Development Strategy Topic Paper

Appendix 1: Strategic Growth and Spatial Options Review

Greater Cambridge Local Plan

Topic Paper published as part of the Proposed Submission Local Plan - Regulation 19 consultation (August 2026 - September 2026)

GREATER CAMBRIDGE
SHARED PLANNING

Development Strategy Topic Paper 2026 Appendix 1: Strategic growth and spatial options review

Appendix 1A: Introduction to strategic growth and spatial options review

1.1 The Greater Cambridge Local Plan strategic options evidence base testing demonstrates that a robust and transparent process has been followed for identifying and testing strategic spatial options, following the requirements of relevant legislation and national policy, as well as local objectives.

1.2 This appendix explains the Councils' approach to strategic options testing for the draft plan and Proposed Submission stages, providing context for strategic options testing work completed to inform the Proposed Submission strategy.

1.3 The rest of this Appendix comprises the following sections:

- Appendix 1B: Strategic Options considerations at earlier stages of the plan's progress
- Appendix 1C: Overall approach to strategic options testing for the draft plan stage
- Appendix 1D: Implications of the revised plan period for evidence base assessments
- Appendix 1E: Greater Cambridge Local Plan Strategic Spatial Options: 9a, 10a, 11a and 11b – alternative hybrid strategies
- Appendix 1F: Greater Cambridge Local Plan Strategic Spatial Options: 9b, 10b, 11ai and 11bi – alternative hybrid strategies with no further development allocated at North East Cambridge

1.4 Appendices 1B-1E were published at Draft Plan stage and remain the same. Appendix 1F has been added to explain the strategic options testing at the Proposed Submission stage.

Appendix 1B: Strategic Options considerations at earlier stages of the plan's progress

Introduction

1.1 This Appendix sets out how the Development Strategy has evolved through the formulation and testing of growth and spatial options at the various stages of the Greater Cambridge Local Plan's progress. The purpose is to ensure that there is sufficient background and context to understand how the Development Strategy included in the draft Plan has been informed by the preceding stages.

1.2 In particular, it identifies the growth and spatial options considered ahead of the First Proposals consultation, and provides a summary of key issues identified in our evidence and Sustainability Appraisal in relation to each spatial option.

1.3 The following section draws together the evidence base, Sustainability Appraisal and consultation responses, and considers the consequences and issues related to the strategic choices available to the Councils.

1.4 It then identifies the reasons for the preferred approach of the Councils set out at First Proposals and Development Strategy Update stages, which together form the key points at which the full development strategy was identified. This considerable evidence base and the established preferred Strategy have directly informed the updated preferred Strategy set out in the draft Plan.

Growth and spatial options testing: evidence, Sustainability Appraisal and consultation

Key evidence, Sustainability Appraisal and consultation

2.1 Throughout the process of preparing the plan, we have assessed the impacts of the growth and spatial strategy choices open to us via our evidence bases and Sustainability Appraisal, to understand the opportunities and challenges across the seven 'Themes' that we identified for the Plan: Climate Change, Biodiversity

and Green Spaces, Wellbeing and Social Inclusion, Great Places, Jobs, Homes and Infrastructure. Sustainability Appraisal is an iterative process to ensure that potential sustainability effects of plans are addressed through assessing sustainability impacts of objectives, actions, policies and their alternatives during plan preparation.

2.2 Further to the above, at key stages in the plan-making process we completed engagement and consultation regarding these choices and the preferred approach, as well as our evidence bases and Sustainability Appraisal.

2.3 The growth and spatial options considered ahead at the initial strategic spatial options stage of plan-making are set out below.

Growth options: identifying objectively assessed needs for jobs and homes

2.4 National policy requires that plans should address the objectively assessed needs for development in their area. National requirements for how objectively assessed needs should be determined has been revised at different points during the plan-making process, but have remained consistent insofar as to state that the default approach to identifying housing need for the area should be to use the standard method in planning guidance, but separately that plans should support economic growth and productivity, considering the role of key sectors and clusters.

2.5 Drawing on the above, and noting the unique strengths of the Greater Cambridge economy, at each stage of plan-making the councils have sought to provide a consistent understanding of the minimum housing need using the Standard Method and the jobs that the minimum would support, and also the most likely forecast for jobs and the homes that might be required to support this.

2.6 At each formal stage we have refreshed our employment and housing evidence to ensure it was up to date, such that we have tested a range of growth levels through the process against our evidence bases and Sustainability Appraisal. Each update has superseded the previous one in determining what is a

reasonable alternative growth level to plan for. Growth and spatial options considered through the plan-making process

3.1 The councils explored a wide range of alternative options to inform the Local Plan development strategy. The process of identifying the options is set out below, followed by a summary table of the initial strategic spatial options tested:

a) January 2020 First Conversation consultation (issues and options): at this early stage we began with identifying and testing 6 spatial options including undertaking sustainability appraisal:

b) November 2020 interim evidence: we initially identified 3 growth level options for homes and jobs and 2 further blended spatial strategies creating 8 spatial options. These were all tested so we considered 24 strategy options, including a further Sustainability Appraisal.

3.2 The initial eight strategic spatial options (SSO) comprised:

1. Focus on Densification of existing urban areas (SSO 1)
2. Focus on Edge of Cambridge - outside Green Belt (SSO 2)
3. Focus on Edge of Cambridge - Green Belt (SSO 3)
4. Focus on New Settlements (SSO 4)
5. Focus on Dispersal: Villages (SSO 5)
6. Focus on Public transport corridors (SSO 6)
7. Supporting a high-tech corridor by integrating homes and jobs (southern cluster) (SSO 7)
8. Expanding a growth area around transport nodes (SSO 8)

Initial strategic growth and spatial options findings: evidence bases

3.3 Key evidence findings relevant to the strategic growth options identified in 2020:

- Net Zero: The strategic spatial options assessment: Net Zero Carbon, November 2020 found that transport carbon is the greatest source of carbon and shows by far the most significant variation across the spatial options. The primary determinant of how each option compares in terms of its carbon emissions is the quality of access to public,

active, and low carbon travel modes, and the degree of need to travel regularly. Drawing on this central finding: Densification (SSO 1): is the best option for carbon emissions, resulting in the best public and active transport access of the options and the most efficient materials use for higher rise construction in places with a lower requirement for new supporting infrastructure.

- Dispersal to villages (SSO 5): is the worst option for carbon emissions. It has the worst transport links by a substantial margin and a slightly higher embodied carbon due to low rise detached housing and necessary supporting infrastructure.
- In terms of carbon emissions, the other options tested performed in between densification and dispersal to villages, noting in particular that:
  - Edge of Cambridge options (SSO 2 and 3): the urban fringe is assumed to have medium public and active travel accessibility and hence transport emissions, and medium density, hence medium ability to provide renewables on-site and therefore medium building energy emissions.
  - Where villages were included in a blended option (i.e. an option comprising a range of different broad locations) this resulted in higher transport carbon emissions (SSO 7 and 8).

- Reinforcing the above finding about the primary role played by transport in determining carbon emissions, the strategic spatial options assessment: Transport Evidence Report, November 2020 found that the best performing option was Option 1 – Densification. In terms of non-car mode shares, Option 1 - Densification performed best with a non-car mode shared of 57.6%, followed by Option 2 - Edge non-Green Belt (50.0%), Option 3 - Edge Green Belt (49.5%), and Option 8 - Expanding a growth area around transport nodes (48.6%), which all performed very similarly by this metric. Development located within villages performs least well of all options tested, having the highest car mode share, furthest distance travelled, and highest travel time and delay.
- The strategic spatial options assessment: Integrated Water Management Study, November 2020 found positive and negative impacts of the various options, identifying benefits for concentrating growth at large sites with good

opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling system.

- The remaining spatial options assessments for the Local Plan themes - including for Green Infrastructure Opportunity Mapping, Habitat Regulations Assessment, Equalities Impact Assessment, Landscape and Townscape Character Assessment, Housing Delivery Study, Employment Land Review and Infrastructure Delivery Plan and Viability Study (all November 2020) - identified different implications, opportunities and risks for each of the spatial options, with no one option clearly performing better or worse than another.

Spatial options findings: Sustainability Appraisal findings

2.1 Headline sustainability benefits and challenges associated with each strategic spatial option are summarised in below.

1: Focus on Densification of existing urban areas: Headline sustainability benefits

Relevant to North East Cambridge and smaller sites within Cambridge urban area:

- Very good access to services, facilities, public transport links, established employment hubs, and the main commercial and retail centres, resulting in positive effects for equalities, health, climate change mitigation, air quality, economy and employment.
- Concentration of development results in fewer environmental impacts on the wider Greater Cambridge area.

1: Focus on Densification of existing urban areas: Headline sustainability challenges

Relevant to North East Cambridge and Cambridge urban area:

- Putting additional pressure on water supply and wastewater treatment, existing facilities and services, and local environment including public open space and biodiversity assets.
- Potential impact on historic townscape character.

Relevant only to smaller sites within Cambridge urban area:

- Unlikely to provide significant volumes of new homes.

Smaller sites not providing opportunities for a wide range of housing types and larger scale employment opportunities.

2: Focus on Edge of Cambridge - outside Green Belt: Headline sustainability benefits

- Good access to existing services, facilities, employment hubs and public transport links. Provision of new services and facilities and public transport, resulting in positive effects for accessibility, equalities, health, climate change mitigation and air quality.
- Opportunity to deliver a scheme of new settlement scale, to form part of the Cambridge urban area, with all the jobs, shops, services and facilities expected of a development of that scale.

2: Focus on Edge of Cambridge - outside Green Belt: Headline sustainability challenges

- Will require the relocation of existing businesses, which could disrupt trade or affect viability.
- Limited investment in services, facilities, economy and employment in more rural areas.
- Cambridge City Airport services likely to be transferred elsewhere to other airports less well located to Cambridge, with resulting direct and indirect impacts on local jobs and support services.

3: Focus on Edge of Cambridge - Green Belt: Headline sustainability benefits

- Depending on location, potentially good access to established employment hubs, existing services, facilities and public transport links, and provision of new employment, services and facilities if developments are of sufficient scale, resulting in positive effects for the economy and employment, accessibility, equalities, health, climate change mitigation and air quality.
- Can be designed around walking and cycling.

3: Focus on Edge of Cambridge - Green Belt: Headline sustainability challenges

- Some Green Belt locations could be too distant from the city centre for ease of walking and cycling.
- Potential loss of views into and out of the historic core of Cambridge.

4: Focus on New Settlements: Headline sustainability benefits

- Can deliver large numbers of homes of a range of types and tenures, as well as a range of new services and facilities, resulting in positive effects for accessibility, equalities, health, climate change mitigation and air quality.
- New settlements on very good public transport corridors also likely to have good access to services, facilities, public transport and employment centres.
- Helps to protect the wider setting of Cambridge.

4: Focus on New Settlements: Headline sustainability challenges

- Unlikely to be within walking and cycling distance of Cambridge, which could encourage car use, especially if the new settlement is not on a very good public transport route.
- Major landscape change/urbanisation at the location of the development and likely loss of a large area of greenfield land.

5: Focus on Dispersal: Villages: Headline sustainability benefits

- Supports rural services and the vitality and viability of villages, and their shops and services.
- Provides for homes to be delivered to meet local village needs.

5: Focus on Dispersal: Villages: Headline sustainability challenges

- Less scope to deliver the volumes of homes required to meet needs through the Greater Cambridge area.
- Existing services and facilities may not have capacity to accommodate new development.
- Likely to result in significant car trips, both for commuting and to access services and facilities not available in villages.

6: Focus on Public transport corridors: Headline sustainability benefits

No additional points beyond those relevant to new settlements and villages on very

good public transport routes as above.

6: Focus on Public transport corridors: Headline sustainability challenges

No additional points beyond those relevant to new settlements and villages on very good public transport routes as above.

7: Supporting a high-tech corridor by integrating homes and jobs (southern cluster): Headline sustainability benefits

- Potentially good access to existing services, facilities and public transport links, depending on exact location of development.
- Good access to established employment hub(s), including Cambridge Biomedical Campus, and possibly Granta Park, resulting in positive effects on economy and employment, as well as helping to minimise traffic and related emissions.

7: Supporting a high-tech corridor by integrating homes and jobs (southern cluster): Headline sustainability challenges

- Potential for settlement coalescence, with consequential effects on settlement character and identity.
- Sensitive landscape characteristics (river valley and chalk hills).
- Challenges noted for new settlements and villages are also relevant to this source of supply.

8: Expanding a growth area around transport nodes: Headline sustainability benefits

- Further develops and enhances a new settlement where the groundwork has already been laid, providing access to services and facilities within Cambourne and likely provision of new services and facilities, resulting in positive effects for accessibility, equalities, health, climate change mitigation and air quality.
- Good access to public transport and services, facilities and employment centres elsewhere, once strategic transport infrastructure is complete.

8: Expanding a growth area around transport nodes: Headline sustainability challenges

- Access to jobs and services outside Cambourne are beyond reasonable walking and cycling distance, which could encourage car use, despite public transport

provision and investment.
- Could result in damage to or degradation of biodiversity assets and green infrastructure.

Spatial options findings: engagement and consultation

3.1 Engagement regarding the strategic options was held via the First Conversation Issues and Options consultation 2020, and via informal engagement around the spatial options evidence base in late 2020. Further detail can be found in the Strategy Topic Paper supporting the First Proposals 2021 consultation.

Considerations and the preferred development strategy First

Proposals development strategy

Vision and aims

3.2 Ahead of the First Proposals 2021 consultation we identified a vision and set of emerging aims for the plan that informed decisions regarding the spatial strategy, alongside Sustainability Appraisal. We drew the aims from the seven Themes referred to above, and cross-checked them against NPPF principles and Greater Cambridge Local Plan Sustainability Appraisal objectives to ensure coverage of all relevant topics. The First Proposals vision was:

"We want Greater Cambridge to be a place where a big decrease in our climate impacts comes with a big increase in the quality of everyday life for all our communities. New development must reduce carbon emissions and reliance on the private car; create thriving neighbourhoods with the variety of jobs and homes we need; increase nature, wildlife and green spaces; and safeguard our unique heritage and landscapes."

3.3 The primary implications of our emerging Local Plan aims for the development strategy comprised:

- Reduce climate impacts through compact development located where active and sustainable travel can be maximised

- Make best use of suitable safeguarded and brownfield land
- Make best use of existing and committed key sustainable transport infrastructure
- Support rural communities to thrive and sustain services.

Reviewing alternative broad locations to meet needs

3.4 As we moved towards identifying our preferred option development strategy we identified our objectively assessed need for jobs and homes (see S/JH Jobs and Homes), and a working preferred option for further testing to meet this need. Key evidence base and Sustainability Appraisal findings informing the identification of this working preferred option strategy included that:

- As above, location is the biggest factor in impacts on carbon emissions, but that our Housing and Economic Land Availability Assessment (August 2021) and Greater Cambridge Housing Delivery Study (August 2021) evidence showed that it would not be deliverable to focus all development in any one broad location.
- For transport, (Transport Evidence Report: Preferred Options Update, August 2021, noting that this incorporated no assumptions about transport infrastructure over and above that included in the baseline - for example East West Rail was not included):
    - In terms of non-car mode shares and car trips per dwelling, development located within Cambridge urban area performs best including at North East Cambridge, with edge of Cambridge locations also performing particularly well. New settlements generate more car traffic but perform better where they are on or close to a public transport corridor or those closer to existing urban settlements (such as Cambourne, Northstowe or close to Cambridge).
    - Larger developments accommodating a wide mix of uses allow for more ‘internalisation’ of trips within the site. They are also generally easier to provide viable mitigation for, essentially because more people equals more demand. In terms of trip internalisation within a particular site, the largest freestanding new settlements perform best, with sites adjacent to Cambridge and in the villages not performing as well.
- Of the new settlement location options tested, the one in the Cambourne area

performed best in terms of active mode share for trips generated and equal best for car trips per dwelling.

- 1.1 Drawing on the above, for the working assumption preferred strategy we sought to focus growth at a range of the best performing locations - comprising a hybrid of single spatial options (a so-called ‘blended spatial option’ – Spatial Option 9).

3.5 This included:

- The substantial commitments identified in the adopted Cambridge Local Plan 2018 and South Cambridgeshire Local Plan 2018.
- Cambridge urban area: Our evidence and Sustainability Appraisal above identify that locating development within Cambridge urban area forms a highly sustainable development option, primarily relating to the accessibility of these locations to existing facilities and services, and was also supported in consultation responses. The largest opportunity for development at this broad location is at North East Cambridge.
- Edge of Cambridge non-Green Belt: Our evidence and Sustainability Appraisal above showed that the edge of Cambridge non-Green Belt is a sustainable location for homes and jobs, being accessible to existing jobs and services, particularly where development is planned at sufficient scale to support new infrastructure. This finding was also supported by consultation responses. As such we consider that this source of supply should be a focus for additional jobs and homes within the Greater Cambridge Local Plan. The only substantive opportunity for development at this broad location is at Cambridge Airport.
- Villages: Our evidence, Sustainability Appraisal and consultation responses above showed that a strategy focused on village development would be unsustainable, in particular regarding transport and associated carbon emissions, but also for supporting delivery of required infrastructure. However, for homes we thought that our villages should play a limited role in meeting development needs to support a deliverable plan, including in the first five years, support provision of a proportion of small sites, support delivery of a range of types and sizes of housing across the Greater Cambridge area, support the social sustainability of villages and support community

aspirations. We therefore reviewed proposals for village growth at the most sustainable locations.

3.6 Beyond the above locations, noting that our most sustainable locations - Cambridge urban area or edge of Cambridge outside the Green Belt - did not have sufficient capacity to meet all of our development needs, the key choice regarding where to focus remaining development to meet our needs was between:

- Edge of Cambridge – Green Belt
- An expanded Cambourne, founded upon the step change in public transport connectivity provided by the proposed East West Rail scheme (Our evidence showed that expanding a new settlement at Cambourne would form the most sustainable development location tested within rural South Cambridgeshire, even without East West Rail. Beyond this, it would provide an opportunity to grow an existing town to become larger, enhancing the critical mass of population, employment and services. Also, adding development in the area of an existing town at Cambourne should speed up delivery of development in comparison with starting afresh in a new location with no existing infrastructure and services. Drawing on these findings, we rejected additional new settlements as not forming a reasonable option for meeting our objectively assessed housing needs.)

3.7 Our emerging preferred hybrid strategy (SSO 9) included development at adopted plan commitments, Cambridge urban area, Edge of Cambridge non-Green Belt, and limited development in villages as described above. Beyond this it included development at an expanded Cambourne. To ensure we understood the merits of the alternative choices we also identified a further blended spatial option alternative that warranted testing (SSO 10), including development at adopted plan commitments, Cambridge urban area, Edge of Cambridge non-Green Belt, and limited development in villages as described above, but in place of an expanded Cambourne it included edge Green Belt locations. Options 9 and 10 were tested in a comparable way to the 8 spatial options, so ten spatial options were tested, prior to confirming the preferred strategy at the First Proposals stage.

Spatial options findings: evidence bases

3.8 Key evidence findings considering options 9 and 10 as a whole were that:

- Carbon: for annual carbon emissions per home, Options 9 and 10 perform very similarly to each other, and similarly to the mid-range of options previously tested, reflecting the fact that they include a blend of sources of supply:
- For transport, that both Option 9 and 10 would be likely to have a high level of active mode travel (walking and cycling) and low car mode share, with Option 9 likely to perform similarly to the previously assessed Option 2 (which was the second best of the previously tested options) and with Option 10 likely to perform between that Option 1 (the best performing option) and Option 2.
- As for the other strategic options tested, Options 9 and 10 are likely to be viable for residential and employment uses.

3.9 Focusing on the impacts specifically of edge of Cambridge – Green Belt locations compared to an expanded Cambourne:

- Transport
    - Expanded Cambourne: For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential pinch points along planned public transport corridors. The introduction of a new railway station and the Cambourne to Cambridge Public Transport Scheme will greatly improve sustainable transport options at this location in the long term, which are likely to be attractive to residents. However, there is some uncertainty about when these will be delivered.
    - Edge of Cambridge – Green Belt: Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option.
- Water
    - Expanded Cambourne: would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems

    - Edge of Cambridge – Green Belt: There may be some constraints for development in this broad location because existing fluvial and surface water flood risk may make individual sites difficult to deliver, but this depends upon location.
- Green infrastructure
    - Expanded Cambourne: Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. Cambourne provides significant opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location.
    - Edge of Cambridge – Green Belt: Additional supply here provides an opportunity for urban extensions to cater for GI deficits in neighbouring urban areas. There are also opportunities associated with the requirement of the NPPF for the release of Green Belt sites to positively enhance the remaining Green Belt.
- Green Belt, landscape and heritage:
    - Expanded Cambourne: Development would be outside of the Green Belt. Development is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth. Cambourne is in a less sensitive area in terms of environmental and historic assets.
    - Edge of Cambridge – Green Belt: Green Belt development has a higher risk of policy conflict, due to likely adverse effects on the setting of the historic city centre. Given this, it is considered that there are significant risks that are unlikely to be addressed through mitigation. Development here could result in landscape changes that would alter the setting of the City, particularly in relation to the historic core.
- Equalities
    - Expanded Cambourne: can be planned to be self-contained by co-locating a broad range of jobs, houses and facilities and services.

    - Edge of Cambridge - Green Belt sites: have potential to promote equality and inclusivity by providing people with access to a wide range of services via sustainable modes of travel.
- Jobs
    - Expanded Cambourne: Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support economic growth. East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations. However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.
    - Edge of Cambridge – Green Belt: would likely be successful over time given existing sector strengths in and close to Cambridge, although there will be location-specific sensitivities depending on proximity to other economic activity.
- Homes
    - Expanded Cambourne: If the phasing of East West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at the mid-latter part of the 2031 plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.
    - Edge of Cambridge - Green Belt: Lead-in times are extended for the Edge of Cambridge site(s) compared to other options due to the requirement to release Green Belt land through an adopted plan before

applications can be approved. There is also potential for the Green Belt site allocations to compete with North East, North West Cambridge and Cambridge Airport and reduce delivery rates under this scenario as they would be delivering a similar product in a similar location concurrently at scale.

- Infrastructure
    - Expanded Cambourne: Development here would be well-located for Cambourne's existing services and facilities whilst providing new and/or expanded facilities too. It performs relatively poorly within the plan period, as it is unlikely that the full infrastructure to support development will be provided, but it performs well when fully built out.
    - Edge of Cambridge – Green Belt: Additional homes on the edge of Cambridge would require support from either new or improved transport infrastructure connecting this growth to jobs and local amenities. Existing capacity issues for social and community infrastructure will also require new provision early in the development of the growth areas.

1.1 Sustainability Appraisal headlines for options 9 and 10 are set out below.

9: Preferred Option growth level: preferred options spatial strategy: Headline sustainability benefits

- Development at North East Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities
- Development would be well-located for Cambourne's existing services and facilities whilst providing new and/or expanded facilities.

9: Preferred Option growth level: preferred options spatial strategy: Headline sustainability challenges

- Growth around Cambourne is reliant upon delivery of a new East West Rail railway station and the Cambourne to Cambridge Public Transport Scheme, for which there is uncertainty about when they will be delivered.

10: Preferred Option growth level: Blended Strategy including Edge of Cambridge: Green Belt: Headline sustainability benefits

- Development at North East Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities
- Large urban extensions on the edge of Cambridge in the Green Belt are assumed to provide new services and facilities, as well as being well-located for services, facilities and jobs within Cambridge.

10: Preferred Option growth level: Blended Strategy including Edge of Cambridge: Green Belt: Headline sustainability challenges

1 Risk that growth around the city could put pressure on amenities within the city and has potential for adverse impacts on the landscape and historic environment.

Weighing up the strategy alternatives

1.2 Drawing on the above, we weighed up our evidence findings and Sustainability Appraisal regarding the opportunities and impacts at an expanded Cambourne and also at the edge of Cambridge in the Green Belt, including completing HELAA assessment and Sustainability Appraisal of sites within these locations. Having completed this exercise, we concluded that, having regard to the scale of our needs for development in relation to existing supply, the evidenced harm of releasing further land on the edge of Cambridge in the Green Belt, and the opportunities at other sustainable locations for development as set out in the emerging preferred strategy, including in particular at Cambourne as included at First Proposals, we concluded that our housing needs alone did not provide the 'exceptional circumstances' required in national policy to justify removing land from the Green Belt on the edge of Cambridge in this Local Plan.

Notwithstanding, for site specific reasons we concluded that exceptional circumstances existed to justify release from the Green Belt at Cambridge Biomedical Campus. Review of site specific reasons for releasing land from the Green Belt on the edge of Cambridge did not identify further sites where exceptional circumstances exist.

First Proposals (Preferred Options) preferred development strategy 2021

1.3 For the reasons set out above, the preferred blended strategy drew on but was not fully aligned with any single strategic spatial option tested at the interim evidence stage in 2020. The preferred strategy therefore has a particular focus on the Densification, Edge of Cambridge – Non Green Belt and Expanding a growth area around transport nodes (around Cambourne) strategic spatial options tested in November 2020.

1.4 The S/DS: Development Strategy policy supporting text identified that there was some uncertainty whether water supplies could be provided in a way that was sufficient for the full objectively assessed needs to be able to be delivered in a sustainable way throughout the plan period, and noted that we needed confidence that adequate water supply would be available to support delivery of the preferred options allocations. It also set out potential options for how the plan might respond to a scenario in which a sustainable water supply could not be provided to support the full development strategy.

Development Strategy Update and strategic options work

1.5 Following extensive engagement with partners regarding the water scarcity issue, in January 2023 we published the Development Strategy Update which confirmed:

- Updated needs for jobs and homes drawing on the Employment and Housing Evidence Update 2023 (EHEU).
- The inclusion of North East Cambridge, Cambridge East, and Cambridge Biomedical Campus as central building blocks of any future strategy for

development.

- In principle the Councils' position remained that the Greater Cambridge Local Plan should seek to provide for the identified objectively assessed needs for housing and jobs, but that this must be considered in the context of whether, or how much of, that need can be provided without unacceptable sustainability impacts. At the time of the Development Strategy Update, given water supply and housing delivery uncertainty, it was not possible to confirm this, and as such a full development strategy could not be confirmed at the time.
- Having reviewed First Proposals representations and our evidence we confirmed that the development strategy principles that informed the First Proposals development strategy (set out in the Policy directions below) remain valid, and we would build on these to inform the identification of any additional sites.

4.14 At that stage, in relation to strategic options testing, we considered the evidence base and Sustainability Appraisal impacts of the updated growth options identified via the EHEU in a comparable way to how the previous growth and spatial options had been tested. Key conclusions from those studies at that point included:

a) Evidence base testing: the significant difference between the [previous and new] growth levels would result in material differences to conclusions made regarding those earlier growth levels, and the location of that additional growth would have a material bearing on its impacts.
b) Sustainability Appraisal: There was currently too much uncertainty to determine whether the two emerging alternative development strategy options constitute reasonable alternatives requiring appraisal to the same level of detail as the development strategy options previously appraised through the Sustainability Appraisal, including identification of whether effects are likely to be significant. Considering this uncertainty, this Sustainability Appraisal addendum instead provided a short commentary on the likely direction of economic, social and environmental effects of the two emerging options.

4.15 Drawing on the above, we confirmed at that time that we would explore and confirm the need or otherwise for any further strategic options testing, once we had confirmed a growth level that was deliverable in housing delivery and water supply terms, and identified a distribution to meet this growth level.

4.16 This work has been undertaken to inform the preferred Development Strategy set out in the draft Plan Topic Paper.

Appendix 1C: Overall approach to strategic options testing for the draft plan stage

Rationale informing the approach to strategic options testing for the draft plan stage

1.1 The strategic spatial options evidence bases completed to inform the First Proposals 2021 and Development Strategy Update 2023 plan-making stages provide a substantial body of evidence informing the emerging Local Plan regarding:

- The performance of different broad locations for development – such evidence remains valid for informing any draft plan development strategy for any plan period, and for any growth level.
- The performance of different spatial options, including:
    - Theoretical spatial strategies locating all required development at a single broad location type (spatial options 3: Edge of Cambridge - Green Belt; 4: New Settlements; and 5: Villages). Given the finding set out in the main Topic Paper, that only a blended (hybrid) strategy can meet the identified development needs, the evidence base findings for such “single-spatial choice” development strategies remain valid for informing the draft plan spatial strategy only so far as they inform understanding of the performance of that broad location in isolation, as above. They do not form reasonable spatial strategy alternatives that warrant further evidence base testing.
    - Hybrid strategies placing development at a number of locations (spatial options 1: Densification, 2: Edge of Cambridge – non-Green Belt, 6: Public Transport Corridors, 7: Rural Southern Cluster, and 8:

Expanding a growth area around transport nodes (Cambourne). As per the above, the First Proposals 2021 preferred blended strategy drew on but was not fully aligned with any single strategic spatial option tested at the interim evidence stage in 2020.

Key features informing the draft plan strategy relevant to strategic options testing include:

- Revised plan period: it has been necessary to revise the plan period to better reflect the future timetable for the Plan's preparation and to ensure that it covers an appropriate period on adoption. Consequently, the Plan will now cover the period 2024 to 2045.
- Updated growth option: the draft plan strategy growth option is informed by an updated homes and jobs evidence. The preferred growth option is the 2025 jobs-led housing figure associated with the most likely jobs forecast. The Councils consider it to form their objectively assessed need for homes.
- A strategy building on confirmed central building blocks: given that North East Cambridge, Cambridge East, and Cambridge Biomedical Campus were confirmed at the Development Strategy Update stage as central building blocks of any future strategy for development, and that the development strategy principles that informed the First Proposals development strategy remain valid, work to confirm the draft plan development strategy is adding to rather than fundamentally revisiting the development strategy.

1.2 Drawing on the previously completed strategic options testing and the context for confirming a draft plan development strategy set out above; to inform any further strategic evidence base assessment work, the Councils consider that:

- Components of the previously completed strategic spatial options evidence base remain valid in informing any draft plan development strategy.
- There is little merit in revisiting the evidence base assessments for "single-spatial choice" development strategies, as they do not form reasonable alternatives; nor in revisiting previously tested in-principle hybrid strategies (spatial options 1-8), given that the First Proposals development strategy drew on elements of all hybrid strategies previously tested, and given that we don't need to test every possible reasonable alternative.
- Any further substantive strategic options evidence base testing should be

closely focused on understanding the impacts of updated growth options, and the choices available to meet the additional needs beyond those met by the First Proposals. In practice this means testing the updated growth option and associated emerging preferred strategy for the new plan period, alongside clear alternatives identified at that time, rather than revisiting spatial options 1-8.

Summary of strategic options work undertaken to inform the draft plan stage

2.1 Drawing on the above, the following appendices comprise strategic options evidence base testing informing the draft plan. The appendices are:

a) Appendix 1D: Implications of the revised plan period for evidence base assessments
b) Appendix 1E: Greater Cambridge Local Plan Strategic Spatial Options: 9a and 10a – alternative hybrid strategies

Appendix 1D: Implications of the revised plan period for evidence base assessments

Introduction

1.1 The period covered by the Greater Cambridge Local Plan up to the First Proposals, the last formal stage of the Plan's progress, was 2020 to 2041. As explained in this Topic Paper, it has been necessary to revise the plan period to better reflect the future timetable for the Plan's preparation and to ensure that it covers an appropriate period on adoption. Consequently, the Plan will now cover the period 2024 to 2045. Evidence directly informing the draft plan has been based on the new plan period, but it is also important to consider whether previously completed evidence that informed the Councils' position regarding the development strategy needs revisiting in the light of the new plan period.

Analysis

1.2 The evidence studies that were produced by consultants are either largely qualitative in their assessments and conclusions; or they address quantifiable matters which, based on previous experience, are more likely to be sensitive to changes introduced during the Local Plan's progress. Sustainability Appraisal involves a qualitative assessment, but derives its findings from the assessment

of individual evidence studies.

1.3 The following issues involve qualitative evidence where the plan period is not considered to have an influence:

- Green spaces and biodiversity: green infrastructure
- Green spaces and biodiversity: habitats
- Wellbeing: equalities
- Great places: landscape and townscape
- Infrastructure: viability

1.4 The following evidence involves quantitative assessment, which the Councils consider could in principle be affected by the revised plan period:

- Climate change: water
- Climate change: zero carbon
- Jobs: employment land review
- Homes: housing delivery study
- Infrastructure: transport evidence
- Infrastructure: delivery plan

1.5 For this evidence involving quantitative assessment, we considered whether the revised plan period of 2024-45 could have a material impact on previous strategic growth and spatial options findings. In doing this we considered the previous strategic options work, together with the respective evidence base consultants' previous comments in 2021 and 2022 regarding updates to previous strategic options evidence bases. More specifically, we drew on evidence base consultants' responses to questions regarding amended growth options, as set out in the First Proposals Development Strategy topic paper, Appendix 1B: Evidence base assessments of the medium + growth level, p186.

1.6 In relation to previous strategic *growth* options testing: previously tested growth options were developed specifically for the previous plan period of 2020-41. As such, testing these previous growth options under a new plan period is not relevant; new growth options have been developed that are relevant to the new

plan period. Previous *growth* options testing remains relevant to informing the draft plan only insofar as it enables comparison of the scale and impacts of those previous options with the new growth options.

1.7 In relation to previous strategic *spatial* options testing, given that the previous spatial options were compiled specifically to meet the previous growth options, it is not possible to state what the implications of revising the plan period *per se* would be on previously completed strategic options testing, in the absence of revised growth options as above.

Conclusion

1.8 In conclusion, it is not possible to assess the impact of changing the plan period *per se* on previously completed strategic evidence options testing. These impacts can only be understood once updated growth options are confirmed, and once reasonable alternative strategic spatial options arising are identified. See the sections below that explore those topics.

Appendix 1E: Greater Cambridge Local Plan Strategic Spatial Options: 9a, 10a, 11a and 11b – alternative hybrid strategies

Part 1: Strategic spatial options methodology supplement

Introduction

1.1 This note forms a supplement to the Greater Cambridge Local Plan Strategic Spatial Options for Testing – Methodology, November 2020, and Greater Cambridge Local Plan First Proposals Development Strategy Topic Paper 2021 Appendix 1F: Greater Cambridge Local Plan Strategic Spatial Options for Testing – Methodology – Supplement, August 2021. It sets out four strategic (non-site specific) spatial options to be tested through the Greater Cambridge Local Plan process (in addition to the eight previously identified options tested in autumn 2020 and two further options tested in summer 2021), and the methodology used to identify them. The need to identify these additional strategic options is firstly to respond to the objectively assessed need for homes identified in 2025 that is materially higher than that previously identified, and secondly to address a spatial option not previously considered.

1.2 The four options have been considered in terms of transport, climate change and other impacts, and have been subject to sustainability appraisal, to inform the selection of a preferred option for the Local Plan. See Part 2: Summary Evidence Base Report below.

Identifying the reasonable alternatives to inform the draft plan development strategy

Growth level options

1.3 As set out in section 3 of the Greater Cambridge Local Plan: Strategy Topic Paper, following consideration of evidence arising since the 2021 First Proposals, comprising the revised Standard Method outcome confirmed in December 2024, and the updated Greater Cambridge Employment and Housing

Evidence 2025, the Councils consider that the up to date Standard Method calculation outcome and the most likely jobs scenario (which is supported by the Standard Method outcome) represents the objectively assessed need for homes and jobs in Greater Cambridge. Having determined this based on up to date evidence, the previously assessed alternative growth options are no longer considered to represent reasonable alternatives.

1.4 Drawing on the above, this note identifies strategic spatial options relating to the 2025 housing need figure only, and does not include development figures for the previous alternative growth levels in relation to these new spatial options.

Strategic spatial options

1.5 Drawing on the assessments of the strategic spatial options tested in November 2020 and 2021, the Councils have identified four potential reasonable alternative strategic spatial options. The new strategic spatial options for testing to inform the draft plan development strategy are:

- 9a: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne
- 10a: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne
- 11a - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement
- 11b - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne

N.B. Expanding a market town – Royston is a new previously untested strategic spatial option (see main body of Strategy topic paper section 5: S/DS: Development Strategy - New or Updated Evidence subsection). Having identified this strategic spatial option, the Councils noted that it could be seen as an alternative to Cambourne, given that it also involves expansion of an existing settlement. As such we have retested the performance of Cambourne against other reasonable alternative strategic spatial options in order to ensure we have a consistent understanding of Cambourne's performance against those alternatives.

1.6 All four options are all similar to options 9 and 10 that were tested at the First Proposals stage, but provide additional development locations to meet a higher growth level. As such, all four options are identical in their development assumptions at the following locations: North East Cambridge, North West Cambridge, small sites within Cambridge urban area; Cambridge Airport; and limited development in rural villages. The differences between the four are that:

- Option 9a includes development at an expanded Cambourne and a non-site specific new settlement location,
- Option 10a includes development at an expanded Cambourne and a non-site specific edge of Cambridge - Green Belt location,
- Option 11a includes development at an expanded Royston and a non-site specific new settlement location, and
- Option 11b includes: includes development at an expanded Cambourne and at an expanded Royston.

1.7 To ensure we had a comparable understanding of the benefits and disadvantages of each, we tested these in the same way as had been completed at previous stages so far as was proportionate (see further in Part 2: summary evidence base report to this appendix), noting the similarities between these new hybrid options and the two hybrid options tested as part of preparation of the First Proposals for the earlier level of jobs and homes (SO9 First Proposals including Cambourne and SO10 hybrid strategy alternative including Green Belt).

Compiling the strategic spatial options

1.8 Section 5: S/DS Development Strategy in the main body of the Strategy topic paper sets out how the draft plan development strategy was selected. The Councils determined the high-level distribution set out in the descriptions and tables below for testing via the strategic options before identifying the full detailed draft plan strategy, such that the figures in the table may not exactly match those included in the detailed spatial strategy.

Non site-specific locations tested

1.9 The Councils identified the four alternative strategic options using the First Proposals preferred option hybrid spatial strategy excluding Cambourne as the starting point (see above sub-section regarding the strategic spatial options). Subtracting this supply from the 2025 housing need figure leaves a shortfall to find in the draft plan of around two strategic sites using evidence-based housing delivery assumptions (for further detail see 5. S/DS: Development Strategy > New or Updated Evidence > Towards a draft plan development strategy: jobs and homes > Review of broad locations for meeting additional need).

1.10 As such, the strategic spatial options include the Emerging First Proposals preferred option hybrid spatial strategy excluding Cambourne, plus development at two strategic site locations in varying combinations from the following four sources of supply: Edge of Cambridge - Green Belt, expanded Cambourne, an additional new settlement, and expanding an existing town - Royston

Location capacity

1.11 The assumed capacity for each non-site-specific broad location tested was as follows:

- Edge of Cambridge - Green Belt: 1 or more sites totalling 3,600 homes (capacity based on rough analysis of potential available sites and delivery assumption within plan period)
- New settlement: 5,000 homes (hypothetical capacity based on previous minimum assumption of 4,500 homes for a new settlement, rounded up)
- Cambourne: 15,000 homes (hypothetical capacity consistent with previous testing)
- Expanded Royston: 15,000 homes (hypothetical capacity based on a rounded estimate of the total capacity of land directly adjacent to Royston within the South Cambridgeshire area, using assumptions for development area and housing density).

Housing trajectories for each option

1.12 To enable testing of the housing deliverability of each strategic option, we produced housing trajectories for each, which all included commitments as per the April 2025 housing trajectory, and current expectations about previously identified GCLP emerging allocations. For the additional locations which are the focus of testing the following start year and build out typologies were used, drawing on advice in the Housing Delivery Study 2021:

- Edge of Cambridge: standard start year assumption post-plan adoption; sustainable urban extension typology build out rate.
- New settlement: standard start year assumption post-plan adoption; new settlement typology build out rate.
- Expanded Royston: standard start year assumption post-plan adoption; sustainable urban extension typology build out rate.

Description of strategic spatial options and options numbers for testing

9a: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne

Outline description

1.13 This is a hybrid strategy to meet a variety of needs, focusing growth at a range of locations including in particular Cambridge urban area, edge of Cambridge - non-Green Belt, around Cambourne, and at an additional new settlement.

Detailed description

1.14 Broad areas to include:

Cambridge urban area

- North East Cambridge (delivery by 2045 assumption)
- North West Cambridge (densification of existing planned built-up area)
- Small sites within Cambridge urban area - limited amount of development relating to actual capacity

Edge of Cambridge - non-Green Belt

- Cambridge Airport (initial phase post 2030, outside Green Belt, delivery by 2045 assumption)

Western Cluster (focus on transport node)

- Expanded Cambourne (delivery by 2045 assumption)

New settlements on public transport corridors

- Additional new settlement (delivery by 2045 assumption)

Southern Cluster (integrating jobs and homes)

- Southern cluster villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

Dispersal to villages

- Rest of rural area villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

10a: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne

Outline description

1.15 This is a hybrid strategy to meet a variety of needs, focusing growth at a range of locations including in particular Cambridge urban area, edge of Cambridge - non-Green Belt, and non-site-specific Green Belt locations. (N.B. this strategic spatial option is identical – within the 2024-45 plan period - to the emerging preferred option hybrid spatial strategy except for the inclusion of development at Edge of Cambridge - Green Belt in place of development at an additional new settlement).

Detailed description

1.16 Broad areas to include:

Cambridge urban area

- North East Cambridge (delivery by 2045 assumption)
- North West Cambridge (densification of existing planned built up area)
- Small sites within Cambridge urban area - limited amount of development relating to actual capacity

Edge of Cambridge - non-Green Belt

- Cambridge Airport (initial phase post 2030, outside Green Belt, delivery by 2041 assumption)

Edge of Cambridge - Green Belt

- Edge of Cambridge - Green Belt (equivalent to one or more non-site specific Green Belt location/s)

Western Cluster (focus on transport node)

- Expanded Cambourne (delivery by 2045 assumption)

Southern Cluster (integrating jobs and homes)

- Southern cluster villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

Dispersal to villages

- Rest of rural area villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

11a - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement

Outline description

1.17 The alternative hybrid spatial strategy is a hybrid strategy to meet a variety of needs, focusing growth at a range of locations including in particular Cambridge urban area, edge of Cambridge - non-Green Belt, at an expanded Royston, and at an additional new settlement.

Detailed description

1.18 Broad areas to include:

Cambridge urban area

- North East Cambridge (delivery by 2045 assumption)
- North West Cambridge (densification of existing planned built up area)
- Small sites within Cambridge urban area - limited amount of development relating to actual capacity

Edge of Cambridge - non-Green Belt

- Cambridge Airport (initial phase post 2030, outside Green Belt, delivery by 2041 assumption)

Expanding an existing market town - Royston

- Extension to Royston (delivery by 2045 assumption)

New settlements on public transport corridors

- Additional new settlement (delivery by 2045 assumption)

Southern Cluster (integrating jobs and homes)

- Southern cluster villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

Dispersal to villages

- Rest of rural area villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

11b - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne

Outline description

1.19 The alternative hybrid spatial strategy is a hybrid strategy to meet a variety of needs, focusing growth at a range of locations including in particular Cambridge urban area, edge of Cambridge - non-Green Belt, around Cambourne, and at an expanded Royston.

Detailed description

1.20 Broad areas to include:

Cambridge urban area

- North East Cambridge (delivery by 2045 assumption)
- North West Cambridge (densification of existing planned built-up area)
- Small sites within Cambridge urban area - limited amount of development relating to actual capacity

Edge of Cambridge - non-Green Belt

- Cambridge Airport (initial phase post 2030, outside Green Belt, delivery by 2041 assumption)

Western Cluster (focus on transport node)

- Expanded Cambourne (delivery by 2045 assumption)

Expanding an existing market town: Royston

- Extension to Royston (delivery by 2045 assumption)

Southern Cluster (integrating jobs and homes)

- Southern cluster villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

Dispersal to villages

- Rest of rural area villages - limited development distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access

Strategic spatial options numbers for testing

Table 1: Strategic Option 9a: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne

Steps or Sites / Locations	Homes 2024-45	Homes Post 2045	Homes full build out	Jobs 2024-45	Jobs post 2045	Jobs full build out
Requirement	-	-	-	-	-	-
Housing requirement (annual figure)	2,295	-	-	72,300	-	-
Local Housing Need (plan period figure)	48,195	-	-	-	-	-
Rough 10% buffer	4,820	-	-	-	-	-
Local Housing Need + 10% buffer	53,015	-	-	-	-	-
CURRENT HOUSING SUPPLY	-	-	-	-	-	-
Current supply - Housing Trajectory (1 April 2025)[1]	37,961	7,725	45,686	-	-	-
Current supply - updates to Housing Trajectory[2]	-115	0	-115	-	-	-

Additional homes to be identified	10,349	-	-	-	-	-
ADDITIONAL SOURCES OF SUPPLY	-	-	-	-	-	-
Densification of Cambridge	-	-	-	-	-	-
North East Cambridge	3,950	3,975	7,925	1,300	13,700	15,000
North West Cambridge	2,500	0	2,500	-	-	-
Other smaller urban sites / small sites requirement	12	0	12	-	-	-
Edge of Cambridge - non-Green Belt	-	-	-	-	-	-
Cambridge Airport (safeguarded land)	3,950	4,050	8,000	100	8,900	9,000
Edge of Cambridge - Green Belt	-	-	-	-	-	-
Edge of Cambridge Green Belt - non site specific	-	-	-	-	-	-
Cambridge Biomedical Campus	700	0	700	0	8,300	8,300
Western Cluster (focus on transport node)	-	-	-	-	-	-
Extension to Cambourne (East West Rail)	2,550	12,450	15,000	300	14,700	15,000
New settlements on public transport corridors	-	-	-	-	-	-
Additional new settlement	2,550	2,450	5,000	300	700	1,000
Expanding an existing market town: Royston	-	-	-	-	-	-
Extension to Royston	-	-	-	-	-	-
Southern Cluster (integrating jobs and homes)	-	-	-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	185	0	185	-	-	-
Dispersal to villages	-	-	-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	204	0	204	-	-	-

[1] Previous strategic spatial options explicitly included increased delivery rates at existing major sites delivering beyond 2045 (Northstowe and Waterbeach). These assumptions are retained but are incorporated within the current supply row. In addition, previous strategic spatial options included an increased windfall assumption and dwelling equivalents from student and older peoples bedspaces in the updates to housing trajectory row. These are now incorporated within the current supply row.

[2] Previous strategic spatial options explicitly included increased delivery rates at existing major sites delivering beyond 2045 (Northstowe and Waterbeach). These assumptions are retained but are incorporated within the current supply row. In addition, previous strategic spatial options included an increased windfall assumption and dwelling equivalents from student and older peoples bedspaces in the updates to housing trajectory row. These are now incorporated within the current supply row.

Rural employment locations	-	-	-	-	-	-
Babraham	-	-	-	300	300	600
B2/B8 on A14 corridor (in vicinity of Swavesey junction)	-	-	-	300	500	800
Total additional sources of supply	**16,601**	**22,925**	**39,526**	**2,600**	**47,100**	**49,700**
Total including current and additional sources of supply	**54,447**	**30,650**	**85,097**	**N/A**	**N/A**	**N/A**
Balance of total supply against Housing requirement	6,252	N/A	N/A	N/A	N/A	N/A
Balance of total supply against Housing requirement + 10% buffer	1,433	N/A	N/A	N/A	N/A	N/A
Total supply vs. Housing requirement: % oversupply	13.00%	N/A	N/A	N/A	N/A	N/A

NOTE: figures in the tables above for homes post 2045 do not include a continuing windfall allowance of 185 dwellings in Cambridge and 240 dwellings in South Cambridgeshire, which are shown in the housing trajectory for the years post 2045 up to 2060.

Table 2: Strategic Option 10a: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne

Housing Supply and needs	Homes 2024-45	Homes Post 2045	Homes full build out	Jobs 2024-45	Jobs post 2045	Jobs full build out
Requirement	-	-	-	-	-	-
Housing requirement (annual figure)	2,295	-	-	72,300	-	-
Local Housing Need (plan period figure)	48,195	-	-	-	-	-
Rough 10% buffer	4,820	-	-	-	-	-
Local Housing Need + 10% buffer	53,015	-	-	-	-	-
CURRENT HOUSING SUPPLY	-	-	-	-	-	-
Current supply - Housing Trajectory (1 April 2025)[3]	37,961	7,725	45,686	-	-	-
Current supply - updates to Housing Trajectory[4]	-115	0	-115	-	-	-
Additional homes to be identified	10,349	-	-	-	-	-
ADDITIONAL SOURCES OF SUPPLY	-	-	-	-	-	-
Densification of Cambridge	-	-	-	-	-	-
North East Cambridge	3,950	3,975	7,925	1,300	13,700	15,000
North West Cambridge	2,500	0	2,500	-	-	-
Other smaller urban sites / small sites requirement	12	0	12	-	-	-

3 Previous strategic spatial options explicitly included increased delivery rates at existing major sites delivering beyond 2045 (Northstowe and Waterbeach). These assumptions are retained but are incorporated within the current supply row. In addition, previous strategic spatial options included an increased windfall assumption and dwelling equivalents from student and older peoples bedspaces in the updates to housing trajectory row. These are now incorporated within the current supply row.

4 Previous strategic spatial options explicitly included increased delivery rates at

existing major sites delivering beyond 2045 (Northstowe and Waterbeach). These assumptions are retained but are incorporated within the current supply row. In addition, previous strategic spatial options included an increased windfall assumption and dwelling equivalents from student and older peoples bedspaces in the updates to housing trajectory row. These are now incorporated within the current supply row.

Edge of Cambridge - non-Green Belt	-	-	-	-	-	-
Cambridge Airport (safeguarded land)	3,950	4,050	8,000	100	8,900	9,000
Edge of Cambridge - Green Belt	-	-	-	-	-	-
Edge of Cambridge Green Belt - non site specific	3,150	450	3,600	300	-	300
Cambridge Biomedical Campus	700	0	700	0	8,300	8,300
Western Cluster (focus on transport node)	-	-	-	-	-	-
Extension to Cambourne (East West Rail)	2,550	12,450	15,000	300	14,700	15,000
New settlements on public transport corridors	-	-	-	-	-	-
Additional new settlement	-	-	-	-	-	-
Expanding an existing market town - Royston	-	-	-	-	-	-
Extension to Royston	-	-	-	-	-	-
Southern Cluster (integrating jobs and homes)	-		-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	185	0	185	-	-	-
Dispersal to villages	-	-	-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	204	0	204	-	-	-
Rural employment locations	-	-	-	-	-	-
Babraham	-	-	-	300	300	600
B2/B8 on A14 corridor (in vicinity of Swavesey junction)	-	-	-	300	500	800
Total additional	**17,201**	**20,925**	**38,126**	**2,600**	**46,400**	**49,000**

sources of supply						

Total including current and additional sources of supply	**55,047**	**28,650**	**83,697**	**N/A**	**N/A**	**N/A**
Balance of total supply against Housing requirement	6,852	N/A	N/A	N/A	N/A	N/A
Balance of total supply against Housing requirement + 10% buffer	2,033	N/A	N/A	N/A	N/A	N/A
Total supply vs. Housing requirement: % oversupply	14.20%	N/A	N/A	N/A	N/A	N/A

NOTE: figures in the tables above for homes post 2045 do not include a continuing windfall allowance of 185 dwellings in Cambridge and 240 dwellings in South Cambridgeshire, which are shown in the housing trajectory for the years post 2045 up to 2060.

Table 3: Strategic Option 11a - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement

Housing Supply and needs	Homes 2024-45	Homes Post 2045	Homes full build out	Jobs 2024 -45	Jobs post 2045	Jobs full build out
Requirement	-	-	-	-	-	-
Housing requirement (annual figure)	2,295	-	-	72,300	-	-
Local Housing Need (plan period figure)	48,195	-	-	-	-	-
Rough 10% buffer	4,820	-	-	-	-	-
Local Housing Need + 10% buffer	53,015	-	-	-	-	-
CURRENT HOUSING SUPPLY	-	-	-	-	-	-
Current supply - Housing Trajectory (1 April 2025)[5]	37,961	7,725	45,686	-	-	-
Current supply - updates to Housing Trajectory[6]	-115	0	-115	-	-	-
Additional homes to be identified	10,349	-	-	-	-	-
ADDITIONAL SOURCES OF SUPPLY	-	-	-	-	-	-
Densification of Cambridge	-	-	-	-	-	-
North East Cambridge	3,950	3,975	7,925	1,300	13,700	15,000
North West Cambridge	2,500	0	2,500	-	-	-
Other smaller urban sites / small sites requirement	12	0	12	-	-	-
Edge of Cambridge non-Green Belt	-	-	-	-	-	-
Cambridge Airport (safeguarded land)	3,950	4,050	8,000	100	8,900	9,000
Edge of Cambridge Green Belt	-	-	-	-	-	-

[5] Previous strategic spatial options explicitly included increased delivery rates at existing major sites delivering beyond 2045 (Northstowe and Waterbeach). These assumptions are retained but are incorporated within the current supply row. In addition, previous strategic spatial options included an increased windfall assumption and dwelling equivalents from student and older peoples bedspaces in the updates to housing trajectory row. These are now incorporated within the current supply row.

[6] Previous strategic spatial options explicitly included increased delivery rates at existing major sites delivering beyond 2045 (Northstowe and Waterbeach). These assumptions are retained but are incorporated within the current supply row. In addition, previous strategic spatial options included an increased windfall assumption and dwelling equivalents from student and older peoples bedspaces in the updates to housing trajectory row. These are now incorporated within the current supply row.

Edge of Cambridge Green Belt - non site specific	-	-	-	-	-	-
Cambridge Biomedical Campus	700	0	700	0	8,300	8,300
Western Cluster (focus on transport node)	-	-	-	-	-	-
Extension to Cambourne (East West Rail)	-	-	-	-	-	-
New settlements on public transport corridors	-	-	-	-	-	-
Additional new settlement	2,550	2,450	5,000	300	700	1,000
Expanding an existing market town - Royston	-	-	-	-	-	-
Extension to Royston	3150	11,850	15,000	600	1,400	2,000
Southern Cluster (integrating jobs and homes)	-	-	-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	185	0	185	-	-	-
Dispersal to villages	-	-	-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	204	0	204	300	300	600
Rural employment locations	-	-	-	-	-	-
Babraham	-	-	-	300	300	600
B2/B8 on A14 corridor (in vicinity of Swavesey junction)	-	-	-	300	500	800
Total additional sources of supply	**17,201**	**22,325**	**39,526**	**3,500**	**48,800**	**52,300**
Total including current and additional sources of supply	**55,162**	**30,050**	**85,212**	**N/A**	**N/A**	**N/A**
Balance of total supply against Housing requirement	6,967	N/A	N/A	N/A	N/A	N/A
Balance of total supply against Housing requirement + 10% buffer	2,147	N/A	N/A	N/A	N/A	N/A

Total supply vs. Housing requirement: % oversupply	13%	N/A	N/A	N/A	N/A	N/A

NOTE: figures in the tables above for homes post 2045 do not include a continuing windfall allowance of 185 dwellings in Cambridge and 240 dwellings in South Cambridgeshire, which are shown in the housing trajectory for the years post 2045 up to 2060.

Table 4: Strategic Option 11b - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne

Housing Supply and needs	Homes 2024-45	Homes Post 2045	Homes full build out	Jobs 2024-45	Jobs post 2045	Jobs full build out
Requirement	-	-	-	-	-	-
Housing requirement (annual figure)	2,295	-	-	72,300	-	-
Local Housing Need (plan period figure)	48,195	-	-	-	-	-
Rough 10% buffer	4,820	-	-	-	-	-
Local Housing Need + 10% buffer	53,015	-	-	-	-	-
CURRENT HOUSING SUPPLY	-	-	-	-	-	-
Current supply - Housing Trajectory (1 April 2025)	37,961	7,725	45,686	-	-	-
Current supply - updates to Housing Trajectory	-115	0	-115	-	-	-
Additional homes to be identified	10,349	-	-	-	-	-
ADDITIONAL SOURCES OF SUPPLY	-	-	-	-	-	-
Densification of Cambridge	-	-	-	-	-	-
North East Cambridge	3,950	3,975	7,925	1,300	13,700	15,000
North West Cambridge	2,500	0	2,500	-	-	-
Other smaller urban sites / small sites requirement	12	0	12	-	-	-
Edge of Cambridge - non-Green Belt	-	-	-	-	-	-
Cambridge Airport (safeguarded land)	3,950	4,050	8,000	100	8,900	9,000
Edge of Cambridge - Green Belt	-	-	-	-	-	-
Edge of Cambridge Green Belt - non site specific	0	0	0	-	-	-
Cambridge Biomedical Campus	700	0	700	0	8,300	8,300
Western Cluster (focus on transport node)	-	-	-	-	-	-
Extension to Cambourne (East West Rail)	2,550	12,450	15,000	300	14,700	15,000
New settlements on public transport corridors	-	-	-	-	-	-

Additional new settlement	-	-	-	-	-	-
Expanding an existing market town - Royston	-	-	-	-	-	-
Extension to Royston	3150	11,850	15,000	600	1,400	2,000
Southern Cluster (integrating jobs and homes)	-		-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	185	0	185	-	-	-
Dispersal to villages	-	-	-	-	-	-
Distributed across Rural Centres, Minor Rural Centres, and Group Villages with very good Public Transport Access	204	0	204	300	300	600
Rural employment locations	-	-	-	-	-	-
Babraham	-	-	-	300	300	600
B2/B8 on A14 corridor (in vicinity of Swavesey junction)	-	-	-	300	500	800
Total additional sources of supply	**17,201**	**32,325**	**49,526**	**2,600**	**46,700**	**49,300**
Total including current and additional sources of supply	**55,162**	**40,050**	**95,212**	**N/A**	**N/A**	**N/A**
Balance of total supply against Housing requirement	6,967	N/A	N/A	N/A	N/A	N/A
Balance of total supply against Housing requirement + 10% buffer	2,147	N/A	N/A	N/A	N/A	N/A
Total supply vs. Housing requirement: % oversupply	13%	N/A	N/A	N/A	N/A	N/A

NOTE: figures in the table above for homes post 2045 do not include a continuing windfall allowance of 185 dwellings in Cambridge and 240 dwellings in South Cambridgeshire, which are shown in the housing trajectory for the years post 2045 up to 2060.

Part 2: Summary evidence base report

Introduction

1.21 This section summarises the opportunities, challenges and outcomes of evidence-based and sustainability testing associated with the four alternative hybrid strategies set out above in Appendix 1E - Part 1.

1.22 There is a substantive amount of evidence that has been developed to date that remains relevant; and a preferred hybrid strategy was established at the First Proposals, the last formal stage of the plan's progress. Consequently, the summaries provided in this appendix build on this established work. Given this necessary continuity across the stages of the plan's progress, this appendix should be read in conjunction with Appendix 1G of the Greater Cambridge Local Plan: Development Strategy Topic Paper (2021); and the Greater Cambridge Local Plan: Development Strategy Update (January 2023).

1.23 More specifically, the alternative hybrid strategies 9a, 10a, 11a and 11b are based firmly on Options 9 and 10, the previous hybrid strategies which were assessed in the First Proposals. Indeed, for all four options most of the component elements are unchanged from Options 9 and 10, and Options 9a and 10a are comprised of component broad locations that have all been tested via our evidence bases and Sustainability Appraisal for previous stages of strategic options testing. As such, it is appropriate to rely on this already published information to provide an understanding of the performance of the new options. The only specific evidence completed to inform these additional hybrid spatial strategies is via the Housing Delivery Study 2025, which tested options 9a and 10a in housing delivery terms.

1.24 The only broad location not previously tested is the expanding a market town – Royston broad location included within options 11a and 11b. While no specific evidence has been commissioned with regard to this broad location, in many instances the existing strategic options evidence bases can reasonably be used to infer the likely challenges and opportunities that will arise from it. In addition,

some issues can be taken into account at a broad strategic level from the HELAA assessments of the specific sites adjacent to Royston that comprise this spatial option. Where it is not possible to assess how this location might perform with regard to a particular topic, then this is stated as such within the summary of challenges and opportunities. In particular, no carbon or transport modelling of the performance of the Royston broad location has been undertaken.

1.25 The Sustainability Appraisal supporting the draft plan has been completed for all four strategic options. The individual evidence base assessments and Sustainability Appraisal supplement reports from previous stages are also available on the Greater Cambridge Shared Planning website.

Evidence base assessments

Option 9a - 2025 growth option: Hybrid spatial strategy including new settlement

1.26 This approach would focus new homes and jobs primarily within Cambridge at North East Cambridge, on the edge of Cambridge at Cambridge East, at an extension of Cambridge Biomedical Campus, and at an expanded Cambourne and at a new settlement, with some limited development in villages.

1.27 The elements of Option 9a are the same as Option 9, except for the new settlement. For this reason, the assessment below draws directly from the previous findings for Option 9 and adds the sustainability appraisal outcomes, opportunities and challenges related to new settlements.

1.28 The Sustainability Appraisal found that this option had a range of positive and negative effects relating to the blend of locations included within it.

1.29 Development at North East Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities.

1.30 Development would be well-located for Cambourne's existing services and facilities whilst providing new and/or expanded facilities too. It is also in a less sensitive area in terms of environmental and historic assets. This option performs relatively poorly within the plan period, as it is unlikely that the full infrastructure to support development will be provided, but it performs well when fully built out. The introduction of a new railway station and the Cambourne to Cambridge Public Transport Scheme will greatly improve sustainable transport options at this location in the long term, which are likely to be attractive to residents. However, there is some uncertainty about when these will be delivered.

1.31 The small element of growth at villages included in this option would have some positive social and economic effects in particular via the provision of local housing and employment opportunities which thereby may support existing services, and limited negative environmental effects associated with dispersing development.

1.32 The Sustainability Appraisal found that new settlements would establish a whole new town or village, providing homes, jobs and supporting infrastructure in a new location, and would need to be supported by strategic transport infrastructure connecting to Cambridge.

1.33 The Sustainability Appraisal concludes that the new settlements option performs well in terms of social objectives, particularly when fully built out, as all new settlements are expected to be of a size that provides for the day to day needs of residents. This includes provision of features such as schools, health care, recreation and leisure facilities. In addition, new settlements can be designed in a way that encourages walking and cycling and incorporates good green infrastructure networks.

1.34 However, new settlements result in large-scale landscape change and may be of a scale where it is difficult to avoid intersecting with environmental or heritage assets, areas at risk of flooding or source protection zones. In addition, new settlements have a long lead-in time this may lead to a lack of housing

availability from this source earlier in the plan period and a period of disconnect between when housing is delivered and when jobs and supporting infrastructure is delivered. In order to ensure sustainable behaviours are encouraged in new settlements, it is important to avoid the need for residents to travel for work and services at the outset, otherwise these may become ingrained travel patterns.

Option 9a - 2025 growth option: Hybrid spatial strategy including new settlement – Opportunities

1.35 For annual carbon emissions per home, this option performed similarly to the mid-range of options previously tested, reflecting the fact that it includes a blend of sources of supply.

1.36 With regard to water, this option includes the larger developments of North East Cambridge, Cambridge Airport and Cambourne, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems.

1.37 There are however opportunities to supply Cambourne with fresh water from outside the area easing likely short term local supply shortages.

1.38 The North East Cambridge, Cambridge Airport and North West Cambridge strategic locations provide significant opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits. Other locations provide the opportunity to introduce GI connectivity across the A428 corridor. There is potential to further develop active transport connections linking GI assets.

1.39 With regard to the effects on landscape, development in the Western Cluster as an extension to Cambourne is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth.

1.40 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.41 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting. Cambridge North Station provides a highly accessible access node and public transport to other locations can be enhanced.

1.42 Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support economic growth.

1.43 East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. These strategic locations as a whole would provide a good range of employment use types.

1.44 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites begin to deliver.

1.45 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option, similar to that seen for Option 2. Given this, this option is likely to limit the need for completely new transport infrastructure beyond that already planned, in comparison with those spatial options that have a much more dispersed approach.

1.46 As noted above, these findings apply equally to Option 9a, given that the same locations and development typologies are involved. The following findings relate to the additional element of a new settlement.

1.47 With regard to carbon emissions, new settlements would result in mid-range transport carbon emissions. However, embodied carbon is high due to the need for additional supporting infrastructure and the likely predominance of larger houses rather than more efficient flats.

1.48 This option performs well with regard to water, as site selection can result in known or expected low flood risk, and large sites with good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems.

1.49 Establishing new settlements on public transport corridors provides an opportunity to integrate a wider range of green infrastructure opportunities associated with larger scale development. Landscape-led masterplanning could accommodate generous GI provision to avoid risk of impact on nearby wetland habitats and water resources.

1.50 New settlements, depending on their size, can be planned to be self-contained by co-locating a broad range of jobs, houses and facilities and services. This provides positive outcomes with regard to equalities and inclusivity. Development in new settlements or large urban extensions provide a ‘clean slate’ whereby new accessible buildings, streets and the public realm can be designed from the outset to cater for all abilities and needs. This option may be likely to include new healthcare services on site. New settlements (larger existing settlements) could act as a local hub for surrounding smaller communities, to avoid the need to travel longer distances to market towns or Cambridge for all their needs, provided access issues could be overcome.

1.51 New settlements provide opportunities for high quality and distinctive housing design that is responsive to local character and creates a strong sense of place

through a comprehensive masterplanning process. There may also be opportunities to avoid heritage impacts but would depend on location.

1.52 New settlements provide opportunities to deliver new housing at scale towards the mid to latter parts of the plan period. The ability to provide a wide range of dwelling types and sizes is likely, supporting higher delivery rates; and provision of housing for ownership (including self / custom build) and affordable housing are all opportunities arising from this option.

1.53 New settlement development will be well suited to accommodating the full range of employment land uses, including offices, labs and warehousing industrial given opportunities for available land. This suggests that spatial proximity is unlikely to be a key factor in generating new economic development, although professional services offices in particular cluster near to the city. The south / south east of South Cambridgeshire has generally been more successful in developing life science related employment. The location of a new settlement may therefore have a bearing on its level of employment success.

Option 9a - 2025 growth option: Hybrid spatial strategy including new settlement – Challenges

1.54 Additional local wastewater treatment capacity connected to growth at Cambourne would need to be provided to enable further development at the location.

1.55 For green infrastructure (GI), there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites, and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that where development is proposed it is designed to consider the current habitat networks within the site and avoid habitat fragmentation.

1.56 For the strategic development locations, development presents risks to the existing GI network; particularly relating to increased recreational pressure on nearby sites, and the potential for impacts on wetland assets to the east and north-east.

1.57 Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. There is also a risk of development (dwellings or supporting infrastructure) extending or exacerbating existing north-south severance.

1.58 With regard to townscape, densification of the Cambridge urban area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.59 For landscape, development at Cambridge Airport on the edge of Cambridge outside the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.60 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key views experienced from the Gog Magog Chalk Hills. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.61 Heritage impacts relating to this option are categorised as low / moderate. Appropriate design responses in terms of building heights and layout at the key sites at North East Cambridge, Cambridge Airport and Cambourne will reduce risks. For other smaller dispersed sites, location and scale will be important matters. Overall, no significant risks are anticipated that cannot be addressed

through mitigation.

1.62 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.63 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.64 Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations. However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.

1.65 If the phasing of East West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at the mid-latter part of the plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.

1.66 For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential pinch points along planned public transport corridors.

1.67 New provision for social and community infrastructure will also be required

early in the development of the growth areas. In the more rural areas, there will be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.68 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

1.69 These challenges related to Option 9 remain relevant with regard to Option 9a. The following additional challenges related to new settlements are relevant as this is the only different element between Options 9 and 9a.

1.70 Reliance on conventional public transport may not be an option for people with some disabilities. Depending on the location of new settlements and supporting infrastructure, there is an increased risk of impact on nature sites with an international designation and/or functionally linked habitat.

1.71 For housing, competition with existing committed new settlement sites in the mid to latter part of the plan period may flood the market with similar products in similar locations, thus reducing build-out rates. It is also unlikely to deliver sufficient small sites to meet NPPF requirements.

1.72 Under all growth options the market's preference would be to see new B1a (offices) and some B1b (R&D) employment space delivered in close proximity to the city.

1.73 Depending on the scale of development there could be impacts on the Greater Cambridge landscape – including potentially on the landscape setting of rural historic villages – as they include additional sources of supply on greenfield land. The same applies to the potential effects on heritage assets.

Option 10a - 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt

1.74 This approach would focus new homes and jobs within Cambridge at North East Cambridge, on the edge of Cambridge at Cambridge East, at Green Belt locations on the edge of Cambridge and at an expanded Cambourne, with some limited development in villages. Given that the majority of component elements of Option 10 have not changed in Option 10a, the findings with regard to Option 10 are directly applicable to the new alternative hybrid option, as set out below. Findings in relation to an expanded Cambourne are also included in this option.

1.75 The Sustainability Appraisal found that Option 10 had a range of positive and negative effects, relating to the blend of locations included within it. Development at North East Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities.

1.76 Large urban extensions on the edge of Cambridge in the Green Belt are assumed to provide new services and facilities, as well as being well-located for services, facilities and jobs within Cambridge. There is a risk however that growth around the city could put pressure on amenities within the city, and has potential for adverse impacts on the landscape and historic environment by extending the urban influence of the city and affecting views into and out of the historic centre, thereby affecting the setting of the city.

1.77 Development would be well-located for Cambourne's existing services and facilities whilst providing new and/or expanded facilities too. It is also in a less sensitive area in terms of environmental and historic assets. This option performs relatively poorly within the plan period, as it is unlikely that the full infrastructure to support development will be provided, but it performs well when fully built out. The introduction of a new railway station and the Cambourne to Cambridge Public Transport Scheme will greatly improve sustainable transport options at

this location in the long term, which are likely to be attractive to residents. However, there is some uncertainty about when these will be delivered.

1.78 The small element of growth at villages included in this option would have some positive social and economic effects in particular via the provision of local housing and employment opportunities which thereby may support existing services, and limited negative environmental effects associated with dispersing development.

Option 10a - 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt - Opportunities

1.79 For annual carbon emissions per home, this option performed similar to the mid-range of options previously tested, reflecting the fact that it includes a blend of sources of supply. Emissions per home would be very slightly higher than for Option 9a, based on the assumption that Green Belt suburbs will have marginally worse transport connections and therefore higher related emissions than growth on public transport corridors (i.e. at Cambourne or a new settlement).

1.80 With regard to water, this option includes the larger developments of North East Cambridge, Cambridge Airport and Cambourne, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems. There are however opportunities to supply Cambourne with fresh water from outside the area easing likely short term local supply shortages.

1.81 As with Strategic Spatial Option 9a, development at North East Cambridge, Cambridge Airport and North West Cambridge provide greater opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits.

1.82 Additional supply in the Green Belt Fringe provides an opportunity for urban extensions to cater for GI deficits in neighbouring urban areas. There are also opportunities associated with the requirement of the NPPF for the release of Green Belt sites to positively enhance the remaining Green Belt.

1.83 With regard to the effects on landscape, development in the Western Cluster as an extension to Cambourne is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth.

1.84 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.85 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting. Cambridge North Station provides a highly accessible access node and public transport to other locations can be enhanced.

1.86 The development of a new employment offer in other edge of Cambridge - Green Belt locations is likely to be successful over time given existing sector strengths, levels of demand and forecast employment growth in Greater Cambridge, although there will be location-specific sensitivities depending on proximity to other economic activity.

1.87 These strategic locations as a whole would provide a good range of employment use types.

1.88 Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support

economic growth.

1.89 East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. These strategic locations as a whole would provide a good range of employment use types.

1.90 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites being to deliver.

1.91 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option, between that achieved by Options 1 and 2. Given this, this option is likely to limit the need for completely new transport infrastructure beyond that already planned, in comparison with those spatial options that have a much more dispersed approach.

Option 10a – 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt – Challenges

1.92 There may be some constraints for development in the Green Belt for this hybrid option because existing fluvial and surface water flood risk may make individual sites difficult to deliver, but this depends upon location.

1.93 Additional local wastewater treatment capacity connected to growth at Cambourne would need to be provided to enable further development at the location.

1.94 For green infrastructure there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites and opportunities to increase the permeability of the urban area will be needed

so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that development is designed to consider the current habitat networks within the site and avoid habitat fragmentation.

1.95 For the strategic development locations, development presents risks to the existing GI network; particularly relating to increased recreational pressure on nearby sites, and potential impacts on wetland assets to the east and north east. Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. There is also a risk of development (dwellings or supporting infrastructure) extending or exacerbating existing north-south severance.

1.96 With regard to townscape, densification of the Cambridge urban area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.97 There is some sensitivity within Green Belt corridors that protrude into urban areas where assets are at greatest risk of fragmentation or severance.

1.98 With regard to townscape, densification of the Cambridge Urban Area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.99 For landscape, development at Cambridge Airport on the edge of Cambridge outside of the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.100 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key

views experienced from the Gog Magog Chalk Hills. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.101 Development within the Green Belt could result in landscape changes that would alter the setting of the City, particularly in relation to the historic core. Depending on the location of development, this could include impacts on the character of the Fens, Cam River Valley, Western Claylands, Lowland Claylands and Gog Magog Chalk Hills landscapes, and potentially on key views of the City such as from the Gog Magog Hills and Wimpole Ridge. It may also contribute to an increased sense of coalescence with some of the rural villages in close proximity to the City.

1.102 Heritage impacts relating to this option are categorised as moderate. Appropriate design responses in terms of building heights and layout at the key sites at North East Cambridge, Cambridge Airport and Cambourne will reduce risks for these sites. For other smaller dispersed sites, location and scale will be important matters to managing risk. Green Belt development has a higher risk of policy conflict. Given this, it is considered that there are significant risks that are unlikely to be addressed through mitigation.

1.103 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.104 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.105 Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations.

However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.

1.106 If the phasing of East-West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at the mid-latter part of the plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.

1.107 Lead-in times are extended for the Edge of Cambridge site(s) compared to other options due to the requirement to release Green Belt land through an adopted plan before applications can be approved (i.e. applications cannot be "twin-tracked" during plan-making unless "very special circumstances" can be demonstrated). The lead-in times are dependent on the size and complexity of the sites allocated.

1.108 There is also potential for the Green Belt site allocations to compete with North East, North West Cambridge and Cambridge Airport and reduce delivery rates under this scenario as they would be delivering a similar product in a similar location concurrently at scale.

1.109 The additional homes on the edge of Cambridge would require support from either new or improved transport infrastructure connecting this growth to jobs and local amenities. New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.110 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

Option 11a - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement

1.111 This approach would focus new homes and jobs primarily within Cambridge at North East Cambridge, on the edge of Cambridge at Cambridge East, at an extension of Cambridge Biomedical Campus, at an expanded Royston and at a new settlement, with some limited development in villages.

1.112 The elements of Option 11a are the same as Option 9a, except that development at Royston replaces expansion of Cambourne, given that both involve expansion of an existing settlement. For this reason, the assessment below draws directly from the previous findings for Option 9a and adds the sustainability appraisal outcomes, opportunities and challenges related to the expansion of Royston.

1.113 The Sustainability Appraisal found that this option had a range of positive and negative effects relating to the blend of locations included within it.

1.114 Development at North East Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities.

1.115 Development at Royston is expected to bring new services and facilities while benefiting from some existing infrastructure within the town. As Royston is an established market town with a rail station, housing expansion here would likely

not require entirely new transport infrastructure.

1.116 The creation of a new settlement presents an opportunity to deliver a substantial number of homes across various types and tenures, alongside a wide range of services and facilities. Thoughtful design of such a settlement can promote positive outcomes in terms of accessibility, equality, health, climate change mitigation, and air quality. Over time, the settlement is expected to achieve a degree of self-containment.

1.117 New settlements located along strong public transport corridors are likely to benefit from excellent connectivity to services, facilities, and employment centres beyond their immediate area. Additionally, concentrating development in a new settlement can help protect the broader setting of Cambridge, including its heritage assets.

1.118 Careful planning of the new settlement could ensure it avoids areas of higher flood risk. Although its development would require significant greenfield land, it offers the chance to integrate substantial green spaces, supporting climate resilience. The site could also be chosen to avoid impacts on Minerals Safeguarding Areas and Minerals Consultation Areas. Furthermore, the settlement could include high-quality employment space designed to attract investment.

1.119 Housing development on the edge of Royston, within the South Cambridgeshire district, would be relatively far from Cambridge. As a result, it may be more aligned with serving the Stevenage Housing Market Area rather than contributing to Cambridge's housing needs.

1.120 New development areas around Royston would be less connected to the existing town centre, as they would be separated by the A505. This physical barrier could limit convenient access to existing town facilities and make commuting to employment centres in Cambridge or southern towns such as Stevenage or Hertford more likely, potentially increasing car dependency and

reducing sustainability.

Option 11a - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement – Opportunities

1.121 For annual carbon emissions per home it is not possible directly to compare this hybrid strategy with others as no specific assessment of the performance of the Royston spatial option has been undertaken.

1.122 With regard to water, this option includes the larger developments of North East Cambridge and Cambridge Airport, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems. These opportunities could equally apply to strategic scale development at Royston.

1.123 The North East Cambridge, Cambridge Airport and North West Cambridge strategic locations, as well as establishing new settlements on public transport corridors, all provide significant opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits.

1.124 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.125 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting. Cambridge North Station provides a highly accessible access node and public transport to other locations can be enhanced.

1.126 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites begin to deliver.

1.127 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option, particularly with regard to development close to Cambridge.

1.128 Strategic scale development at Royston could provide access to services and facilities planned within the development and existing facilities in the town, including promoting walking and cycling.

1.129 New settlements and larger urban extensions, depending on their size, can be planned to be self-contained by co-locating a broad range of jobs, houses and facilities and services. This provides positive outcomes with regard to equalities and inclusivity.

1.130 New settlements and larger urban extensions, including strategic development at Royston, provide opportunities to deliver new housing at scale towards the mid to latter parts of the plan period. The ability to provide a wide range of dwelling types and sizes is likely, supporting higher delivery rates; and provision of housing for ownership (including self / custom build) and affordable housing are all opportunities arising from this option.

Option 11a - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement - Challenges

1.131 For green infrastructure (GI), there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites, and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that where development is proposed it is designed to

consider the current habitat networks within the site and avoid habitat fragmentation. Development at Royston could have an adverse effect on the Therfield Heath SSSI.

1.132 For the strategic development locations, development presents risks to the existing GI network; particularly relating to increased recreational pressure on nearby sites.

1.133 With regard to townscape, densification of the Cambridge urban area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.134 For landscape, development at Cambridge Airport on the edge of Cambridge outside the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.135 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key views experienced from the Gog Magog Chalk Hills.

1.136 Development at Royston is likely to have an adverse impact on the rural chalklands landscape character due to extensive views of the open low-lying land. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.137 Some heritage impacts can be addressed through appropriate design responses in terms of building heights and layout at the key sites at North East

Cambridge and Cambridge Airport. For the Royston option, development in some locations is likely to affect one or more scheduled monuments. For other smaller dispersed sites, location and scale will be important matters.

1.138 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.139 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.140 Development at Royston would be some distance from the town's rail station and town centre services. As an expansion of an existing market town that has a rail station, housing at this strategic location would likely not need completely new transport infrastructure, although the expansion sites would be relatively distant from the station which would likely limit the number of trips made by sustainable modes. This is likely to place reliance on car travel for longer journeys, with resultant adverse effects on carbon emissions and on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.141 Under all growth options the market's preference would be to see new B1a (offices) and some B1b (R&D) employment space delivered in close proximity to Cambridge. Therefore, spreading employment outside of the city to more dispersed locations such as the Royston option and villages will be contrary to prime office market preferences for the city centre and city fringe locations.

1.142 For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential

pinch points along planned public transport corridors.

1.143 New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.144 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

1.145 For housing, competition with existing committed new settlement sites in the mid to latter part of the plan period may flood the market with similar products in similar locations, thus reducing build-out rates. It is also unlikely to deliver sufficient small sites to meet NPPF requirements.

1.146 Housing provided at Royston would be relatively distant from Cambridge, serving at least in part the Stevenage Housing Market Area.

Option 11b - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne

1.147 This approach would focus new homes and jobs within Cambridge at North East Cambridge, on the edge of Cambridge at Cambridge East, at an extension of Cambridge Biomedical Campus, at an expanded Cambourne and at Royston, with some limited development in villages.

1.148 The component parts of Option 11b are the same as Option 10a, except that development at Royston replaces a new settlement option to create a reasonable alternative to the other hybrid strategies.

1.149 The Sustainability Appraisal found that this option had a range of positive and negative effects relating to the blend of locations included within it.

1.150 Development at North East Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities.

1.151 Development at North East Cambridge and Cambridge East would be well positioned to provide convenient access to local services, facilities, and employment opportunities. This strategic location is likely to reduce the need for car travel, supporting more sustainable transport choices. Additionally, these sites, being larger in scale, offer the potential to introduce new services and facilities, enhancing the overall sustainability of the developments.

1.152 Cambourne already benefits from a range of existing services and facilities. The proposed level of growth in this area means that further infrastructure improvements would be delivered over time, supporting the needs of a growing population and contributing to long-term sustainability.

1.153 Development at Royston is also expected to bring new services and facilities, while benefiting from partial access to existing infrastructure within the town.

1.154 Housing development on the edge of Royston, within the South Cambridgeshire district, would be relatively far from Cambridge. As a result, it is more likely to serve the Stevenage Housing Market Area rather than meeting Cambridge’s housing needs.

1.155 New development areas around Royston would be less integrated with the existing town, as they would be separated from the town centre by the A505. This physical barrier could limit easy access to existing facilities and services, and may encourage commuting to employment hubs in Cambridge or southern towns such as Stevenage or Hertford, potentially increasing car dependency.

1.156 In Cambourne, a significant number of residents currently commute to Cambridge for work. Therefore, further development in the area is expected to lead to an increase in carbon emissions. However, this impact is anticipated to be mitigated through planned improvements to public transport infrastructure, which would support more sustainable travel options.

Option 11b - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne - Opportunities

1.157 As with Option 11a, it is not possible directly to compare this hybrid strategy with others with regard to annual carbon emissions per home as no specific assessment of the performance of the Royston spatial option has been undertaken.

1.158 With regard to water, this option includes the larger developments of North East Cambridge, Cambridge Airport and Cambourne, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems. These opportunities could equally apply to strategic scale development at Royston. There are opportunities to supply Cambourne with fresh water from outside the area easing likely short term local supply shortages.

1.159 As with Strategic Spatial Option 11a, development at North East Cambridge, Cambridge Airport and North West Cambridge provide greater opportunities for integrating a wide range of green infrastructure given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits.

1.160 With regard to the effects on landscape, development in the Western Cluster as an extension to Cambourne is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth.

1.161 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.162 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting. Cambridge North Station provides a highly accessible access node and public transport to other locations can be enhanced.

1.163 Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support economic growth.

1.164 East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. These strategic locations as a whole would provide a good range of employment use types.

1.165 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites begin to deliver.

1.166 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option, particularly with regard to development close to Cambridge.

1.167 Strategic scale development at Royston could provide access to services and facilities planned within the development and existing facilities in the town, including promoting walking and cycling.

1.168 Larger urban extensions, including strategic development at Royston, provide opportunities to deliver new housing at scale towards the mid to latter parts of the plan period. The ability to provide a wide range of dwelling types and sizes is likely, supporting higher delivery rates; and provision of housing for ownership (including self/custom build) and affordable housing are all opportunities arising from this option.

Option 11b – 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne – Challenges

1.169 Additional local wastewater treatment capacity connected to growth at Cambourne would need to be provided to enable further development at the location.

1.170 For green infrastructure there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that development is designed to consider the current habitat networks within the site and avoid habitat fragmentation. Development at Royston could have an adverse effect on the Therfield Heath SSSI.

1.171 For the strategic development locations, development presents risks to the existing green infrastructure network; particularly relating to increased recreational pressure on nearby sites, and potential impacts on wetland assets to the east and north east. Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. There is also a risk of development (dwellings or supporting infrastructure) extending or exacerbating existing north-south severance.

1.172 With regard to townscape, densification of the Cambridge Urban Area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.173 For landscape, development at Cambridge Airport on the edge of Cambridge outside of the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.174 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key views experienced from the Gog Magog Chalk Hills.

1.175 Development at Royston is likely to have an adverse impact on the rural chalklands landscape character due to extensive views of the open low-lying land. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.176 Some heritage impacts can be addressed through appropriate design responses in terms of building heights and layout at the key sites at North East Cambridge, Cambridge Airport and Cambourne. For the Royston option, development in some locations is likely to affect one or more scheduled monuments. For other smaller dispersed sites, location and scale will be important matters.

1.177 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.178 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.179 Development at Royston would be some distance from the town's rail station and town centre services. As an expansion of an existing market town that has a rail station, housing at this strategic location would likely not need completely new transport infrastructure, although the expansion sites would be relatively distant from the station which would likely limit the number of trips made by sustainable modes. This is likely to place reliance on car travel for longer journeys, with resultant adverse effects on carbon emissions and on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.180 Under all growth options the market's preference would be to see new B1a (offices) and some B1b (R&D) employment space delivered in close proximity to Cambridge. Therefore, spreading employment outside of the city to more dispersed locations such as the Royston option and villages will be contrary to prime office market preferences for the city centre and city fringe locations.

1.181 Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations. However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.

1.182 If the phasing of East West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at

the mid-latter part of the plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.

1.183 As noted above with regard to Option 11a, housing provided at Royston would be relatively distant from Cambridge, serving at least in part the Stevenage Housing Market Area.

1.184 For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential pinch points along planned public transport corridors.

1.185 New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.186 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

Appendix 1F: Greater Cambridge Local Plan Strategic Spatial Options: 9b, 10b, 11ai and 11bi – alternative hybrid strategies with no further development allocated at North East Cambridge

Part 1: Strategic spatial options methodology supplement

Introduction

1.187 This note forms a supplement to the Greater Cambridge Local Plan Strategic Spatial Options for Testing – Methodology, November 2020, Greater Cambridge Local Plan First Proposals Development Strategy Topic Paper 2021 Appendix 1F: Greater Cambridge Local Plan Strategic Spatial Options for Testing – Methodology – Supplement, August 2021, and Greater Cambridge Local Plan Strategy topic paper Appendix 1E: Greater Cambridge Local Plan Strategic Spatial Options: 9a, 10a, 11a and 11b – alternative hybrid strategies. It sets out four strategic (non-site specific) spatial options to be tested through the Greater Cambridge Local Plan process (in addition to the eight previously identified options tested in autumn 2020, two further options tested in summer 2021, and four additional options tested in 2025). The need to identify these additional strategic options is to respond to the change in context for development at the North East Cambridge site. The previously proposed development scenario involving comprehensive mixed use development included in all of the spatial options identified at preferred options and draft plan stage, is no longer assessed as achievable in the plan period. This leaves only very limited capacity for homes within the site from existing supply - an existing adopted allocation and a site with outline planning permission, relied upon within the housing trajectory – and a small amount of further development potential on other sites subject to addressing and/or mitigating various site-specific constraints.

1.188 The four options have been considered in terms of transport, climate change and other impacts, and have been subject to sustainability appraisal, to inform the selection of a preferred option for the Local Plan. See Part 2: Summary Evidence Base Report below.

1.189 Drawing on the assessments of the strategic spatial options tested in November 2020, 2021 and 2025, the Councils have identified the following four strategic spatial options for testing to inform the Proposed Submission development strategy:

- 9b: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne (no further development allocated at North East Cambridge)
- 10b: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne (no further development allocated at North East Cambridge)
- 11ai - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement (no further development allocated at North East Cambridge)
- 11bi - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne (no further development allocated at North East Cambridge).

1.190 These options are identical to options 9, 10, 11a and 11b that were tested at the draft plan stage (see Appendix 1E: Greater Cambridge Local Plan Strategic Spatial Options: 9a, 10a, 11a and 11b – alternative hybrid strategies), except that they do not assume any further allocations for development at North East Cambridge (beyond that already included within existing supply). As for the draft plan strategic options, the differences between the four are that:

- Option 9b includes development at an expanded Cambourne and a non-site specific new settlement location,
- Option 10b includes development at an expanded Cambourne and a non-site specific edge of Cambridge - Green Belt location,
- Option 11ai includes development at an expanded Royston and a non-site specific new settlement location, and
- Option 11bi includes: includes development at an expanded Cambourne and at an expanded Royston.

1.191 To ensure a comparable understanding of the benefits and disadvantages of each, the same proportionate testing was undertaken as at previous stages (see further in Part 2: summary evidence base report to this appendix), noting the strong similarities between these new hybrid options and the two hybrid options tested in preparing the First Proposals (SO9 First Proposals including Cambourne and SO10 hybrid strategy alternative including Green Belt).

Part 2: Summary evidence base report

Introduction

1.1 This section summarises the opportunities, challenges and outcomes of evidence-based and sustainability testing associated with the four alternative hybrid strategies set out above in Appendix 1F - Part 1.

1.2 There is a substantive amount of evidence that has been developed to date that remains relevant; and a preferred hybrid strategy was established at the First Proposals and added to (rather than being fundamentally revised) at draft plan, the previous formal stage of the plan's progress. Consequently, the summaries provided in this appendix build on this established work. Given this necessary continuity across the stages of the plan's progress, this appendix should be read in conjunction with Appendix 1G of the Greater Cambridge Local Plan: Development Strategy Topic Paper (2021); and the Greater Cambridge Local Plan: Development Strategy Update (January 2023).

1.3 More specifically, the alternative hybrid strategies 9b, 10b, 11ai and 11bi are identical to draft plan Options 9a and 10a, 11a and 11b except that they include no further development allocated at North East Cambridge, and therefore also on Options 9 and 10, the previous hybrid strategies which were assessed in the First Proposals. Indeed, for all four options most of the component elements are unchanged from Options 9 and 10, and Options 9b and 10b are comprised of component broad locations that have all been tested via our evidence bases and Sustainability Appraisal for previous stages of strategic options testing. As such, it is appropriate to rely on this already published information to provide an understanding of the performance of the new options. No further carbon or transport modelling has been completed to inform this assessment, such that previous quantitative comparisons with earlier options 1-8 have been excluded from this analysis.

1.4 The only broad location not tested prior to draft plan is the expanding a market

town – Royston broad location included within options 11ai and 11bi. While no specific evidence has been commissioned with regard to this broad location, in many instances the existing strategic options evidence bases can reasonably be used to infer the likely challenges and opportunities that will arise from it. In addition, some issues can be taken into account at a broad strategic level from the HELAA assessments of the specific sites adjacent to Royston that comprise this spatial option. Where it is not possible to assess how this location might perform with regard to a particular topic, then this is stated as such within the summary of challenges and opportunities. In particular, no carbon or transport modelling has been completed of the performance of the Royston broad location.

1.5 The Sustainability Appraisal supporting the Proposed Submission plan has been completed for all four strategic options. The individual evidence base assessments and Sustainability Appraisal supplement reports from previous stages are also available on the Greater Cambridge Shared Planning website.

Evidence base assessments

9b: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne (no further development allocated at North East Cambridge)

1.6 This approach would focus new homes and jobs primarily within Cambridge at North West Cambridge, on the edge of Cambridge at Cambridge East, at an extension of Cambridge Biomedical Campus, and at an expanded Cambourne and at a new settlement, with some limited development in villages.

1.7 The elements of Option 9b are the same as Option 9, except for the exclusion of further development at North East Cambridge and the inclusion of a new settlement. For this reason, the assessment below draws directly from the previous findings for Option 9 (excluding findings applicable only to North East Cambridge) and adds the sustainability appraisal outcomes, opportunities and challenges related to new settlements.

1.8 The Sustainability Appraisal found that this option had a range of positive

and negative effects relating to the blend of locations included within it.

Development at Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. This site would also provide benefits as a larger development providing new services and facilities. Development would be well-located for Cambourne's existing services and facilities whilst providing new and/or expanded facilities too. It is also in a less sensitive area in terms of environmental and historic assets. This option performs relatively poorly within the plan period, as it is unlikely that the full infrastructure to support development will be provided, but it performs well when fully built out. The introduction of a new railway station and the Cambourne to Cambridge Public Transport Scheme will greatly improve sustainable transport options at this location in the long term, which are likely to be attractive to residents. However, there is some uncertainty about when these will be delivered.

1.9 The small element of growth at villages included in this option would have some positive social and economic effects in particular via the provision of local housing and employment opportunities which thereby may support existing services, and limited negative environmental effects associated with dispersing development.

1.10 The Sustainability Appraisal found that new settlements would establish a whole new town or village, providing homes, jobs and supporting infrastructure in a new location, and would need to be supported by strategic transport infrastructure connecting to Cambridge.

1.11 The Sustainability Appraisal concludes that the new settlements option performs well in terms of social objectives, particularly when fully built out, as all new settlements are expected to be of a size that provides for the day to day needs of residents. This includes provision of features such as schools, health care, recreation and leisure facilities. In addition, new settlements can be designed in a way that encourages walking and cycling and incorporates good green infrastructure networks.

1.12 However, new settlements result in large-scale landscape change and may be of a scale where it is difficult to avoid intersecting with environmental or heritage assets, areas at risk of flooding or source protection zones. In addition, new settlements have a long lead-in time this may lead to a lack of housing availability from this source earlier in the plan period and a period of disconnect between when housing is delivered and when jobs and supporting infrastructure is delivered. In order to ensure sustainable behaviours are encouraged in new settlements, it is important to avoid the need for residents to travel for work and services at the outset, otherwise these may become ingrained travel patterns.

9b: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne (no further development allocated at North East Cambridge) - opportunities

1.13 For annual carbon emissions per home, this option would be likely to perform similarly to the mid-range of options previously tested, reflecting the fact that it includes a blend of sources of supply.

1.14 With regard to water, this option includes the larger developments of Cambridge Airport and Cambourne, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems.

1.15 There are however opportunities to supply Cambourne with fresh water from outside the area easing likely short term local supply shortages.

1.16 The Cambridge Airport and North West Cambridge strategic locations provide significant opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits. Other locations provide the opportunity to introduce GI connectivity across the A428 corridor. There is potential to further develop active transport connections linking GI assets.

1.17 With regard to the effects on landscape, development in the Western Cluster

as an extension to Cambourne is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth.

1.18 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.19 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting.

1.20 Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support economic growth.

1.21 East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. These strategic locations as a whole would provide a good range of employment use types.

1.22 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites begin to deliver.

1.23 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option. Given this, this option is likely to limit the need for completely new transport infrastructure beyond that already planned, in comparison with those spatial

options that have a much more dispersed approach.

1.24 As noted above, these findings apply equally to Option 9b, given that the same locations and development typologies are involved (and excluding findings applicable only to North East Cambridge). The following findings relate to the additional element of a new settlement.

1.25 With regard to carbon emissions, new settlements would result in mid-range transport carbon emissions. However, embodied carbon is high due to the need for additional supporting infrastructure and the likely predominance of larger houses rather than more efficient flats.

1.26 This option performs well with regard to water, as site selection can result in known or expected low flood risk, and large sites with good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems.

1.27 Establishing new settlements on public transport corridors provides an opportunity to integrate a wider range of green infrastructure opportunities associated with larger scale development. Landscape-led masterplanning could accommodate generous GI provision to avoid risk of impact on nearby wetland habitats and water resources.

1.28 New settlements, depending on their size, can be planned to be self-contained by co-locating a broad range of jobs, houses and facilities and services. This provides positive outcomes with regard to equalities and inclusivity. Development in new settlements or large urban extensions provide a ‘clean slate’ whereby new accessible buildings, streets and the public realm can be designed from the outset to cater for all abilities and needs. This option may be likely to include new healthcare services on site. New settlements (larger existing settlements) could act as a local hub for surrounding smaller communities, to avoid the need to travel longer distances to market towns or Cambridge for all their needs, provided access issues could be overcome.

1.29 New settlements provide opportunities for high quality and distinctive housing design that is responsive to local character and creates a strong sense of place through a comprehensive masterplanning process. There may also be opportunities to avoid heritage impacts, but would depend on location.

1.30 New settlements provide opportunities to deliver new housing at scale towards the mid to latter parts of the plan period. The ability to provide a wide range of dwelling types and sizes is likely, supporting higher delivery rates; and provision of housing for ownership (including self / custom build) and affordable housing are all opportunities arising from this option.

1.31 New settlement development will be well suited to accommodating the full range of employment land uses, including offices, labs and warehousing industrial given opportunities for available land. This suggests that spatial proximity is unlikely to be a key factor in generating new economic development, although professional services offices in particular cluster near to the city. The south / south east of South Cambridgeshire has generally been more successful in developing life science related employment. The location of a new settlement may therefore have a bearing on its level of employment success.

9b: 2025 growth option: Hybrid spatial strategy including new settlement, and expanding Cambourne (no further development allocated at North East Cambridge) – Challenges

1.32 Additional local treatment capacity connected to growth at Cambourne would need to be provided to enable further development at the location.

1.33 For green infrastructure (GI), there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites, and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that where development is proposed it is designed to consider the current habitat networks within the site and avoid habitat fragmentation.

1.34 For the strategic development locations, development presents risks to the existing GI network; particularly relating to increased recreational pressure on nearby sites, and the potential for impacts on wetland assets to the east and north-east.

1.35 Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. There is also a risk of development (dwellings or supporting infrastructure) extending or exacerbating existing north-south severance.

1.36 With regard to townscape, densification of the Cambridge urban area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.37 For landscape, development at Cambridge Airport on the edge of Cambridge outside the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.38 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key views experienced from the Gog Magog Chalk Hills. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.39 Heritage impacts relating to this option are categorised as low / moderate. Appropriate design responses in terms of building heights and layout at the key sites at Cambridge Airport and Cambourne will reduce risks. For other smaller dispersed sites, location and scale will be important matters. Overall, no significant risks are anticipated that cannot be addressed through mitigation.

1.40 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.41 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.42 Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations. However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.

1.43 If the phasing of East West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at the mid-latter part of the plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.

1.44 For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential pinch points along planned public transport corridors.

1.45 New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will

be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.46 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

1.47 The above challenges related to Option 9 and remain relevant with regard to Option 9b. The following additional challenges related to new settlements are relevant as this is the only different element between Options 9b and 10b.

1.48 Reliance on conventional public transport may not be an option for people with some disabilities. Depending on the location of new settlements and supporting infrastructure, there is an increased risk of impact on nature sites with an international designation and/or functionally linked habitat.

1.49 For housing, competition with existing committed new settlement sites in the mid to latter part of the plan period may flood the market with similar products in similar locations, thus reducing build-out rates. It is also unlikely to deliver sufficient small sites to meet NPPF requirements.

1.50 Under all growth options the market's preference would be to see new B1a (offices) and some B1b (R&D) employment space delivered in close proximity to the city.

1.51 Depending on the scale of development there could be impacts on the Greater Cambridge landscape – including potentially on the landscape setting of rural historic villages – as they include additional sources of supply on greenfield land. The same applies to the potential effects on heritage assets.

10b: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne (no further development allocated at North East Cambridge)

1.52 This approach would focus new homes and jobs within Cambridge at North West Cambridge, on the edge of Cambridge at Cambridge East, at Green Belt locations on the edge of Cambridge and at an expanded Cambourne, with some limited development in villages.

1.53 Given that the majority of component elements of Option 10 have not changed in Option 10b (except for the exclusion of further development at North East Cambridge), the findings with regard to Option 10 are directly applicable to the new alternative hybrid option, as set out below. Findings in relation to an expanded Cambourne are also included in this option.

1.54 The Sustainability Appraisal found that Option 10 had a range of positive and negative effects, relating to the blend of locations included within it. Development at Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. This site would also provide benefits as a larger development providing new services and facilities.

1.55 Large urban extensions on the edge of Cambridge in the Green Belt are assumed to provide new services and facilities, as well as being well-located for services, facilities and jobs within Cambridge. There is a risk however that growth around the city could put pressure on amenities within the city, and has potential for adverse impacts on the landscape and historic environment by extending the urban influence of the city and affecting views into and out of the historic centre, thereby affecting the setting of the city.

1.56 Development would be well-located for Cambourne's existing services and facilities whilst providing new and/or expanded facilities too. It is also in a less sensitive area in terms of environmental and historic assets. This option performs relatively poorly within the plan period, as it is unlikely that the full infrastructure to support development will be provided, but it performs well when fully built out.

The introduction of a new railway station and the Cambourne to Cambridge Public Transport Scheme will greatly improve sustainable transport options at this location in the long term, which are likely to be attractive to residents. However, there is some uncertainty about when these will be delivered.

1.57 The small element of growth at villages included in this option would have some positive social and economic effects in particular via the provision of local housing and employment opportunities which thereby may support existing services, and limited negative environmental effects associated with dispersing development.

10b: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne (no further development allocated at North East Cambridge) - Opportunities

1.58 For annual carbon emissions per home, this option would be likely to perform similar to the mid-range of options previously tested, reflecting the fact that it includes a blend of sources of supply.

1.59 With regard to water, this option includes the larger developments of Cambridge Airport and Cambourne, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems. There are however opportunities to supply Cambourne with fresh water from outside the area easing likely short term local supply shortages.

1.60 As with Strategic Spatial Option 9b, development at Cambridge Airport and North West Cambridge provide greater opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits.

1.61 Additional supply in the Green Belt Fringe provides an opportunity for urban extensions to cater for GI deficits in neighbouring urban areas. There are also opportunities associated with the requirement of the NPPF for the release of Green Belt sites to positively enhance the remaining Green Belt.

1.62 With regard to the effects on landscape, development in the Western Cluster as an extension to Cambourne is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth.

1.63 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.64 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting.

1.65 The development of a new employment offer in other edge of Cambridge - Green Belt locations is likely to be successful over time given existing sector strengths, levels of demand and forecast employment growth in Greater Cambridge, although there will be location-specific sensitivities depending on proximity to other economic activity.

1.66 These strategic locations as a whole would provide a good range of employment use types.

1.67 Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support economic growth.

1.68 East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. These strategic locations as a whole would provide a good range of employment use types.

1.69 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites being to deliver.

1.70 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option. Given this, this option is likely to limit the need for completely new transport infrastructure beyond that already planned, in comparison with those spatial options that have a much more dispersed approach.

10b: 2025 growth option: Hybrid spatial strategy including Edge of Cambridge: Green Belt, and expanding Cambourne (no further development allocated at North East Cambridge) – Challenges

1.71 There may be some constraints for development in the Green Belt for this hybrid option because existing fluvial and surface water flood risk may make individual sites difficult to deliver, but this depends upon location.

1.72 Additional local wastewater treatment capacity connected to growth at Cambourne would need to be provided to enable further development at the location.

1.73 For green infrastructure there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island

effect. It is also important that development is designed to consider the current habitat networks within the site and avoid habitat fragmentation.

1.74 For the strategic development locations, development presents risks to the existing GI network; particularly relating to increased recreational pressure on nearby sites, and potential impacts on wetland assets to the east and north east. Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. There is also a risk of development (dwellings or supporting infrastructure) extending or exacerbating existing north-south severance.

1.75 With regard to townscape, densification of the Cambridge urban area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.76 There is some sensitivity within Green Belt corridors that protrude into urban areas where assets are at greatest risk of fragmentation or severance.

1.77 With regard to townscape, densification of the Cambridge Urban Area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.78 For landscape, development at Cambridge Airport on the edge of Cambridge outside of the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.79 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge and may have an impact on key

views experienced from the Gog Magog Chalk Hills. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.80 Development within the Green Belt could result in landscape changes that would alter the setting of the City, particularly in relation to the historic core. Depending on the location of development, this could include impacts on the character of the Fens, Cam River Valley, Western Claylands, Lowland Claylands and Gog Magog Chalk Hills landscapes, and potentially on key views of the City such as from the Gog Magog Hills and Wimpole Ridge. It may also contribute to an increased sense of coalescence with some of the rural villages in close proximity to the City.

1.81 Heritage impacts relating to this option are categorised as moderate. Appropriate design responses in terms of building heights and layout at the key sites at Cambridge Airport and Cambourne will reduce risks for these sites. For other smaller dispersed sites, location and scale will be important matters to managing risk. Green Belt development has a higher risk of policy conflict. Given this, it is considered that there are significant risks that are unlikely to be addressed through mitigation.

1.82 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.83 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.84 Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations.

However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.

1.85 If the phasing of East-West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at the mid-latter part of the plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.

1.86 Lead-in times are extended for the Edge of Cambridge site(s) compared to other options due to the requirement to release Green Belt land through an adopted plan before applications can be approved (i.e. applications cannot be “twin-tracked” during plan-making unless “very special circumstances” can be demonstrated). The lead-in times are dependent on the size and complexity of the sites allocated.

1.87 There is also potential for the Green Belt site allocations to compete with North West Cambridge and Cambridge Airport and reduce delivery rates under this scenario as they would be delivering a similar product in a similar location concurrently at scale.

1.88 The additional homes on the edge of Cambridge would require support from either new or improved transport infrastructure connecting this growth to jobs and local amenities. New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.89 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

11ai - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement (no further development allocated at North East Cambridge)

1.90 This approach would focus new homes and jobs primarily within Cambridge at North West Cambridge, on the edge of Cambridge at Cambridge East, at an extension of Cambridge Biomedical Campus, at an expanded Royston and at a new settlement, with some limited development in villages.

1.91 The elements of Option 11ai are the same as Option 9, except for the exclusion of further development at North East Cambridge and that development at Royston replaces expansion of Cambourne, noting that both options involve expansion of an existing settlement. For this reason, the assessment below draws directly from the previous findings for Option 9 and adds the sustainability appraisal outcomes, opportunities and challenges related to the expansion of Royston.

1.92 The Sustainability Appraisal found that this option had a range of positive and negative effects relating to the blend of locations included within it.

1.93 Development at Cambridge East would result in development well located to access local services, facilities and jobs and would likely minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities.

1.94 Development at Royston is expected to bring new services and facilities while benefiting from some existing infrastructure within the town. As Royston is an

established market town with a rail station, housing expansion here would likely not require entirely new transport infrastructure.

1.95 The creation of a new settlement presents an opportunity to deliver a substantial number of homes across various types and tenures, alongside a wide range of services and facilities. Thoughtful design of such a settlement can promote positive outcomes in terms of accessibility, equality, health, climate change mitigation, and air quality. Over time, the settlement is expected to achieve a degree of self-containment.

1.96 New settlements located along strong public transport corridors are likely to benefit from excellent connectivity to services, facilities, and employment centres beyond their immediate area. Additionally, concentrating development in a new settlement can help protect the broader setting of Cambridge, including its heritage assets.

1.97 Careful planning of the new settlement could ensure it avoids areas of higher flood risk. Although its development would require significant greenfield land, it offers the chance to integrate substantial green spaces, supporting climate resilience. The site could also be chosen to avoid impacts on Minerals Safeguarding Areas and Minerals Consultation Areas. Furthermore, the settlement could include high-quality employment space designed to attract investment.

1.98 Housing development on the edge of Royston, within the South Cambridgeshire district, would be relatively far from Cambridge. As a result, it may be more aligned with serving the Stevenage Housing Market Area rather than contributing to Cambridge's housing needs.

1.99 New development areas around Royston would be less connected to the existing town centre, as they would be separated by the A505. This physical barrier could limit convenient access to existing town facilities and make commuting to employment centres in Cambridge or southern towns such as Stevenage or Hertford more likely, potentially increasing car dependency and

reducing sustainability.

11ai - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement (no further development allocated at North East Cambridge)– Opportunities

1.1 For annual carbon emissions per home it is not possible directly to compare this hybrid strategy with others as no specific assessment of the performance of the Royston spatial option has been undertaken.

1.2 With regard to water, this option includes the larger developments of Cambridge Airport, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems. These opportunities could equally apply to strategic scale development at Royston.

1.3 The Cambridge Airport and North West Cambridge strategic locations, as well as establishing new settlements on public transport corridors, all provide significant opportunities for integrating a wide range of green infrastructure (GI) given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits.

1.4 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.5 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting. Cambridge North Station provides a highly accessible access node and public transport to other locations can be enhanced.

1.6 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as

positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites begin to deliver.

1.7 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option, particularly with regard to development close to Cambridge.

1.8 Strategic scale development at Royston could provide access to services and facilities planned within the development and existing facilities in the town, including promoting walking and cycling.

1.9 New settlements and larger urban extensions, depending on their size, can be planned to be self-contained by co-locating a broad range of jobs, houses and facilities and services. This provides positive outcomes with regard to equalities and inclusivity.

1.10 New settlements and larger urban extensions, including strategic development at Royston, provide opportunities to deliver new housing at scale towards the mid to latter parts of the plan period. The ability to provide a wide range of dwelling types and sizes is likely, supporting higher delivery rates; and provision of housing for ownership (including self / custom build) and affordable housing are all opportunities arising from this option.

11ai - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston and a new settlement (no further development allocated at North East Cambridge) - Challenges

1.11 For green infrastructure (GI), there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites, and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that where development is proposed it is designed to consider the current habitat networks within the site and avoid habitat fragmentation. Development at Royston could have an adverse effect on the

Therfield Heath SSSI.

1.12 For the strategic development locations, development presents risks to the existing GI network; particularly relating to increased recreational pressure on nearby sites.

1.13 With regard to townscape, densification of the Cambridge urban area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.14 For landscape, development at Cambridge Airport on the edge of Cambridge outside the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.15 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key views experienced from the Gog Magog Chalk Hills.

1.16 Development at Royston is likely to have an adverse impact on the rural chalklands landscape character due to extensive views of the open low-lying land. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

Some heritage impacts can be addressed through appropriate design responses in terms of building heights and layout at the key sites at North West Cambridge and Cambridge Airport. For the Royston option, development in some locations is likely to affect one or more scheduled monuments. For other smaller dispersed sites, location and scale will be important matters.

1.17 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.18 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.19 Development at Royston would be some distance from the town's rail station and town centre services. As an expansion of an existing market town that has a rail station, housing at this strategic location would likely not need completely new transport infrastructure, although the expansion sites would be relatively distant from the station which would likely limit the number of trips made by sustainable modes. This is likely to place reliance on car travel for longer journeys, with resultant adverse effects on carbon emissions and on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.20 Under all growth options the market's preference would be to see new B1a (offices) and some B1b (R&D) employment space delivered in close proximity to Cambridge. Therefore, spreading employment outside of the city to more dispersed locations such as the Royston option and villages will be contrary to prime office market preferences for the city centre and city fringe locations.

For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential pinch points along planned public transport corridors.

1.21 New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will be critical mass

issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.22 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.

1.23 For housing, competition with existing committed new settlement sites in the mid to latter part of the plan period may flood the market with similar products in similar locations, thus reducing build-out rates. It is also unlikely to deliver sufficient small sites to meet NPPF requirements.

1.24 Housing provided at Royston would be relatively distant from Cambridge, serving at least in part the Stevenage Housing Market Area.

11bi - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne (no further development allocated at North East Cambridge)

This approach would focus new homes and jobs within Cambridge at North West Cambridge, on the edge of Cambridge at Cambridge East, at an extension of Cambridge Biomedical Campus, at an expanded Cambourne and at Royston, with some limited development in villages.

1.25 The component parts of Option 11bi are the same as Option 10, except for the exclusion of further development at North East Cambridge and that development at Royston replaces a new settlement option to create a reasonable alternative to the other hybrid strategies.

1.26 The Sustainability Appraisal found that this option had a range of positive and negative effects relating to the blend of locations included within it.

1.27 Development at North West Cambridge and Cambridge East would result in development well located to access local services, facilities and jobs and would likely

minimise the need to travel by car. These sites would also provide benefits as larger developments providing new services and facilities.

1.28 Development at North West Cambridge and Cambridge East would be well positioned to provide convenient access to local services, facilities, and employment opportunities. This strategic location is likely to reduce the need for car travel, supporting more sustainable transport choices. Additionally, these sites, being larger in scale, offer the potential to introduce new services and facilities, enhancing the overall sustainability of the developments.

1.29 Cambourne already benefits from a range of existing services and facilities. The proposed level of growth in this area means that further infrastructure improvements would be delivered over time, supporting the needs of a growing population and contributing to long-term sustainability.

1.30 Development at Royston is also expected to bring new services and facilities, while benefiting from partial access to existing infrastructure within the town.

1.31 Housing development on the edge of Royston, within the South Cambridgeshire district, would be relatively far from Cambridge. As a result, it is more likely to serve the Stevenage Housing Market Area rather than meeting Cambridge's housing needs.

1.32 New development areas around Royston would be less integrated with the existing town, as they would be separated from the town centre by the A505. This physical barrier could limit easy access to existing facilities and services, and may encourage commuting to employment hubs in Cambridge or southern towns such as Stevenage or Hertford, potentially increasing car dependency.

1.33 In Cambourne, a significant number of residents currently commute to Cambridge for work. Therefore, further development in the area is expected to lead to an increase in carbon emissions. However, this impact is anticipated to be mitigated through planned improvements to public transport infrastructure, which would

support more sustainable travel options.

11bi - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne (no further development allocated at North East Cambridge) - Opportunities

1.34 As with Option 11ai, it is not possible directly to compare this hybrid strategy with others with regard to annual carbon emissions per home as no specific assessment of the performance of the Royston spatial option has been undertaken.

1.35 With regard to water, this option includes the larger developments of Cambridge Airport and Cambourne, which would have good opportunities for blue-green infrastructure, flood risk reduction and high-quality resilient water recycling systems. These opportunities could equally apply to strategic scale development at Royston. There are opportunities to supply Cambourne with fresh water from outside the area easing likely short term local supply shortages.

1.36 As with Strategic Spatial Option 11ai, development at Cambridge Airport and North West Cambridge provide greater opportunities for integrating a wide range of green infrastructure given the larger scale of development in a single location. There is opportunity to create a GI network across these sites in an innovative and coherent manner which maximises benefits.

1.37 With regard to the effects on landscape, development in the Western Cluster as an extension to Cambourne is likely to result in localised changes to the character of the Wooded Clayland landscape around Cambourne, which is considered to offer potential opportunities to accommodate growth.

1.38 An urban and edge of Cambridge focus would promote equality and inclusivity by providing more people with access to a range of sustainable modes of travel. It would be more inclusive to more people as Cambridge has the broadest range of services and facilities and is the focus for many jobs; including the potential to invest and spread benefits of growth in areas of Cambridge which includes some of the most deprived wards in Cambridgeshire.

1.39 Locations within and close to Cambridge would provide highly accessible employment opportunities to a significant labour pool in the city with short and sustainable modes of commuting. Cambridge North Station provides a highly accessible access node and public transport to other locations can be enhanced.

1.40 Employment located at transport nodes around Cambourne will broadly enable good labour market accessibility to employment locations and support economic growth.

1.41 East West Rail and the Greater Cambridge Cambourne to Cambridge Public Transport Scheme are likely to significantly improve accessibility, enhancing commutability. These strategic locations as a whole would provide a good range of employment use types.

1.42 For housing, proximity to employment and the ability to provide specialist housing because of existing facilities, services and amenities are seen as positives. Densification of Cambridge and also allocations at the villages will provide early delivery post adoption until new strategic sites begin to deliver.

1.43 Locating homes close to jobs gives the best chance to improve walking, cycling and public transport potential. A high level of active mode travel (walking and cycling) and low car mode share is likely to be seen in this option, particularly with regard to development close to Cambridge.

1.44 Strategic scale development at Royston could provide access to services and facilities planned within the development and existing facilities in the town, including promoting walking and cycling.

1.45 Larger urban extensions, including strategic development at Royston, provide opportunities to deliver new housing at scale towards the mid to latter parts of the plan period. The ability to provide a wide range of dwelling types and sizes is likely, supporting higher delivery rates; and provision of housing for ownership (including self/custom build) and affordable housing are all opportunities arising from this option.

11bi - 2025 growth option: Hybrid spatial strategy including expanding an existing market town: Royston, and expanding Cambourne (no further development allocated at North East Cambridge) – Challenges

1.46 Additional local wastewater treatment capacity connected to growth at Cambourne would need to be provided to enable further development at the location.

1.47 For green infrastructure there is a risk that further development within Cambridge urban area will place additional recreational pressure on existing sites and opportunities to increase the permeability of the urban area will be needed so as not to exacerbate surface water flooding and the urban heat island effect. It is also important that development is designed to consider the current habitat networks within the site and avoid habitat fragmentation. Development at Royston could have an adverse effect on the Therfield Heath SSSI.

1.48 For the strategic development locations, development presents risks to the existing green infrastructure network; particularly relating to increased recreational pressure on nearby sites, and potential impacts on wetland assets to the east and north east. Development focused around Cambourne has the potential for impact/s on Eversden & Wimpole SAC and the numerous SSSI (primarily woodland in character) which must be considered cumulatively. There is also a risk of development (dwellings or supporting infrastructure) extending or exacerbating existing north-south severance.

1.49 With regard to townscape, densification of the Cambridge Urban Area is likely to include the potential for additional tall buildings, which could result in changes to historic townscape characteristics and on key views towards the City across the open landscapes of the Fen Edge Claylands and Cam River Valley.

1.50 For landscape, development at Cambridge Airport on the edge of Cambridge outside of the Green Belt is likely to create a new urban edge that would be a prominent feature in the landscape due to the open character of the Fen Edge Chalklands landscape context for Cambridge Airport.

1.51 Development in the Southern Cluster is likely to result in localised changes to the character of the River Valley, Chalk Hills and Lowland Claylands landscape types within this part of Greater Cambridge, and may have an impact on key views experienced from the Gog Magog Chalk Hills.

1.52 Development at Royston is likely to have an adverse impact on the rural chalklands landscape character due to extensive views of the open low-lying land. Dispersal of development to the villages is likely to result in localised changes to the townscape character and landscape setting of some of Greater Cambridge's rural villages.

1.53 Some heritage impacts can be addressed through appropriate design responses in terms of building heights and layout at the key sites at Cambridge Airport and Cambourne. For the Royston option, development in some locations is likely to affect one or more scheduled monuments. For other smaller dispersed sites, location and scale will be important matters.

1.54 Villages typically have fewer services and facilities and so residents are more likely to rely on car use which could negatively impact on

equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.55 Unless villages are located close to or on one of the radial routes into Cambridge the choice of travel options may be limited and/or costly. Unless jobs are also dispersed in the rural area, it would not redress the jobs/homes balance, impacting on working age people.

1.56 Development at Royston would be some distance from the town's rail station and town centre services. As an expansion of an existing market town that has a rail station, housing at this strategic location would likely not need completely new transport infrastructure, although the expansion sites would be relatively distant from the station which would likely limit the number of trips made by sustainable modes. This is likely to place reliance on car travel for longer journeys, with resultant adverse effects on carbon emissions and on equalities and inclusivity, particularly for younger and older people who are unable to drive or own a car.

1.57 Under all growth options the market's preference would be to see new B1a (offices) and some B1b (R&D) employment space delivered in close proximity to Cambridge. Therefore, spreading employment outside of the city to more dispersed locations such as the Royston option and villages will be contrary to prime office market preferences for the city centre and city fringe locations.

1.58 Spreading employment outside of the city to Cambourne will be contrary to prime office market preferences for the city centre and city fringe locations. However, secondary offices and lab development is likely to be successful around Cambourne with improved accessibility. Industrial and warehousing tend to have a greater reliance on strategic road access rather than public transport and would benefit from the A428 connection.

1.59 If the phasing of East West Rail and the new railway station at Cambourne is delayed, then this could delay housing completions from the Cambourne Expansion. Uncertainty over the location of the new station could also affect lead-in times. There is also a risk of potential competition between Cambourne, Bourn Airfield and the Cambourne Extension with all three under construction at the mid-latter part of the plan period, however the committed Cambourne West site would be past its peak and starting to decline before peak delivery would be reached at a new Cambourne allocation.

1.60 As noted above with regard to Option 11ai, housing provided at Royston would be relatively distant from Cambridge, serving at least in part the Stevenage Housing Market Area.

1.61 For the growth allocated outside of the Cambridge urban area, transport infrastructure improvements are required to achieve sustainable links to jobs at Cambridge, which may include highway infrastructure to overcome potential pinch points along planned public transport corridors.

1.62 New provision for social and community infrastructure will also be required early in the development of the growth areas. In the more rural areas, there will be critical mass issues for social, community, sports and leisure infrastructure that may well lead to longer travel distances to access facilities.

1.63 There are likely to be existing utilities that cross growth areas, particularly in the urban area, that will require diverting or protecting, and this may impact on the lead-in times for the development of these sites. In time, the level of growth anticipated will exceed planned current water and power demands, and even though there are technical solutions, there are risks around timing and financing of these solutions.