterways and use them to help celebrate the heritage, culture and rich history of Sheffield, but less so than Option A and B. There would be fewer opportunities to reap the benefits of securing access along a city wide network of paths and riverside parkways from a central location (Sheffield Waterways Strategy 2014).</p> <p>The development of 40,000 additional homes, commercial development and other community facilities will increase the water usage and water treatment needs, but this can be partly mitigated by incorporating water conservation and water efficiency measures into new development (NPPF 2019, and Humber River Basin Management Plan, 2015). However this is true for all 3 Options.</p> <p>New development will decrease hard-surfacing and run-off of pollutants into water courses which may be increased under Option C compared to B and C. This is because a less densely packed urban environment with more gardens may make sustainable urban drainage (SuDS) methods (which can help reduce pollutants into water courses) less challenging. The range of SuDS methods available is broader compared with central locations, though it is observed by the Lead local Flood Authority that developers are less willing to adopt SuDS in suburban locations.</p>

Sustainability Aims	Impact	Comments on Impact
<p>14. Greenhouse gas emissions minimised and the impact of climate change effectively managed.</p>	<p>✓/XX</p>	<p>Potentially even higher greenhouse gas than Options A and B, due to more new homes having increased travelling distances to jobs and facilities. A lower proportion of apartments would result in a larger carbon footprint than in Options B and C.</p> <p>As with Option B, larger housing sites on Green Belt land can still be accommodated without the need to build in high flood risk areas.</p> <p>There would potentially be opportunities to build flood alleviation works into new open spaces on larger sites, protecting both new and existing developments.</p> <p>Policies to promote energy conservation through sustainable design and the use of renewable energy would help to minimise emissions from new development.</p> <p>There would be less pressure to include site allocations options in Flood Zones 2 and 3 because such flood zones cover around a third of the city centre, and therefore less reliance on measures to adapt to climate change and the management of flood risk; making it easier for the Local Plan to pass the sequential and exception tests of site allocation options.</p> <p>New development will decrease hard-surfacing which may decrease surface water run-off and associated flood risk under Option B because of more gardens and a less densely packed urban environment. Option C would also increase the range of sustainable urban drainage (SuDS) methods available compared with Option C where there are more opportunities to implement them, though it is observed by the Lead local Flood Authority that developers are less willing to adopt SuDS in suburban locations.</p>
<p>15. Environmental pollution improved and impacts on air quality minimised or mitigated.</p>	<p>✓/XX</p>	<p>Potentially higher air pollution than Options A and B, due to increased travelling distances from new homes to jobs and facilities. However, the majority of new homes would still be built within the existing urban area where access to sustainable modes of travel.</p> <p>As the number of electric vehicles increase over the period of the plan, the negative impact on air quality will diminish.</p> <p>Could lead to an overall lower amount of reclamation and decontamination of brownfield sites as more greenfield sites in suburban areas (Where there is generally a lower risk of land contamination issues) would be available for development in Options A and B.</p>

Sustainability Aims	Impact	Comments on Impact
		<p>Further potential of an increase in light pollution on some rural areas adversely affecting wildlife and ecology.</p> <p>Policies could help protect from unacceptable levels of noise and light pollution and to ensure suitable distances between any hazardous installations and environmentally sensitive uses.</p>
<p>16. Energy consumption minimised and use of sustainable energy sources maximised.</p>	<p>✓</p>	<p>Less potential to connect new homes to the District Heating Network than under Options A or B.</p> <p>A lower number of overall apartments than in Option A may mean there is less opportunity for some renewable and low-carbon features such as solar panels or building wide heat and power generation facilities. Apartments are also more energy efficient than houses, resulting in lower energy consumption.</p> <p>Policies to promote energy conservation and use of renewable energy would help to minimise emissions from new development.</p>
<p>17. Minimal production of waste and the reuse, recycling and recovery of waste maximised.</p>	<p>X/?</p>	<p>Although the overall levels of household waste have reduced over the last 10 years, the development of 40,000 additional homes and the associated population growth (projections show an additional 49,000 people by 2038), together with significant commercial development, is likely to increase the amount of waste generated.</p> <p>This can be partly mitigated by incorporating recycling measures into new development (for example, more on site recycling facilities, clearer signage to those facilities).</p> <p>A separate waste management plan is being considered by the 4 South Yorkshire local planning authorities. Until this is produced, it is not possible to say with any certainty how the reuse, recycling and recovery of waste is to be maximised.</p>

5. Conclusion and Next Steps

Impact of Sustainability Appraisal Process on Decision Making

- 5.1 The SA on the scale of growth enables us to assess the implications of 4 different strategic alternatives for economic growth and three different options for housing growth based on the city's aspirations for jobs growth. The SA includes an appraisal of the Plan's Objectives and the three spatial options for growth. The current SAs have enabled us to highlight the potential positive and negative impacts of the strategic options. This will help us to focus on the key sustainability issues as we select potential site allocations and develop the policies in the Publication Draft Sheffield Plan. This will secure a Sheffield Plan that meets the statutory objective of contributing to the achievement of three dimensions of sustainable development: social, economic and environmental.

Overall Effects, and Cumulative and Synergistic Effects

- 5.2 The overall primary and secondary effects of the options set out in the Sheffield Plan Issues and Options document are a mix of positive and negative effects. The *Draft Sheffield Plan* helps to meet the sustainability aims. It helps to deliver sustainable development, in terms of accommodating needed housing and economic growth, while matching up the necessary additional infrastructure, and minimising other social and environmental impacts.

Mitigation

- 5.3 Potential mitigation measures have been identified for each of the 3 main strategic options to reduce any negative impacts they may have on the sustainability aims. However, the degree to which these are achievable will depend on:
- the specific location of development;
 - the inclusion of appropriate design policies in the local plan;
 - the economic viability of the development taking place (i.e. the ability to fund appropriate mitigation measures)
 - national planning policy (which could either provide levels of control or enable the market to operate with a high level of freedom);
 - the availability Community Infrastructure Levy (CIL) funding or other public funding to support infrastructure or other social or environmental benefits;
 - technical advancements (e.g. introduction of electric vehicles)

Habitats Regulations Assessment

- 5.4 A [Habitats Regulation Assessment Stage 1 Screening Report](#) (2020) has been undertaken, as is appropriate at the Regulations 18 stage of Local Plans.
- 5.5 The key vulnerabilities as identified in Stage 1: Task 1 are air pollution and public access/disturbance. The assessment identifies the proposed site

allocations and site allocation options which, if ultimately allocated, will result in housing growth within 5km of the European sites, and are therefore could have a significant impact on them.

- 5.6 The Sheffield Plan Issues and Options document sets out issues and options for development over the plan period (to 2038), including options for site allocations to meet the city's needs. Following this Regulation 18 stage of public consultation, and review of the comments received from stakeholders, a decision will be made as to which sites to put forward for allocation in the Publication (Pre-Submission) Draft Sheffield Plan (under Regulation 19⁶). The Council has agreed with Natural England that the Stage 2: Appropriate Assessment can be undertaken alongside the preparation of the Publication Draft Plan, and will be available as part of the consultation on that document.

Cross-boundary Issues

- 5.7 We have identified a number of strategic issues requiring further discussion and agreement (where possible) with strategic planning bodies and other prescribed bodies. Details of these strategic issues can be viewed in the Sheffield Plan Issues and Options document – [Duty to Cooperate Statement](#).

Monitoring the Effect of Implementing the Plan

- 5.8 We have put forward a provisional list of indicators to monitor the effect of implementing the Sheffield Plan. These are listed in Appendix 2 of this report.

Next Steps

- 5.9 At subsequent stages in the process, further appraisals will be undertaken.
- 5.10 The next appraisal will include assessment of individual sites and the results of investigations into particular impacts, which at this point are still unclear. The cumulative impact of the Publication Draft Sheffield Plan will be assessed at that stage. The potential for mitigation through development management policies and provision of infrastructure can also be taken into account. All this will provide greater certainty of the overall impact of the Sheffield Plan.

⁶ Regulation 19 of the Town and County Planning (Local Planning) (England) Regulations, 2012.

Appendix 1: Sustainability Appraisal Framework 2020

SEA Topics	Sustainability Aims	Appraisal Criteria 2020: Would the option...
Material Assets	1. A vibrant and competitive economy with good job opportunities available to the whole community.	<p>Ensure a sufficient supply of good quality land for office, industrial and other commercial uses including the protection of existing employment land where necessary?</p> <p>Ensure a high quality of office floorspace is provided?</p> <p>Support job growth targets?</p> <p>Contribute to providing good quality, skilled jobs that meet the requirements of the growing Sheffield economy?</p> <p>Support the development of employment sites in the priority economic regeneration areas (the 'Growth Areas')?</p> <p>Help provide a quality portfolio of commercial sites and premises that are available for development?</p> <p>Promote the development and expansion of advanced manufacturing, particularly in the Advanced Manufacturing and Innovation District area?</p> <p>Consolidate the City Centre as the City Region's focus for office provision and employment, particularly for financial and professional services?</p> <p>Improve the vibrancy of the City's retail offer in the City Centre, District or Local Centres and their role in providing non-retail services?</p> <p>Encourage and support leisure and tourism, particularly the 'Outdoor City'?</p>
Population	2. Education and training opportunities provided which build the skills and capacity for the whole population and which encourage lifelong learning.	<p>Meet the need for well-designed education and/or training facilities?</p> <p>Locate education and/or training facilities close to the communities they serve, in suitable environments, which are accessible by good public transport?</p> <p>Help to provide a diverse range of learning opportunities?</p> <p>Help to ensure that local schools have the capacity to meet the needs of new housing development?</p>

SEA Topics	Sustainability Aims	Appraisal Criteria: Would the option...
Population	3. Decent and appropriate housing available to everyone.	<p>Support the creation of sustainable housing markets in existing neighbourhoods?</p> <p>Assist with the provision of sufficient new homes to meet local needs (taking into account requirements of location, size, type and affordability)?</p> <p>Ensure that homes are well designed and provide enough space for the types of household they are intended for?</p> <p>Integrate new housing development with existing communities?</p> <p>Help to create mixed income communities by providing a better mix of house types and tenures (including affordable housing)?</p> <p>Provide housing to meet the needs of all vulnerable people and disadvantaged groups (including people on low incomes, older people, people needing supported housing, BME communities, people with disabilities and Gypsies and Travellers)?</p>
Population	4. Health services provided for the health needs of the whole population and which tackle health inequalities.	<p>Focus policies and site allocations on those locations of greatest need?</p> <p>Better recognise the economic, as well as social, benefits of good health?</p> <p>Focus on Primary care to improve health, as this also has a significant preventative role that takes pressure off secondary care?</p> <p>Ensure facilities are located locally, close to the communities they serve and near to public transport/cycling routes, as land availability must address health facility relocation?</p> <p>Address the issue that more people (and an ageing population) mean health facilities need to change or expand to accommodate the changing health needs of the last 10 years. This hasn't been able to be accommodated in the South West due to the unaffordability and unavailability of land (due to market demand for housing and university use) – the money required to expand/relocate facilities within the South West could make a bigger difference in health terms if spent elsewhere?</p> <p>Meet needs for health services and facilities across the city as a whole and in different communities?</p> <p>Help to ensure that health facilities will be available to meet the needs of new housing developments?</p>
Population	5. Open space and cultural, leisure and recreational facilities available for all.	<p>Enable people to have access to sufficient good quality open space, near to their homes?</p> <p>Improve access to wildlife and green spaces, through delivery of green infrastructure?</p> <p>Improve access to the countryside through public rights of way or cycle paths?</p> <p>Enable provision of built cultural, leisure and recreation (CLR) facilities?</p> <p>Encourage and support tourism?</p>

SEA Topics	Sustainability Aims	Appraisal Criteria: Would the option...
Air; Climatic Factors	6. Significant development focused in locations that reduce the need to travel and the fullest possible use made of public transport, walking and cycling.	<p>Enable shorter journeys, improve modal choice and integration of transport modes to encourage or facilitate walking, cycling and public transport?</p> <p>Enable shorter journeys by locating homes near to the main employment areas (City Centre, Lower Don Valley, Upper Don Valley)?</p> <p>Locate high trip generating uses and job opportunities (offices, built leisure, retail) where there is good access by public transport?</p> <p>Make more efficient use of the car (e.g. through car sharing or providing opportunities to make linked trips)?</p> <p>Result in essential services (e.g. health services, shops, leisure facilities) and opportunities to access the natural environment) being available within easy reach of people's homes by foot, cycle or public transport?</p> <p>Provide levels of car parking which are appropriate to the location (i.e. lower levels of provision where other modes of transport are more viable)?</p>

<p>Population; Air, Climatic factors</p>	<p>7. An efficient transport network which maximises access and minimises detrimental impacts</p>	<p>Prevent unacceptable levels of traffic congestion? Support the movement of freight by means other than the road? Support the development of good road and rail links to other cities and international airports? Make more efficient use of, or improve the viability of, existing public transport services? Create an attractive and safe transport network for non-car users (pedestrians, cyclists, etc.)?</p>
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SEA Topics	Sustainability Aims	Appraisal Criteria: Would the option...
Soil; Material Assets	8. Use of land which supports regeneration of the urban area and protection of valuable soil and mineral resources.	<p>Avoid the sterilisation of economic mineral reserves?</p> <p>Encourage the use of secondary and recycled aggregates?</p> <p>Result in the reuse of previously developed land and/or vacant buildings?</p> <p>Encourage development which makes efficient use of land (e.g. by focussing development in urban areas, development densities)?</p> <p>Protect and enhance the best and most versatile agricultural land and soil of other environmental value, and therefore safeguard soil quality?</p>
Material Assets	9. An attractive, high quality built environment that works well and lasts.	<p>Promote city-wide characteristics around: distinctive settlement layouts, townscapes, buildings, topography and natural features?</p> <p>Optimise the potential of a site and promote attractive and locally distinct places and buildings?</p> <p>Protect and enhance the character and functionality of higher quality environments whilst improving poor quality environments?</p> <p>Promote inclusive design principles?</p> <p>Promote safe and secure environments?</p> <p>Promote places that function well for all users now and in the future?</p> <p>Improve the landscape, quality of streets and the public realm?</p> <p>Promote sustainable design principles?</p> <p>Protect the natural environment, increase biodiversity and expand green infrastructure?</p> <p>Reduce the city's carbon footprint?</p> <p>Enable healthy place making?</p> <p>Contribute to people's health and well being both physical and psychological?</p>
Cultural heritage**	10. The historic environment protected and enhanced	<p>Preserve Conservation Areas, Listed buildings and their settings?</p> <p>Preserve archaeological sites and their settings?</p> <p>Enable the reuse of heritage assets to support their conservation and bring wider social, cultural, economic and environmental benefits?</p>

SEA Topics	Sustainability Aims	Appraisal Criteria: Would the option...
Landscape	11. High quality natural landscapes protected and poor landscapes enhanced.	<p>Minimise the impact of development on the setting and special qualities of the Peak District National Park, its fringe landscapes and the wider countryside?</p> <p>Protect and enhance valued landscapes and the character of rural areas?</p> <p>Value and protect local diversity and local distinctiveness?</p> <p>Safeguard individual landscape features such as trees, hedgerows, dry-stone walls and ponds?</p> <p>Preserve or improve woodland or tree cover in appropriate locations?</p> <p>Result in the restoration and appropriate after-use of mineral extraction and landfill sites?</p> <p>Balance needs of the landscape and biodiversity with greater levels of participation in outdoor activities?</p>
Fauna, Flora, Biodiversity	12. Ecological and geological assets created, conserved, managed and enhanced.	<p>Protect and improve the diversity of international, national and locally designated wildlife habitats and species or make provision for their long-term management?</p> <p>Safeguard important geological sites?</p> <p>Establish a Nature Recovery Network based on South Yorkshire wide mapping of existing ecological/geological assets, which reduces habitat fragmentation, enhances native species, and helps deliver habitat restoration, expansion and creation (also helping to achieve Biodiversity Action Plan Targets)?</p> <p>Achieve a 10% increase in Biodiversity Net Gain through development, which includes ongoing monitoring and long term management? (This should include indicators for the quantity and type of habitat created)</p> <p>Provide a reduction in or has controlled the spread of pests, diseases and invasive non native species within or reaching the city?</p> <p>Achieve an improvement in the quality of habitats or the wider environment e.g. water quality and/or levels, air quality, NRN, BNG monitoring?</p> <p>Improve access to nature for people e.g. NRN, BNG monitoring, creation of new open space and pedestrian/cycle routes?</p>

SEA Topics	Sustainability Aims	Appraisal Criteria: Would the option...
Water	13. Water resources protected and enhanced.	Protect and where possible enhance the quality of the water environment? Safeguard watercourses?
Climatic Factors	14. Greenhouse gas emissions minimised and the impact of climate change effectively managed.	Reduce greenhouse gas emissions and promote water and energy efficiency through sustainable design, layout, and construction practices? Reduce or not worsen the Urban Heat Island effect? Minimise the risk of all types of flooding to people and property? Seek to safeguard land needed for current or future flood risk management processes? Avoid inappropriate development in areas of flood risk? Improve or provide flood defences in areas at risk of flooding? Minimise risk to people and property from all sources of flooding?
Climatic Factors, Air, Health	15. Environmental pollution improved and impacts on air quality minimised or mitigated	Locate sensitive uses where health risks from poor air quality is minimised? Minimise air quality impacts arising from new development, including from traffic generation? Minimise, and where possible improve on, unacceptable effects of noise and light pollution? Minimise, and where possible address, land contamination or environmental pollution? Ensure there is appropriate distance between hazardous installations, population and/or environmentally sensitive areas?

SEA Topics	Sustainability Aims	Appraisal Criteria: Would the option...
Material Assets	16. Energy consumption minimised and use of sustainable energy sources maximised.	Minimise energy consumption in the construction or use of buildings? Support the use or development of renewable and low carbon energy sources? Help to maximise the potential of District Heating Networks?
Material Assets	17. Minimal production of waste and the reuse, recycling and recovery of waste maximised.	Promote the minimisation of waste generated? Encourage the recycling/re-use and recovery of waste?

* The SEA Topic of Human Health is covered by a number of Sustainability Aims, not just the ones noted. See Table 3 and Appendices of the Scoping Report for more information.

**This includes architectural and archaeological heritage.

Appendix 2: Proposed Framework for Monitoring the Implementation of the Plan

The following indicators have been identified for each of the Sheffield Plan Aims

A Fair, Inclusive and Healthy City

- Obesity level of Year 6 children - annual
- Trend in number of planning permissions for takeaways - annual
- Trend in number of planning applications for takeaways - annual
- Number of affordable homes completed (by tenure) – annual
- Completions of homes for independent and supported living – annual
- Amount of developer contributions paid through the Community Infrastructure Levy and other developer contributions – quarterly/annually

An Environmentally Sustainable City

- Percentage of developments of >10 homes or 500sqm gross internal floorspace generating sufficient renewable or low carbon energy to reduce carbon dioxide emissions from residual energy use by 10% - annual
- Number and capacity of wind turbines approved – annual
- Amount of renewable energy generated - annual
- Number of permissions granted contrary to the advice of the Environment Agency on flood risk grounds – annual
- Mean nitrogen dioxide emissions and mean particulate (PM10) concentrations – annual
- Number of permissions granted for exploration, appraisal or production of onshore oil or gas – annual

Thriving Neighbourhoods and Communities

- Population change – annual
- Number of new homes completed – annual
- Number of years' supply of deliverable housing sites – annual
- Number of new homes completed on previously developed (brownfield) land – annual
- Number of dwellings granted permission on windfall sites – annual
- Numbers of different house types completed (apartments, houses, bungalows, by number of bedrooms) – annual
- Purpose-Built Student Accommodation completions by bed space and cluster – annual
- Number of applications for HMOs granted permission in the area covered by the Article 4 Direction – annual
- Percentage of dwellings granted permission which fail to meet the nationally described space standard – annual
- Average density of residential developments completed (by location type) – annual
- Number of Gypsy and Traveller and Travelling Showpeople sites made available – annual

A Strong and Growing Economy

- Change in the number of jobs – annual

- Economic activity rate – annual
- Employment land supply by type and location – annual
- Number of years' supply of deliverable employment sites – annual
- Amount of new office and industrial floorpace completed (sqm) – annual
- Number of major-employment generating schemes approved with local employment, including number of jobs or training places where known – annual

A Vibrant City Centre

- Number of major-employment generating schemes approved with local employment, including number of jobs or training places where known – annual
- Percentage of non-shop (non-A1) uses on ground floor frontages in the Central Primary Shopping Area – annual
- Amount and percentage of new retail/leisure floorspace developed in the City Centre and District Centres – annual

A Connected City

- Transport modal split – annual
- Number of people within 30 minutes travel by public transport to the City Centre/Sheffield Business Park/Advanced Manufacturing Park – annual
- Number of people within 60 minutes travel by road to the City Centre/Sheffield Business Park /Advanced Manufacturing Park – annual
- Number of Travel Plans agreed – annual
- Number of developments of two or more homes, or non-residential schemes resulting in additional or refurbished floorspace, that include super-fast or ultra-fast broadband – annual

A Green City

- Net change in the total area of open space – every 5 years
- Hectares of designated wildlife sites lost as a result of development – annual

A Well-Designed City

- Number of non-residential developments of over 500 sqm gross internal floorspace achieving a BREEAM rating of 'excellent' – annual
- Percentage of applications refused on design grounds – annual
- Number of tall buildings developed in the City Centre – annual
- Change in the number of designated heritage assets (Scheduled Ancient Monuments, Listed Buildings, Registered Parks and Gardens, Conservation Areas) – annual

