
Plan:MK Sustainability Appraisal Report

Initial Sustainability Appraisal

February 2017

Executive Summary

Milton Keynes Council is preparing a new Local Plan – Plan:MK – which will guide development in the Borough. The current version of Plan:MK is a draft and sets out the Council's preferred strategy for meeting the Borough's needs until 2031. This version is not the final plan but represents the Council's preferred approach based on the evidence currently available and the results of the previous consultations in 2014 and 2016. It is published to gather the views of residents, businesses and others with an interest in the area. At this stage in the plan's preparation the Council is seeking views on what the plan ought to contain and, where a preferred approach has been identified, whether that is appropriate.

This initial sustainability appraisal (SA) accompanies the draft Plan:MK and seeks to ensure that the draft policies in Plan:MK meet the objective of sustainable development. The appraisal is intended to assess the impact of draft planning policies in terms of their social, economic and environmental impacts (based on sustainability objectives drafted in the Scoping Report published in 2014) and at this stage specifically focuses on Plan:MK's development strategy - specifically in meeting the Borough's housing, employment and retail/town centre needs – and also on potential strategic land allocations to be included in Plan:MK to help meet identified needs. This initial sustainability appraisal report has also considered the sustainability impacts of the reasonable alternative policy options (where reasonable alternatives have been identified) for the development strategy and strategic site developments to take forward in the Borough over the next 15 years through Plan:MK.

In general with the Plan:MK strategic objectives and development strategy options considered a range of significant positive effects are predicted, however negative effects, particularly with regards to the environmental sustainability objectives are also considered likely. Recommendations have been made at the end of each policy assessment, stating which reasonable alternatives (if there are any) would be the best option in sustainability terms. Although the SEA Directive and guidance on sustainability appraisals outline approaches to assessing policies there is a degree of subjectivity attached to the assessment process and the area specific circumstances of the Borough may affect what is considered to be a significant effect.

Following the publication of the draft Plan:MK, it's evidence base and its supporting documents, including this SA report, representations received will be analysed by the Council. Modifications to Plan:MK will be made where necessary and the SA amended to reflect any changes. The next iteration of the SA report will also include a detailed assessment of all the draft strategic and development management policies included in Plan:MK in addition to those appraised in this iteration. It will also complete stages B4 and B5 of the SA process which consider ways of mitigating the adverse effects and maximising the beneficial effects, and also ways of monitoring the effects of implementing the Plan:MK policies.

Table of Contents

| | |
|--|----|
| 1. Introduction..... | 1 |
| 2. SA Stage B: Developing and Refining Options and Assessing Effects..... | 3 |
| 3. SA Stage B1: Testing the Plan Objectives against the Sustainability Objectives 3 | |
| 4. SA Stage B2 – B3: Appraising Plan Options..... | 11 |
| 4A. Appraisal of Housing Development Strategy..... | 15 |
| Meeting Objectively Assessed Housing Need | 15 |
| Affordable Housing..... | 23 |
| Housing Density | 28 |
| Urban vs Rural Development | 31 |
| Housing Land Supply and Spatial Delivery | 34 |
| Settlement Hierarchy..... | 44 |
| Potential Strategic Housing Allocations | 45 |
| Non-Strategic Sites | 66 |
| 4B. Appraisal of Development Strategy for Employment..... | 70 |
| Potential Strategic Employment Allocations | 76 |
| 4C. Appraisal of Development Strategy For Retail And Town Centres | 85 |
| 5. Mitigation..... | 89 |
| 6. Conclusions..... | 90 |
| 7. Next Steps..... | 92 |
| | |
| Appendix 1: Location of Options for Strategic Housing and Employment Sites..... | 93 |

1. Introduction

This report follows on from the Plan:MK Sustainability Appraisal Scoping Report which was published for consultation in October 2014. Otherwise known as Stage A of the Sustainability Appraisal (SA) process, this stage set the context within which Plan:MK would be appraised in the following ways:

- It identified other policies, plans and programmes relevant to the production of the new Local Plan;
- It collected baseline information and identified sustainability objectives, both of which the Plan objectives and policy options would be assessed against;
- It developed the sustainability appraisal framework;
- It identified sustainability issues and problems affecting Milton Keynes Borough;
- It consulted key consultation bodies on the scope of the sustainability appraisal report.

This report is concerned with Stage B of the SA process, the focus being developing and refining alternatives and assessing effects. It does this in the following ways:

- Testing the Local Plan objectives against the sustainability appraisal framework;
- Developing Local Plan options for strategic policies and site allocations including reasonable alternatives;
- Evaluating the likely effects of the policies/allocations and alternatives;

The next iteration of the SA will assess the other Local Plan policies and:

- Consider ways of mitigating and avoiding adverse effects and maximising beneficial effects;
- Propose measures to monitor the significant effects of implementing the Local Plan.

The Local Plan in preparation will be consulted on under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012. As the plan-making process continues and feedback is received, so too will the SA process continue and the Local Plan will be assessed and refined further. The diagram below shows how the SA process progresses as various stages of the plan-making process are reached.

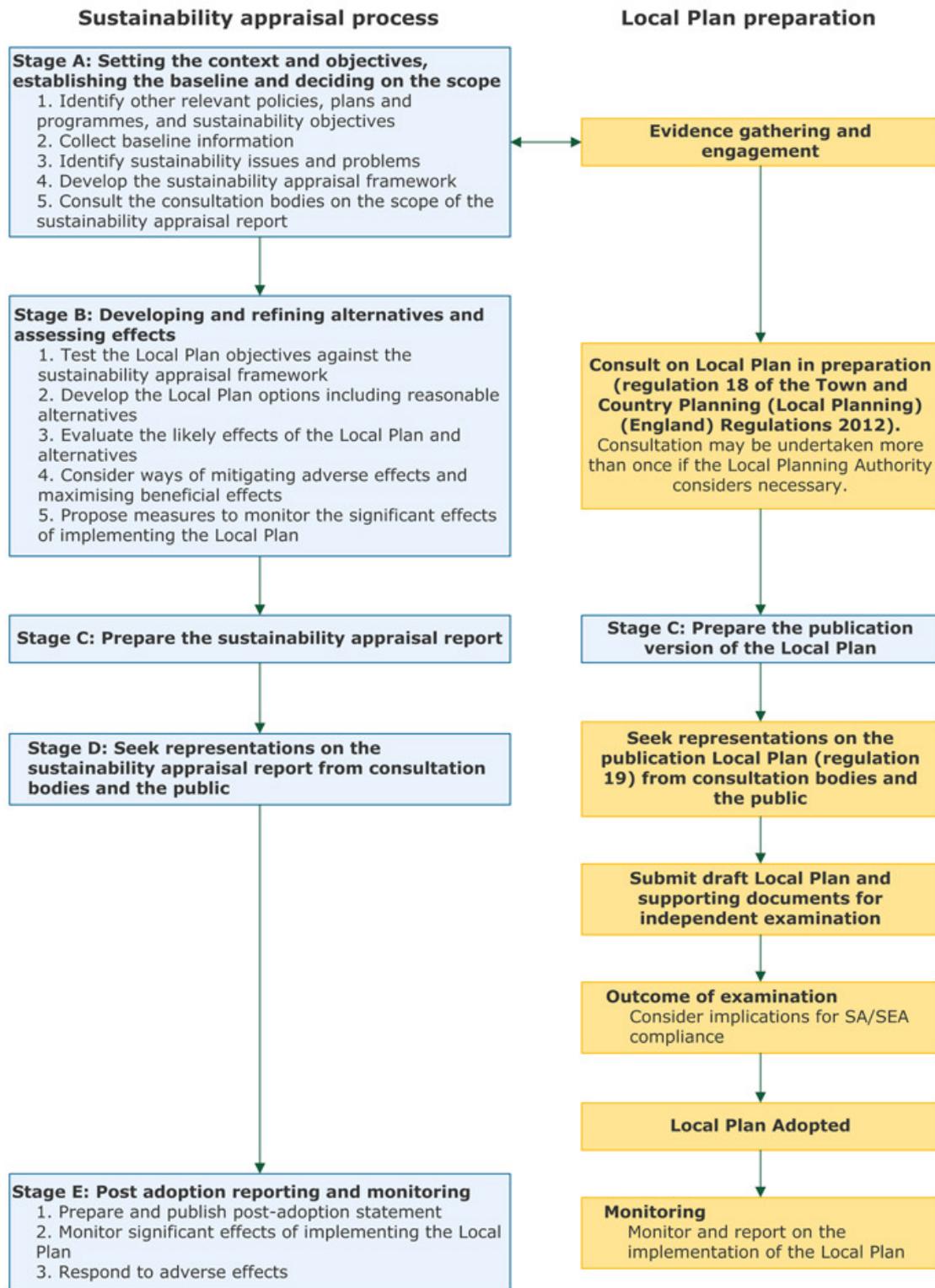


Figure 1: Sustainability appraisal process for Local Plan

2. SA Stage B: Developing and Refining Options and Assessing Effects

During this stage of the SA process the Council has appraised in broad terms the effects of strategic options. Plan:MK is at an early stage of preparation and assessing the plan is an iterative process meaning that Stage B will be carried out throughout the plan-making process as options are assessed, consulted on and refined.

3. SA Stage B1: Testing the Plan Objectives against the Sustainability Objectives

What the SEA Directive says (Tasks B1-B5 and C):

“...an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated” (Article 5.1). Information to be provided in the Environmental Report includes “an outline of the reasons for selecting the alternatives dealt with” (Annex 1 (h)).

“The environmental report shall include information that may reasonable be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, [and] its stage in the decision-making process” (Article 5.2).

Information to be provided in the Environmental Report includes:

- *“The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects” (Annex 1 (f) and footnote).*
- *“An outline of the reasons for selecting the alternatives dealt with” (Annex 1 (h)).*
- *“The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme” (Annex 1 (g)).*

The objectives of the Local Plan, which underpin what the plan and the policies it contains intend to achieve in spatial planning terms, should be tested for compatibility with the sustainability objectives (as set out in Stage A, the Scoping Report). This task helps to test whether there is compatibility between the plan objectives and the local sustainability objectives. This stage of the appraisal represents Task B1 of the SA process.

It is important that the objectives of the Local Plan are in accordance with the sustainability objectives. Where there are potential conflicts this can inform further work in the preparation of the Plan. It does not necessarily mean that objectives need to be amended. In some cases, adverse effects can be mitigated, and tensions between the objectives resolved. If development takes place in accordance with all of the strategic objectives, any potential incompatibility may not necessarily be an

insurmountable issue. However, this matter may need to be considered in the development of policies that comprise the Local Plan.

The objectives of the Plan:MK Local Plan are as follows:

1. To develop Milton Keynes as a major 21st century city, within a rural setting recognised worldwide for its accessibility, knowledge economy and the unique breadth of its open, spacious and green design, its mix of people, communities, cultural, leisure and sporting facilities.
2. To reflect the recommendations of the MK Futures 2050 Commission Report, the land use planning implications of the Strategy for 2050 and its Six Big Projects:
 - Making Milton Keynes the hub of the Cambridge-Milton Keynes-Oxford growth corridor.
 - Enhancing lifelong learning opportunities through the establishment of MK:IT.
 - Learning 2050 – providing world class education.
 - Smart, Shared, Sustainable Mobility for all.
 - Renaissance:CMK creating an even stronger city centre fit for the 21st century.
 - Milton Keynes: The Creative and Cultured City.
3. To deliver land for 26,500 new homes within the Borough between 2016 and 2031.
4. To reflect the National Infrastructure Commission Interim Report (November 2016) and support development along the Cambridge-Milton Keynes-Oxford growth corridor.
5. To work jointly with neighbouring authorities and other key organisations on the planning of any development located on the edge of Milton Keynes (but outside the current MK boundary) so that these areas are integrated with the city and contribute to its role and character.
6. To allocate and manage the development of employment land and pursue a vigorous economic development strategy so that the business sector and local economy are supported, existing firms can expand, new firms are attracted, the level of working skills among the local population is enhanced and the area's resident population can find employment locally
7. To allocate sufficient land to enable greater economic prosperity by improving the local opportunities for learning and to increase the local level of knowledge and skills through the establishment of MK:IT, and support the development of MK College and University Centre MK and the creation of world class schools.
8. To promote the development of Central Milton Keynes as the vibrant cultural centre of the region by making it the main location within the city for retail, leisure, cultural and larger office developments.
9. Support the continued regeneration of Wolverton and Bletchley as town centres within the main urban area (ideally with specialisations or USPs)

10. To seek the protection of existing key services and facilities in sustainable rural settlements and to encourage the development of further provision, including shops, world class schools, community and health services.
11. To aim to reduce health inequalities, deprivation and improve housing quality and access to services for all.
12. To facilitate the delivery of housing that meets the needs of all sections of the community through:
 - Providing sufficient developable land for new housing
 - Construction of viable levels of diverse housing including affordable, supported and specialist housing
 - Taking account of the need for houses in multiple occupation
13. To manage increased travel demands through:
 - Smart, shared, sustainable mobility
 - Promoting improvements to public transport and supporting the development of the East – West rail link between Oxford and Cambridge, including the Aylesbury spur
 - Encouraging an increased number of people to walk and cycle by developing an expanded and improved Redway network
 - Extending the grid road pattern into any major new development areas
 - Utilising demand management measures to reduce the growth of road congestion, whilst upgrading key traffic routes such as the A421, A422 and the A509
14. To mitigate the Borough's impact on climate change and reduce CO² emissions through:
 - Locating development away from areas of flood risk
 - Promoting community energy networks and strategic renewable energy developments
 - Reducing waste generation and increasing the amount of recycling
 - Sustainable transport initiatives
15. To embody Place Making as an overarching design objective for new development and require that the layout and design of new development creates safe, healthy, sustainable built environments with easy access to open space, public transport and everyday facilities, delivering a high quality of urban design, architecture and public realm and creates places with identity
16. To protect, maintain and enhance the important linear parks, sustainable urban drainage systems, character and assets of the New City and the towns and villages throughout the Borough.
17. To encourage healthy lifestyles with the provision of recreation facilities and biodiversity by enhancing the linear park network and extending it into new developments while conserving and enhancing key landscapes and important habitats.
18. To work with public service and infrastructure providers (principally via the Local Investment Plan) to ensure that the social and economic growth planned in the Borough and neighbouring local authorities is facilitated by the timely provision of appropriate new and improved facilities such as public transport, schools, community halls, sport and recreation facilities, transport

interchanges, health services (including MK Hospital), emergency services, highways and rail improvements, and a residual waste treatment plant.

Each of the sustainability objectives, divided into three categories - social, economic, environmental – are also listed below:

Social

1. Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home.
2. Protect and improve residents' health and reduce health inequalities.
3. Reduce levels of crime and create vibrant communities.
4. Reduce the gap between the most deprived areas of Milton Keynes and the average.
5. Ensure all section of the community have good access to services and facilities.
6. Improve education attainment and qualification levels so that everyone can find and stay in work.

Environmental

7. Combat climate change by reducing levels of carbon dioxide.
8. Maintain and improve the air quality in the borough.
9. Maintain and improve water quality and minimise the risk of flooding.
10. Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy.
11. Conserve and enhance the borough's biodiversity.
12. Conserve and enhance the borough's heritage and cultural assets.
13. Protect and enhance soil quality throughout the borough.
14. Limit noise pollution.
15. Encourage energy efficiency, renewable energy use and efficient use of natural resources.
16. Limit and reduce road congestion and encourage sustainable transportation.
17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites.

Economic

18. Ensure high and stable levels of employment.
19. Encourage the creation of new businesses.
20. Sustain economic growth and enhance competitiveness.

The appraisal of the plan objectives is shown in table 2. It compares each of the Plan objectives with each of the sustainability objectives.

Table 1: Key to assessment of Plan:MK and sustainability objectives

| | |
|---------|---|
| ✓ | Compatible – pursuing the Plan:MK objective is likely to help achieve the sustainability objective |
| (blank) | Neutral – the Plan:MK objective is unlikely to have any direct impact on achieving the sustainability objective |
| X | Potential conflict – pursuing the Plan:MK objective may work against or prevent the sustainability objective being achieved |

| | | Sustainability Objectives | | | | | | | | | | | | | | | | | | | |
|--------------------|----|---------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Plan:MK Objectives | 1 | | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | | | | ✓ | ✓ | ✓ |
| | 2 | | | | | | ✓ | | | | | | ✓ | | | | | | ✓ | ✓ | ✓ |
| | 3 | ✓ | | | | | | X | X | | X | X | | X | | | | X | | | |
| | 4 | | | | | | | | | | | | | | | | ✓ | | ✓ | ✓ | ✓ |
| | 5 | | | | | ✓ | | | | | | | | | | | | | | | |
| | 6 | | | | | | ✓ | X | X | | X | X | | X | | | | | ✓ | ✓ | ✓ |
| | 7 | | | | | | ✓ | | | | | | | | | | | | ✓ | ✓ | ✓ |
| | 8 | | | | | | | | | | | | ✓ | | | | | | ✓ | ✓ | ✓ |
| | 9 | | | | ✓ | ✓ | | | | | | | | | | | | | | | |
| | 10 | | ✓ | ✓ | | ✓ | ✓ | | | | | | | | | | | | | | |
| | 11 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | |
| | 12 | ✓ | | | ✓ | | | | | | | | | | | | | | | | |
| | 13 | | ✓ | | | | | | | | | | | | | | | ✓ | | | |
| | 14 | | | | | | | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | | | | |
| | 15 | ✓ | ✓ | | | ✓ | | | | | | | | | | | | ✓ | | | |
| | 16 | | ✓ | | | | | | | ✓ | | ✓ | ✓ | ✓ | | | | | | | |
| | 17 | | ✓ | | | | | | | | | ✓ | ✓ | | | | | | | | |
| | 18 | | ✓ | ✓ | | ✓ | ✓ | | | | | | | | | | ✓ | | ✓ | ✓ | ✓ |

Table 2: Compatibility of Plan:MK objectives with sustainability objectives

The cumulative impact of the Plan:MK objectives against each of the sustainability objectives is also assessed in table 4.

Table 3: Key to cumulative impact of the Plan:MK objectives against each of the sustainability objectives.

| | |
|---|--|
| ✓ | Compatible – the cumulative impact of pursuing the Plan:MK objectives is likely to help achieve the sustainability objective |
| 0 | Cumulative impact of Plan:MK objectives will have no net significant effect on the sustainability objective |
| X | Potential conflict – the cumulative impact of pursuing the Plan:MK objectives may work against or prevent the sustainability objective being achieved. |

Table 4: Appraisal of the Cumulative Compatibility of the Plan Objectives

| Sustainability Objective | Compat ibility | Commentary |
|---|-------------------|---|
| Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home. | ✓ | Plan:MK objectives support the delivery of 26,500 homes over the plan period, and improve housing quality. Plan:MK seeks to facilitate the delivery of housing that meets the needs of all section of the community as well. |
| Protect and improve residents' health and reduce health inequalities. | ✓ | Plan:MK objectives support the delivery of leisure, recreation and sporting facilities, as well as facilitate increased walking and cycling, all of which can encourage healthy lifestyles. Plan:MK also seeks to deliver health infrastructure to meet the needs of the population and explicitly mentions reducing health inequalities. |
| Reduce levels of crime and create vibrant communities. | ✓ | Plan:MK does not explicitly mention reducing crime but seeks to tackle deprivation. It also seeks to encourage the development of community facilities which can help create vibrant communities. |
| Reduce the gap between the most deprived areas of Milton Keynes and the average. | ✓ | Plan:MK seeks to regenerate Wolverton and Bletchley town centres, provide affordable housing and jobs, and explicitly mentions tackling deprivation. |
| Ensure all sections of the community have good access to services and facilities. | ✓ | Plan:MK seeks to provide new services and facilities and improve transport options, both of which will contribute to achieving this sustainability objective. |
| Improve education attainment and qualification levels so that everyone can find and stay in work. | ✓ | Plan:MK seeks to develop the Borough's education facilities, facilitate the provision of new facilities and support MK:IT university. Plan:MK also encourages jobs growth which can provide on-the-job training and help make local people more employable. |
| Combat climate change by reducing levels of carbon dioxide. | X | Significant development is supported by Plan:MK which is likely to have a negative effect on this sustainability objective, however Plan:MK objectives do specifically seek to tackle climate change which over the long-term may result in positive effects. |
| Maintain and improve the air quality in the borough. | X | Significant development is supported by Plan:MK which is likely to have a negative effect on this |

| | | |
|--|---|--|
| | | sustainability objective by way of increased car usage, however Plan:MK objectives seek to encourage sustainable transportation and ensure communities have good access to services and facilities which is likely to help improve air quality in the long term. |
| Maintain and improve water quality and minimise the risk of flooding. | ✓ | Plan:MK seeks to locate development away from flood risk areas and maintain and enhance sustainable urban drainage systems. |
| Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy. | X | Significant development is supported by Plan:MK which is likely to have a negative effect on this sustainability objective, however Plan:MK specifically seeks to reduce waste generation and increase the amount of recycling. |
| Conserve and enhance the borough's biodiversity. | X | Significant development is supported by Plan:MK which could have a negative effect on this objective depending on the location of development, however Plan:MK seeks to provide new and extend linear parks which will improve biodiversity. |
| Conserve and enhance the borough's heritage and cultural assets. | ✓ | Several Plan:MK objectives seek to preserve and enhance the character and cultural aspects of Milton Keynes. |
| Protect and enhance soil quality throughout the borough. | X | Significant development is supported by Plan:MK which could have a negative effect on this objective depending on the location of development. Provision of new open spaces and linear parks may help lead to positive effects on this sustainability objective. |
| Limit noise pollution. | 0 | Significant development is supported by Plan:MK which could have a negative effect on this objective depending on the location of development. Appropriate mitigation measures can help minimise any potential impact. |
| Encourage energy efficiency, renewable energy use and efficient use of natural resources. | ✓ | By seeking to tackle climate change Plan:MK objectives encourage energy efficiency and renewable energy use. |
| Limit and reduce road congestion and encourage sustainable transportation. | ✓ | Significant development is supported by Plan:MK which could have a negative effect on this objective depending on the location of development, however Plan:MK seeks to significantly improve sustainable transport options and improve the road network where necessary. |
| Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites. | ✓ | By seeking to promote the development of Central Milton Keynes a large amount of development is encouraged on brownfield land which will help achieve positive effects on this sustainability objective. Some development on greenfield land will likely be necessary to deliver the number of homes needed. |
| Ensure high and stable levels of employment. | ✓ | Plan:MK seeks to develop the knowledge economy, allocate and manage the development of employment land to encourage business growth, allow existing firms to expand and attract |

| | | |
|--|---|--|
| | | new firms. Plan:MK also seeks to raise education levels of the local population and improve infrastructure which will encourage investment in the Borough. |
| Encourage the creation of new businesses. | ✓ | As above. |
| Sustain economic growth and enhance competitiveness. | ✓ | As above. |

4. SA Stage B2 – B3: Appraising Plan Options

Plan:MK will be the new Local Plan for Milton Keynes Borough. When adopted, Plan:MK will replace the existing Core Strategy (adopted in July 2013) and the remaining saved policies in the Milton Keynes Local Plan (adopted December 2005). It will set out a development strategy for Milton Keynes up to at least 2031, with a range of detailed policies to guide development over this period. The process of adopting a new Local Plan requires the comparison of options for different policies. These are the range of reasonable policy choices available to plan-makers for delivering the plan's vision and objectives. The aim at this stage of the appraisal is to develop plan options and reasonable alternatives (if there are any) for the strategic policies and site allocations to deliver the Plan:MK objectives and compare these against the sustainability objectives in order to inform MKC on how to develop Plan:MK in the most sustainable way.

A series of 'topic papers' were produced in 2014 which identified some of the key issues which Plan:MK will seek to address. These issues were grouped into the following areas:

- Growth in Housing
- Employment and Economic Growth
- Town Centres and Retail
- Transport and Travel
- Provision of Physical and Social Infrastructure
- Culture, Recreation and Quality of Life
- Rural Issues
- Climate Change and Sustainability
- Open Space and the Natural Environment
- Quality of Place
- Development Strategy

The options identified in this sustainability appraisal are seen as realistic and achievable ways of meeting the objectives of Plan:MK, and by comparing them against the sustainability objectives, they will be more sustainable.

Assessment of the Plan

In order to adhere to the SEA Regulations the following types of effects have been identified – short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects where relevant (and where possible to identify). The plan has primarily been assessed using a matrix where policy options and their impact on sustainability objectives are identified. The effects of options are appraised in relation to the baseline situation identified in Stage A (Scoping Stage), which uses the most up-to-date information available to identify the environmental, social and economic issues that characterise the plan area and provide a baseline against which the potential impacts of the plan may be assessed. In most cases the assessment is qualitative rather than quantitative as in many cases there are too many variables to accurately quantify effects. This is followed by commentary explaining in more detail potential effects of the policies. There is a degree of subjectivity attached to this process.

The SEA Regulations also specify the criteria that should be taken into account when determining likely significant effects. The aim of the SA is to identify and respond to significant effects. What constitutes 'significant' will vary according to circumstance and also involves a degree of subjectivity. Guidance from the Planning Advisory

Service (PAS) states that the following principles are considered key in assessing the significance of effects:

- Circumstance – events that are significant in one case may not be in another. The baseline indicators will help inform the situation.
- The analysis of significance should be proportionate to the expected severity of the effect.

Annex II of the SEA Directive also includes a series of criteria for determining the likely significance of effects. These criteria, which principally relate to the nature of the effects arising from the plan and the value and vulnerability of the receptors, are as follows:

- The probability, duration, frequency and reversibility of effects
- The cumulative nature of the effects
- The risks to human health or the environment
- The magnitude and spatial extent of the effects
- The value and vulnerability of the area likely to be affected due to:
 - Special natural characteristics or cultural heritage,
 - Exceeded environmental quality standards or limit values,
 - Intensive land-use
- The effects on areas or landscapes which have a recognised national, community or international protection status.
- Are the effects permanent or temporary? Over what time-scale will they be observed? Short-term effects may occur in the first five years of the plan, medium-term effects in five to fifteen years, and longer-term impacts beyond fifteen years.
- The effect on neighbouring areas – is the plan likely to displace environmental problems or lead to increased traffic generation in adjacent authorities, for example?
- Are the effects positive or negative?

It may not be possible to provide commentary on all of the above when assessing each of the policy options as it may not be relevant to do so in some instances.

In appraising the effects of each of the policy options on the SA objectives the key to the scoring system used will be as set out below.

Table 5: Key to appraisal scoring

| Symbol | Likely effect against the SA Objective |
|--------|--|
| +++ | Potentially significant positive impact |
| + | Policy supports this objective although it may have only a minor positive impact |
| 0 | Policy has no significant impact |
| ? | Uncertain of the impact based on the information available at this stage |
| I | The potential effect of the policy is dependent on its implementation |
| -/+ | Both negative and positive impacts associated with the policy |
| - | Policy appears to conflict with the objective and may result in adverse impacts |
| -- | Potential significant adverse impact. |

As recommended by Government guidance “Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents” (2005), the Plan options are assessed in terms of broader strategic options rather than as detailed policy wording variants.

Alternatives

The NPPF requires that “LPAs should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gains across all three. Significant adverse impacts on any of these dimensions should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued.”

“The Environmental Report (Sustainability Appraisal) shall outline the reasons for selecting the alternatives dealt with” (SEA Regulations Schedule 2(8)).

“The Environmental Report (Sustainability Appraisal) shall identify, describe and evaluate the likely significant effects on the environment of (a) implementing the plan or programme; and (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme” (SEA Regulations Part III 12(2)).

The regulations governing the identification and assessment of alternatives are outlined above. This means that the SA process should set out the reasonable alternative options (both for the overall strategy and for sites) that were considered by the Council, what the sustainability effects of those reasonable alternative options were, and how these effects have been taken into account in the selection of the final approach.

The purpose of this stage is to set up and test a range of reasonable alternatives and in doing so, identify their sustainability effects. This process began by using the SA scoping process to help identify relevant issues from other plans and programmes and using baseline indicators to identify the current state of the Borough. The scope of Plan:MK was defined by town and country planning legislation and the National Planning Policy Framework. Key issues and problems that should be addressed through Plan:MK were identified through evidence studies and local knowledge. In 2014 MKC consulted on ‘topic papers’ which identified key issues facing the Borough and this further refined the objectives and scope of Plan:MK.

The sustainability objectives are used as the basis for the assessment of the emerging plan options. Local Plan policies should be realistic. Not all policies/objectives considered will have a “reasonable alternative” either due to national policy prescribing something very specific or there is only one reasonable option based on the evidence available or informed by professional knowledge. For some policies it is the case that they are not developed enough at this stage to suitably recommend and assess alternatives, and these will be appraised at the next stage of plan-preparation.

In predicting significant effects, assumptions will be made as it is difficult to accurately predict how different events will unfold in the future. These assumptions will be identified.

Mitigation

Part of the function of the SA process is to identify incompatibility with sustainability objectives and suggest measures to prevent, reduce or offset significant adverse effects of implementing the Plan. Mitigation measures can also include

recommendations for improving beneficial effects and these are identified where relevant.

Mitigation can take a wide range of forms, including:

- Changes to the Plan as a whole, including bringing forward new options, or adding or deleting options;
- Refining policies in order to improve the likelihood of beneficial effects and to minimise adverse effects e.g. by strengthening policy criteria;
- Technical measures to be applied during the implementation stage, e.g. buffer zones, application of design principles;
- Proposals for changing other plans and programmes; and
- Proposals in environmental impact assessments (EIAs) accompanying planning applications.

Where relevant, measures to prevent, reduce or offset significant adverse effects of implementing the Plan options, otherwise known as ‘mitigation’ and ‘avoidance’ measures, will also be identified in the next iteration of the SA.

Appraisal Findings

The following section presents the appraisal findings for the policy options/alternatives identified below.

- Development Strategy for Meeting Housing Need
- Development Strategy for Employment
- Development Strategy for Retail and Leisure
- Strategic Site Allocations

As well as predicting and evaluating the effects of policy options any inconsistencies between the objectives of the Local Plan will be identified. Following this, recommendations for improving options and reasons for eliminating options will be documented.

Not all policies/objectives considered will have a “reasonable alternative” either due to national policy prescribing something very specific or there is only one reasonable option (relative to the sustainability objectives) based on the evidence available or informed by professional knowledge. For some policies it is the case that they are not developed enough at this stage to suitably recommend and assess alternatives, in some cases because MKC is awaiting further evidence, and these will be appraised at the next stage of plan-preparation.

The next iteration of the SA will also appraise the remaining policies on:

- Economy and retail
- Sustainable construction and renewable energy
- Managing and reducing flood risk
- Biodiversity and geodiversity
- Milton Keynes Heritage
- Open Space, Leisure and Recreation
- Design
- Homes and Neighbourhoods
- Culture and Community
- Connectivity
- Infrastructure Delivery

4A. Appraisal of Housing Development Strategy

Meeting Objectively Assessed Housing Need

The National Planning Policy Framework (NPPF) requires Local Planning Authorities (LPAs) to “ensure that their Local Plan meets the full, objectively assessed needs (OAN) for market and affordable housing in the housing market area” and “identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which meets household and population projections, taking account of migration and demographic change.”

Milton Keynes Council (MKC) commissioned a Strategic Housing Market Assessment (SHMA) in 2016 to assess the likely quantum of new homes required in Milton Keynes to meet the needs of the current and future population over the plan period from 2016 to 2031, based on the most up-to-date information available.

The “starting point” estimate for OAN is the latest household projections published by the Department for Communities and Local Government (CLG). The CLG housing projections alone however do not provide sufficient data to inform planning policy on the quantum of new homes required, only a baseline figure. The final OAN figure produced by the SHMA uses the CLG projections but also takes account of: current unmet and future need for affordable housing (in more detail than the CLG projections); market signals which take account of house prices, rents, affordability, the rate of development and overcrowding; and employment trends, taking into account employment growth forecasts and the number of new homes needed to ensure that there will be enough workers for the likely increase in jobs in the area. Taking all of this into account, the SHMA concludes that the **OAN, or overall housing need over the plan period is approximately 26,500 dwellings.**

Establishing future need for housing is not an exact science however the OAN provides a robust starting point to inform policy options on housing targets over the plan period. The final policy, which determines the scale of housing growth MKC seeks to achieve over the plan period, will be informed by the OAN, but also the capacity to deliver the housing required, other objectives and other constraints/opportunities MKC may face.

Delivering a quantum of housing above the OAN was considered, however this is dependent on the capacity to deliver this. It is anticipated that delivering more housing could enable a number of potential benefits including:

- avoiding potential land supply issues;
- increasing the number of resident workers and reducing the amount of in-commuting and subsequent pressure on existing transport infrastructure;
- limiting Milton Keynes’ dependency rate by increasing the share of the population represented by those of working age compared to those of a pensionable age;
- limiting potential further increases in house prices;
- Providing a contribution to wider growth within the sub-region.

Delaying the preparation of Plan:MK pending further progress on the emerging strategies and infrastructure developments, notably the MK Futures 2050 work, progress on East-West Rail and on the National Infrastructure Commission’s work on the Cambridge-Milton Keynes-Oxford Growth Corridor was also considered. This option would, however, result in an unacceptable and unnecessary delay to the

Plan:MK process, delaying the production of up to date planning policy to support development across the borough.

Providing fewer homes than the OAN which takes account of past delivery rates was also considered however this would not meet need and would not be compliant with the NPPF. A Plan that failed to plan for the OAN would be unlikely to pass the examination process.

Based on the above information three reasonable policy options on the quantum of housing growth in Milton Keynes can be identified.

Option A

Seek to deliver 26,500 new dwellings over the plan period or 1,765 new dwellings per annum. This would be in line with the OAN target identified in MKC’s housing evidence, the SHMA.

Option B

Seek to deliver 30,000 new dwellings over the plan period or 2,000 new dwellings per annum. This option would deliver more housing than the OAN identifies however it is dependent on housing capacity in the Borough.

Option C

Seek to deliver housing based on past delivery rates which are lower than the yearly OAN figure. This option would deliver less housing than the OAN identifies.

Effects of Policy Options in relation to Sustainability Objectives

The SA scores for the reasonable alternative housing quantum options are shown in table 6. This is followed by a broad description of the various effects, focusing on those that are judged to be significant. The assessment assumes that the stated numbers of dwellings can actually be delivered. It also assumes that development will be delivered in accordance with the principles in the NPPF. This assessment concerns quantum of development rather than its location, and it is recognised that location can determine the effects. An assessment of the potential effects of directing development to particular locations within the Borough is provided separately in the SA of strategic locations.

Table 6: Meeting objectively assessed housing need

| Sustainability Objective | Policy Option | | | Commentary |
|---|---------------|------|----|---|
| | A. | B. | C. | |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | ?+++ | ?+++ | ?+ | Policy options A and B are based on up-to-date evidence and would seek to deliver housing to at least meet the housing needs of the Borough (as identified in the SHMA), both in terms of quantum and also in terms of contribution to specific types of housing need, such as affordable housing. Option C is based on recent delivery rates (i.e. the number of homes built annually in recent years) and this option would result in an under-delivery of housing when |

| | | | | |
|--|-----|-----|---|---|
| | | | | assessed against the OAN. Larger sites are expected to be delivered in the longer term and so a large proportion of affordable housing is expected to be delivered in the long-term. Exact numbers of affordable housing would be determined on a case-by-case basis and subject to viability and constraints, so there is some uncertainty with all options about the extent to which positive effects are achieved. |
| 2. Protect and improve residents' health and reduce health inequalities | 0 | 0 | 0 | New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents' health and wellbeing. The impacts will depend on implementation and the ability of existing infrastructure to cope with increased demand and the ability of infrastructure to be sought to meet the needs of each development as well as those associated with population growth. With particularly large new developments there are likely to be opportunities to provide new areas of accessible green space and through well designed urban environments encourage healthier lifestyles (e.g. creating walkable neighbourhoods). Ultimately, impacts on health will vary based on site specific circumstances and so there is some uncertainty as to the likely impact. Both positive and negative impacts are identified for the long-term for all options. |
| 3. Reduce levels of crime and create vibrant communities | 0 | 0 | 0 | New developments offer the opportunity to implement designing-out-crime principles which can help to minimise crime. The effects are likely to be more significant where large developments are planned and where regeneration programmes are planned. For large development sites, supporting uses including community facilities are likely to be provided which will help in creating vibrant communities. |
| 4. Reduce the gap between the most deprived areas of Milton Keynes and the average | +++ | +++ | + | Provision of additional housing is likely to help reduce the gap between the most deprived areas of Milton Keynes and the average, as depending on implementation and type/mix/tenure of housing delivered it can help regenerate areas and help people on low incomes access potential housing options. An increased supply of housing relative to demand can also |

| | | | | |
|--|-----|-----|-----|--|
| | | | | limit house price/rent increases, and so Options A and B are likely to achieve more positive effects in this regard than Option C. As levels of deprivation vary across Milton Keynes and levels and type of housing delivered will vary across the Borough, effects are uncertain at this stage however regeneration programmes which target deprived areas are likely to be implemented in the long-term. |
| 5.Ensure all section of the community have good access to services and facilities | 0 | 0 | 0 | New housing development in line with Options A, B and C are likely to create additional need for services and facilities which may lead to an adverse impact on sections of the community depending on location. For large development sites, supporting uses and infrastructure would need to be provided alongside housing. There will be an opportunity from the outset to create more walkable neighbourhoods and improve linkages so that access to services and facilities is improved. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | 0 | 0 | New housing development will create additional demand for, or upon education infrastructure, with demand even greater with Options A and B. The impacts will depend on implementation and location and the ability of infrastructure to be sought to meet the needs of each development as well as those associated with population growth. It will also depend upon the location of housing in relation to existing or proposed education facilities. There will be opportunities to provide schools on new housing development sites or funding secured through developer contributions, which will be essential if needs are to be met. Significant adverse effects are predicted in the short-term however in the longer-term, if new housing sites are planned to include schools to meet need and new housing sites are located close to existing and proposed schools, positive effects are identified. |
| 7.Combat climate change by reducing levels of carbon dioxide | ?-- | ?-- | ?-- | Any significant development in the Borough is likely to have a potentially negative impact on the climate change objectives in the short, medium and long term, the precise extent of which is dependent on the scale and location of development and how development/construction is undertaken. There is a degree of uncertainty about the significance and |

| | | | | |
|---|-----|-----|-----|---|
| | | | | <p>extent of negative effects because the extent of effects will depend on the location of new housing development and the incorporation of sustainable design and construction measures that could help to mitigate potential effects. Significant housing development is likely to take place on some greenfield sites as well which will cause significantly greater negative environmental impacts than developing brownfield sites. Carbon emissions would increase as a result of construction. Knock-on effects of building new homes would include but not be limited to: increased energy usage in homes; increased car usage (can be reduced by locating homes in places where reliance on the car is reduced); increased water and other resource usage; and additional infrastructure development/construction to support an increased population, all of which would further impact on carbon emissions. Growth on the scale of either policy option would lead to increased levels of traffic and associated increased levels of congestion on a network that in many places is beginning to get congested at peak times. This is also likely to have an impact on emissions, both general pollution and carbon emissions. Growth in more peripheral locations would also place a greater burden on transport infrastructure with increased journey times. However, an increased population can also make sustainable public transport options more viable depending on the location of new developments. New housing development is likely to provide opportunities to incorporate renewable energy technologies and energy efficiency measures which would help minimise the greenhouse gas emissions. Based on the above, for all policy options significant adverse impacts are likely in the short to medium term, and depending on mitigation measures incorporated, more positive effects are likely in the long-term.</p> |
| 8.Maintain and improve the air quality in the borough | ?-- | ?-- | ?-- | As above, the level of housing proposed in all policy options is likely to result in potentially negative effects against this objective. There is degree |

| | | | | |
|--|-------------|-------------|-------------|--|
| | | | | <p>of uncertainty about the significance and extent of negative effects because the extent of effects will depend on the location of new housing development. Car usage and traffic is likely to increase, however this can be reduced by locating homes where the need to travel and reliance on the car is reduced. In the longer term, increased levels of housing may make providing new sustainable transport modes more viable, and together with already planned improvements to sustainable transport, car usage could reduce lowering the negative effect on air quality. Significant negative effects are likely against this objective.</p> |
| <p>9.Maintain and improve water quality and minimise the risk of flooding</p> | <p>?--</p> | <p>?--</p> | <p>?--</p> | <p>The level of housing proposed with either policy option is likely to increase water consumption, the effect being greater with Options A and B than with C. Development on greenfield land might also increase surface run-off and disrupt infiltration which can impact on water quality.</p> <p>The risk of flooding is also increased as a result of the construction of new homes in two main ways: firstly by impacting on natural drainage systems in the local environment (e.g. reducing permeable surface area and therefore increasing surface run-off); and secondly by siting development in at-risk areas to flooding. Appropriate mitigation measures, locating development away from flood risk areas in the first place and a sequential approach to locating new development will be needed.</p> |
| <p>10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy</p> | <p>?+/-</p> | <p>?+/-</p> | <p>?+/-</p> | <p>Waste generation is likely to increase during the construction and occupation phase of building new homes, however implementing best practice waste management practices can limit the negative effects of this. Negative effects are identified in the short-term, however depending on implementation sustainable waste management may improve in the longer-term.</p> |
| <p>11.Conserve and enhance the borough's biodiversity</p> | <p>?--</p> | <p>?--</p> | <p>?--</p> | <p>Depending on the location, new housing development could have a negative impact on biodiversity with certain areas likely to be more affected than others. There are a number of protected areas however</p> |

| | | | | |
|--|------|------|------|--|
| | | | | outside these areas habitat destruction may still occur, as well as noise disturbance resulting in the relocation of species, or pollution of soil, etc. Significant negative effects are likely for all policy options unless appropriate mitigation measures are employed. |
| 12. Conserve and enhance the borough's heritage and cultural assets | I | I | I | New housing development could result in negative effects on the historic environment, particularly when homes are being constructed as it can affect views. Effects will vary depending on the location and proximity of sites to heritage assets. There is potential for positive effects in the long-term after the construction period if design of new development is in keeping with the character of the area. |
| 13. Protect and enhance soil quality throughout the borough | ?-- | ?-- | ?-- | With all policy options (less so with Option C) there are potentially negative effects on soil quality where homes are developed on greenfield and agricultural land. Appropriate mitigation measures would be needed to reduce the impact in the long-term. |
| 14. Limit noise pollution | I | I | I | All policy options will lead to an increase in activity and car usage where they may previously have been little, particularly on greenfield land. Development in close proximity to the motorway could affect new residents unless adequate mitigation measures are used. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +++ | +++ | +++ | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed with all policy options to offset the overall increase in energy usage from new units. Building to higher densities may increase energy efficiency and planning for more housing initially could encourage higher density development. Significant positive effects are identified over the short, medium and long-term for all policy options, but effects are considered greater for Options A and B. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | ?+/- | ?+/- | ?+/- | With the number of homes proposed with each of the policy options, car usage is likely to increase at least in the short-term. Whilst not immediately, over the long-term this could significantly increase congestion on the roads depending on the location of new housing development. Development on large sites may |

| | | | | |
|--|-----|-----|-----|--|
| | | | | provide an opportunity to create walkable neighbourhoods and extend cycle networks to connect to the main urban area. Sufficiently high levels of housing may also make certain sustainable transport modes for viable. In the long-term. Significant negative effects are identified in the short to medium-term however sustainable transportation usage could increase in the long-term. |
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | I | I | I | Given the level of housing proposed with options A and B, in addition to brownfield development some development on greenfield land is likely, and also possible with Option C. The loss of greenfield land would result in a permanent negative effect against this objective. |
| 18.Ensure high and stable levels of employment | +++ | +++ | +++ | The East of England Forecasting Model (EEFM) shows a large increase in the number of main jobs over the plan period and so delivery of new homes is considered necessary to help fill the jobs. The SHMA also identifies that there will be a shortfall in the number of local workers based on anticipated job growth and adds additional housing in the OAN to take account of this and balance jobs and workers. The quantum of housing provided in options A, B and C therefore contribute positive effects on sustainability objective 18 and 20, with the positive effect potentially greater with options A and B. Option C might result in an under delivery. Transport links of new housing development to the city will be important in ensuring high employment levels so achieving this objective is also dependent on the location of new housing development. Short-term employment opportunities in the construction of new homes are also likely with all options. |
| 19.Encourage the creation of new businesses | + | + | + | An increased local population may encourage the creation of new businesses. Further effects against this objective are best considered on a site-by-site basis. |
| 20.Sustain economic growth and enhance competitiveness | +++ | +++ | +++ | As Objective 18 above. |

Conclusion

The extent of the majority of negative environmental effects described above are generally subject to uncertainty because this will depend on the location of new housing development, the provision of adequate infrastructure and services and facilities to accommodate new housing, mitigation measures used and the

incorporation of sustainable design and construction measures that could help to mitigate other potential effects. All three options are likely to result in similar types of effects however the extent will differ, with greater positive effects on growth objectives likely with Options A and B, but greater negative environmental effects also likely with these options. Option C is not considered to be a suitable policy option to take forward as it would under-deliver on housing and therefore not be compliant with the NPPF. The most suitable option to take forward in the Plan at the moment is considered to be Option A because it seeks to deliver growth in line with housing need identified for the Borough over the plan period and it is considered that in the first instance the Borough should at least seek to meet need as per NPPF requirements. Option B would deliver more housing however it would also potentially result in greater environmental effects. Option B would also require MKC to find additional land to that needed for Option A which may mean more use of greenfield land and subsequently more negative environmental effects. Given the uncertainty over emerging strategies and infrastructure development such as the MK Futures 2050 work, progress of the East-West Rail and the National Infrastructure Commission’s work on the Cambridge – Milton Keynes – Oxford Growth corridor, seeking to deliver over the OAN at this stage is not preferable. The preferred option (Option A) will affect housing land supply options taken forward.

Affordable Housing

The NPPF defines affordable housing as “social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market.” The SHMA has established that over the 15 year plan period, and taking account of existing unmet need as of 2016, there will be a need to provide a significant amount of affordable housing.

Current Council policy sets an affordable housing target of 30% provision on development sites of 15 or more units. There are two aspects to this policy – the site size threshold for providing affordable dwellings, and the proportion of affordable dwellings to provide in developments which meet or exceed the threshold. In terms of broad overview of policy options, alternatives considered could include variations of the above two. These options would largely be determined by the need which has been established in the SHMA.

Site Size Threshold for Providing Affordable Housing

Policy options considered for the site size threshold include:

- A. Follow the existing policy of a 15 unit threshold.
- B. Lower the threshold to 11 units.
- C. Vary the approach across the borough.

It is acknowledged that alternatives considered at this stage will need to be supported by a local plan viability assessment to determine whether different site size thresholds are viable so as not to prevent development coming forward.

Table 7: Affordable housing site size threshold

| Sustainability Objective | Policy Option | | | Commentary |
|---|---------------|-----|------|---|
| | A. | B. | C. | |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++ | +++ | ?+++ | All the policy options seek to deliver affordable housing and so significant positive effects are identified against this |

| | | | | |
|--|---|---|---|---|
| | | | | <p>objective. The extent of effects are dependent on the number of schemes that come forward over the threshold for Options A and B, and for Option C, over the different thresholds in different areas. The effects of Option C are uncertain at this stage given that the approach has not been fully identified as yet. A varied approach could yield no affordable housing in some areas depending on the approach taken. Option B is likely to yield more affordable housing than Option A as it will potentially capture more development schemes. With respect to the financial viability of schemes, provision of more affordable housing could affect sustainability measures provided beyond what is required by policy, however it is likely there will be a minimal impact.</p> |
| 2.Protect and improve residents' health and reduce health inequalities | + | + | + | <p>With all three policy options, provision of affordable housing could help reduce overcrowding which could have an effect on health and well-being.</p> |
| 3.Reduce levels of crime and create vibrant communities | 0 | 0 | 0 | <p>No significant effects are identified against this objective.</p> |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | + | + | + | <p>All three options would likely in a greater amount of disposable income for low income households. Option B would have a greater effect as it would provide more affordable units.</p> |
| 5.Ensure all sections of the community have good access to services and facilities | + | + | + | <p>As above. A greater amount of disposable income could improve access to services and facilities.</p> |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | 0 | 0 | <p>No significant effects are identified against this objective.</p> |
| 7.Combat climate change by reducing levels of carbon dioxide | 0 | 0 | 0 | <p>No significant effects are identified against this objective.</p> |
| 8.Maintain and improve the air quality in the borough | 0 | 0 | 0 | <p>No significant effects are identified against this objective.</p> |
| 9.Maintain and improve water quality and minimise the risk of flooding | 0 | 0 | 0 | <p>No significant effects are identified against this objective.</p> |

| | | | | |
|--|---|---|---|--|
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 11.Conserve and enhance the borough's biodiversity | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 12.Conserve and enhance the borough's heritage and cultural assets | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 13.Protect and enhance soil quality throughout the borough | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 14.Limit noise pollution | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 15.Encourage energy efficiency, renewable energy use and efficient use of natural resources | 0 | 0 | 0 | No significant effects are identified against this objective |
| 16.Limit and reduce road congestion and encourage sustainable transportation | ? | ? | ? | More affordable housing might result in more people living in the Borough which could potentially increase congestion. The exact effects are uncertain at present and will likely be determined by the location of new development. On the other hand more affordable housing could potentially make public transport a more viable option which could have an effect on the frequency and quality of services provided. If affordable housing is located close to places of work or within easy access of sustainable transport, congestion could be reduced. |
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 18.Ensure high and stable levels of employment | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 19.Encourage the creation of new businesses | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 20.Sustain economic growth and enhance competitiveness | 0 | 0 | 0 | No significant effects are identified against this objective. |

The policy has a relatively narrow focus and so effects on the majority of sustainability objectives are not anticipated. Option B is likely to yield more affordable dwellings than Option A, whilst the effects of Option C are likely to be positive but uncertain and could result in some areas of Milton Keynes having no affordable housing, as well as under-delivery, depending on the approach taken. The preferred policy option would need to be subject to a local plan viability assessment.

Proportion of Affordable Housing to Provide for Qualifying Developments

- A. Follow the existing policy of a 30% requirement.
- B. Increase the proportion of homes sought to 33%.
- C. Vary the approach across the borough.

Lowering the proportion of homes required to be affordable housing was not considered a reasonable alternative as this would not help to meet the need established in the SHMA.

It is acknowledged that alternatives considered at this stage will need to be supported by a local plan viability assessment to determine whether different proportions of affordable housing sought are viable so as not to prevent development coming forward.

Table 8: Proportion of affordable housing

| Sustainability Objective | Policy Option | | | Commentary |
|---|---------------|-----|------|---|
| | A. | B. | C. | |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++ | +++ | ?+++ | All the policy options seek to deliver affordable housing and so significant positive effects are identified against this objective. Option B would deliver more affordable housing than option A however ultimately the number of affordable homes delivered will depend on the size of development proposals, site specific circumstances and financial viability. The effects of Option C are uncertain at this stage. A varied approach could yield no affordable housing in some areas depending on the approach taken. With respect to the financial viability of schemes, provision of more affordable housing could affect sustainability measures provided beyond what is required by policy; however it is considered there will be a minimal impact from this. |
| 2.Protect and improve residents' health and reduce health inequalities | + | + | + | With all three policy options, provision of affordable housing could help reduce overcrowding which could have an effect on health and well-being. |
| 3.Reduce levels of crime and create vibrant communities | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the | + | + | + | All three options would likely in a greater amount of disposable income for low income |

| | | | | |
|---|---|---|---|--|
| average | | | | households. Option B would have a greater effect as it would provide more affordable units. |
| 5.Ensure all sections of the community have good access to services and facilities | + | + | + | As above. A greater amount of disposable income could improve access to services and facilities. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 7.Combat climate change by reducing levels of carbon dioxide | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 8.Maintain and improve the air quality in the borough | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 9.Maintain and improve water quality and minimise the risk of flooding | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 11.Conserve and enhance the borough's biodiversity | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 12.Conserve and enhance the borough's heritage and cultural assets | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 13.Protect and enhance soil quality throughout the borough | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 14.Limit noise pollution | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 15.Encourage energy efficiency, renewable energy use and efficient use of natural resources | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 16.Limit and reduce road congestion and encourage sustainable transportation | ? | ? | ? | More affordable housing might result in more people living in the Borough which could potentially increase congestion. The exact effects are uncertain at present and will likely be determined by the location of new development. On the other hand more affordable housing could potentially make public transport a more viable option which could have an effect on the frequency and quality of services provided. If affordable housing is located close to places of work or within easy access of sustainable transport, congestion could be reduced. |

| | | | | |
|--|---|---|---|---|
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 18.Ensure high and stable levels of employment | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 19.Encourage the creation of new businesses | 0 | 0 | 0 | No significant effects are identified against this objective. |
| 20.Sustain economic growth and enhance competitiveness | 0 | 0 | 0 | No significant effects are identified against this objective. |

Conclusion

Option A and B would have relatively similar outcomes however delivering based on the SHMA evidence is preferable and would likely result in a slightly higher number of affordable homes being delivered. There is not enough evidence to suggest Option C would be a viable alternative at this stage. The preferred policy option would need to be subject to a local plan viability assessment to determine whether different proportions of affordable housing sought are viable so as not to prevent development coming forward.

Housing Density

What constitutes an appropriate mix and density of housing is influenced by a number of site-specific and other factors. Two reasonable policy options were identified for planning housing density across the Borough.

- A. Take a zonal approach and set different housing densities for different areas of the Borough.
- B. Take a flexible approach and assess housing density for each site on a case by case basis.

Table 9: Housing density

| Sustainability Objective | Policy Option | | Commentary |
|---|---------------|----|--|
| | A. | B. | |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | 0 | 0 | <p>Option A provides a degree of certainty to potentially how many homes could be provided in different areas of the Borough. Based on area specifics and existing infrastructure in place different areas would have a higher or lower density. This approach would help provide the appropriate number of dwellings for different areas of the Borough.</p> <p>Option B provides some flexibility to the approach taken and assesses the development capabilities of a site on a case by case basis. This approach would take account of area specifics and existing infrastructure too but would provide some flexibility as circumstances change over the plan period.</p> <p>Both options can help optimise the</p> |

| | | | |
|--|---|---|---|
| | | | development potential of sites and therefore potentially increase the amount of affordable housing provided, however Option B may be more effective in doing so over the long-term as the Borough changes. |
| 2.Protect and improve residents' health and reduce health inequalities | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough, the effects of which will vary on site specific circumstances. Lower densities may make provision of certain facilities less viable however could positively affect mental well-being. Higher densities could yield opposite effects. |
| 3.Reduce levels of crime and create vibrant communities | 0 | 0 | No significant effects are identified against this objective. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | 0 | 0 | No significant effects are identified against this objective. |
| 5.Ensure all sections of the community have good access to services and facilities | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough, the effects of which will vary on site specific circumstances. Lower densities may make provision of certain services and facilities less viable. Higher densities could yield opposite effects. Option B's more flexible approach would likely make planning over the longer-term more effective. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough, the effects of which will vary on site specific circumstances. Lower densities may make provision of certain education facilities less viable. Higher densities could yield opposite effects. Option B's more flexible approach would likely make planning over the longer-term more effective. |
| 7.Combat climate change by reducing levels of carbon dioxide | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough to suit the character of the area; however Option B's more flexible approach will make planning over the long-term more effective. Higher densities in sustainable locations where the need to travel is reduced can help reduce carbon emissions and increase energy efficiency. |
| 8.Maintain and improve the air quality in the borough | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough to |

| | | | |
|--|---|---|---|
| | | | suit the character of the area, however Option B's more flexible approach will make planning over the long-term more effective. Higher densities in sustainable locations where the need to travel is reduced can help reduce carbon emissions and therefore improve air quality. |
| 9.Maintain and improve water quality and minimise the risk of flooding | 0 | 0 | No significant effects are identified against this objective. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | 0 | 0 | No significant effects are identified against this objective. |
| 11.Conserve and enhance the borough's biodiversity | 0 | 0 | No significant effects are identified against this objective. |
| 12.Conserve and enhance the borough's heritage and cultural assets | 0 | 0 | No significant effects are identified against this objective. |
| 13.Protect and enhance soil quality throughout the borough | 0 | 0 | No significant effects are identified against this objective. |
| 14.Limit noise pollution | 0 | 0 | No significant effects are identified against this objective. |
| 15.Encourage energy efficiency, renewable energy use and efficient use of natural resources | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough. Higher densities may encourage a more efficient use of natural resources and improve energy efficiency in certain areas. Higher densities may also make incorporation of renewable energy technologies more viable. |
| 16.Limit and reduce road congestion and encourage sustainable transportation | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough. Higher densities in certain areas can make sustainable transport provision in the area could potentially make public transport a more viable option which could have an effect on the frequency and quality of services provided. Higher density development in locations highly accessible by public transport could reduce car usage. As both policy options take into account site specific circumstances, housing densities will likely suit the character of the area. Positive effects are identified. |
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | 0 | 0 | The different approaches are unlikely to yield significantly different effects against this objective. Both approaches will lead to a mix of densities across the Borough. By taking into account site specific circumstances, land can be used more |

| | | | |
|--|---|---|---|
| | | | efficiently. Higher densities could result in less greenfield land being used. Both policy options would optimise the development potential of sites so positive effects are identified. Option B's more flexible approach would make planning over the longer-term more effective. |
| 18.Ensure high and stable levels of employment | 0 | 0 | No significant effects are identified against this objective. |
| 19.Encourage the creation of new businesses | 0 | 0 | No significant effects are identified against this objective. |
| 20.Sustain economic growth and enhance competitiveness | 0 | 0 | No significant effects are identified against this objective. |

Conclusion

Both policy options achieve similar effects and allow site specific circumstances to determine housing density for new developments. Option A seeks to set housing densities for different areas from the outset, however this approach may in the long-term become less effective as new developments and changes in site specific circumstances affect what the most suitable housing density in an area may be. Policy Option B however allows the Council to take a flexible approach and assess what the appropriate housing density for a site should be on a case by case basis. This approach remains effective in the long-term.

Urban vs Rural Development

The Strategic Policies in the 2005 Local Plan took forward the approach of concentrating most new development in the City. The scale and distribution of new development in the Local Plan was based on several general principles which identify some key ways in which sustainability can be maintained and improved in the Borough. These principles are:

- The pursuit of greater environmental, social and economic sustainability;
- Concentrating new development at Milton Keynes City
- Maintaining the existing balance between jobs and homes
- Seeking to reduce the need for and length of journeys by car
- Adopting a sequential approach to identifying new development opportunities
- Concentrating new development in or around existing centres and around nodes on public transport corridors
- Respecting key environmental constraints.

These principles manifested themselves in the continued channelling of the majority of new development to CMK and to the east and west flanks of the city although the Plan now extended the original limits of development of the original city in the allocation of "City Expansion Areas" to the east, west and north of the city.

The City Expansion Areas were selected based on a strategy of concentrating new development in a few larger areas, rather than dispersing smaller amounts of development around more, but smaller sites. The reason behind this was that larger sites maximise the potential to adopt new approaches to layout, density and design, and encouraging greater use of public transport.

Substantial and concentrated development in these areas provided opportunities to contribute to the achievement of the Council's public transport strategy, which to a large extent depended on substantial and concentrated development at both ends of an east-west mass transit corridor. The Strategy continued the approach of limiting

the amount of new development in the rural areas, channelling the majority of any new rural development to the three key settlements of Newport Pagnell, Olney and Woburn Sands.

Urban/Rural Split

Traditionally there has been a split between the urban and rural areas, with the majority of new housing being planned in or adjoining the urban area. The policy approach was continued in the Core Strategy. Over the last 10-15 years there has been the redevelopment of several large brownfield sites in the rural areas. These redevelopment opportunities are now fairly limited and so to continue to deliver 110 homes a year, which was planned in the Core Strategy, would require a greater amount of development to be accommodated on greenfield sites around rural settlements than has previously been the case.

In the last two Plans for the Borough, the need for additional housing growth has primarily been met in urban expansion areas, with the 2005 Local Plan allocating major extension to the east and west of the city as well as a range of smaller extensions to the south. These areas provided the opportunity to plan comprehensively for high quality, mixed use areas of a scale to contain employment floorspace, a range of community facilities and open space alongside housing to help deliver sustainable communities, rather than planning for small scale, standalone housing sites.

In the case of the Eastern and Western Expansion Areas, they also provided the opportunity to try and address issues regarding the effectiveness of public transport by introducing City Streets to complement the existing grid road system. In the main, these Expansion Areas have been on greenfield land around the city.

Based on the above, two reasonable alternative policy options regarding the urban/rural development strategy have been considered for Plan:MK:

Option A

Continue the previous strategy. Focus housing development in and around the Milton Keynes urban area and only deliver a limited amount of housing in rural areas to minimise the use of greenfield sites around rural settlements.

Option B

Still focus housing development in and around the Milton Keynes urban area however make more use of greenfield sites around rural settlements so that a higher number of homes are delivered in rural areas than in Option A.

Table 10: Urban/Rural Split

| Sustainability Objective | Policy Option | |
|---|---------------|-----|
| | A. | B. |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++ | +++ |
| 2.Protect and improve residents' health and reduce health inequalities | 0 | 0 |
| 3.Reduce levels of crime and create vibrant communities | 0 | 0 |

| | | |
|--|---|-----|
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | + | + |
| 5.Ensure all sections of the community have good access to services and facilities | + | + |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | 0 |
| 7.Combat climate change by reducing levels of carbon dioxide | + | + |
| 8.Maintain and improve the air quality in the borough | + | + |
| 9.Maintain and improve water quality and minimise the risk of flooding | ? | ? |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | 0 | 0 |
| 11.Conserve and enhance the borough's biodiversity | + | + |
| 12.Conserve and enhance the borough's heritage and cultural assets | | |
| 13.Protect and enhance soil quality throughout the borough | + | + |
| 14.Limit noise pollution | 0 | 0 |
| 15.Encourage energy efficiency, renewable energy use and efficient use of natural resources | 0 | 0 |
| 16.Limit and reduce road congestion and encourage sustainable transportation | ? | ? |
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | + | +/- |
| 18.Ensure high and stable levels of employment | + | + |
| 19.Encourage the creation of new businesses | + | + |
| 20.Sustain economic growth and enhance competitiveness | + | + |

Both policy options are relatively similar because they focus housing development in the urban area and therefore the sustainability effects are broadly similar too. Any significant development in the Borough is likely to have a potentially negative impact on several of the Council's environmental sustainability objectives in the short, medium and long term, the precise extent of which is dependent on scale and location of development and how development/construction is undertaken. However, seeking to focus development in the main urban area encourages development on brownfield land rather than greenfield which therefore minimises negative environmental effects. There is degree of uncertainty about the significance and extent of effects because the extent of effects will depend on the precise location of new housing sites, even within urban and rural areas, the provision of adequate infrastructure and new services and facilities to accommodate the new development, and the incorporation of sustainable design and construction measures that could help to mitigate potential effects. How policy will be implemented is also a significant factor. However, it is anticipated that a larger proportion of housing development being in rural areas, as is the case with option B, will mean that a larger amount of

greenfield land will need to be used and this will increase any environmental effects. This particularly effects objective 17 as well which seeks to encourage the development of brownfield sites before greenfield sites. It is also anticipated that delivering a higher proportion of new homes in rural areas may lead to a need for additional supporting infrastructure in rural areas to support a larger local population, depending on location, which may subsequently have a greater environmental impact and financial cost than it would in the urban area. Increased journey to work times are also envisaged if a higher proportion of the population live further away from the urban area where the majority of jobs are located.

Both policy options will positively contribute to objectives 1, 18, 19 and 20 however this is discussed in greater detail in the “Meeting Housing Need” appraisal. No significant impacts on the other sustainability objectives are anticipated.

Housing Land Supply and Spatial Delivery

Once the appropriate number of homes to be delivered in the urban has been determined a strategy for delivering the homes is needed. In the Plan:MK topic papers which were publicly consulted on in 2014 various development options were considered. Since then additional evidence has been gathered. Consultation responses on the options have been taken into account, the housing need over the plan period has been determined and a call for sites has been undertaken which has helped in identifying potential strategic housing development locations. The required number of homes to be met through the Local Plan has been identified taking into account existing commitments and overall need.

| | |
|--|--------|
| Number of homes required to be built: | 26,500 |
| Total Existing Commitments; | 19,725 |
| Remaining requirement to be met through Local Plan allocations | 6,775 |

This section will appraise the reasonable alternative spatial delivery options for housing against the sustainability objectives. The options appraised are unlikely to be taken forward in isolation in Plan:MK. The purpose of the SA is to assess the effects of the various and reasonable options available to help inform the preferred development strategy for housing. As such, more than one option could be taken forward to help meet housing need.

Option A – Intensification and Redevelopment in the Urban Area

This option would see the completion of all existing City grid squares, the Eastern and Western Expansion Areas and the Strategic Land Allocation, the continued development of Central Milton Keynes, regeneration opportunities of some existing city housing estates (*MKC is awaiting further information on the potential for additional homes to be delivered in the urban area through the Council’s Regeneration Programme*).

In addition, an Urban Capacity Study has suggested the potential for the delivery of a significant number of homes through development and redevelopment opportunities across the Milton Keynes urban area.

Option B – Sustainable Urban Extensions

This option would see sustainable urban extensions on land to the north, east, west, south-west and/or south east of the city.

Option C - One or more satellite settlements in the rural area

This option would see the development of one or more standalone settlements in the open countryside. Evidence on similar developments in the past suggests 5,000 homes would be the minimum size for any self-sufficient settlement.

Option D – Small scale development within rural settlements

This option would see small scale development to support rural settlements and guide the preparation of remaining neighbourhood plans.

Option E – Non-strategic sites

This option would look to allocate a number of small to medium sized non-strategic sites for housing development, so as to provide short-term flexibility and contingency as major new growth plans come forward. Sites of this nature would be predominantly located within the existing urban area however there is potential that some smaller extensions on the existing boundary of the urban area could also come forward. A number of sites have been submitted through previous consultation periods, whilst the Council can also utilise information from its Urban Capacity Study to find sites of this nature. Individual non-strategic sites are appraised in the following section.

Table 11: Housing land supply and spatial delivery

| Sustainability Objective | Policy Option | | | | | Commentary |
|---|---------------|------|------|----|----|---|
| | A. | B. | C. | D. | E. | |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | ?+++ | ?+++ | ?+++ | 0 | ?+ | Policy Options B and C could possibly deliver a higher proportion of affordable housing than Option A, D and E. With Option A and E some housing delivery is expected to come from small sites where affordable housing provision may not be viable and may not need to be provided based on current policy thresholds, whereas with the other Options housing delivery on large sites may make provision of affordable housing more viable. There is however a large total number of homes that could be delivered through Option A which overall could lead to a high number of affordable homes. |

| | | | | | | |
|---|---|---|---|---|---|--|
| | | | | | | <p>Homes delivered under each of the policy options would be required to comply with sustainable construction standards. Large housing developments with each of the Options might make delivery of certain renewable energy technology more viable. Significant positive effects are identified with policy options A, B, C and E. Option D result in only a small amount of development in rural settlement areas and so opportunities to provide affordable housing are likely to be limited.</p> |
| <p>2.Protect and improve residents' health and reduce health inequalities</p> | I | I | I | 0 | I | <p>New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents' health and wellbeing. The impacts will depend in part on the location and on implementation and the ability of existing infrastructure in the areas to cope with increased demand and the ability of infrastructure to be sought to meet the needs of each development as well as those associated with population growth. Option C would ideally need to be self-sufficient as a standalone settlement and so there is likely to be a greater need to provide additional health infrastructure to support the new settlement, whereas with Options A and E, in the short-term at least existing health infrastructure nearby</p> |

| | | | | | | |
|---|---|---|---|---|---|--|
| | | | | | | <p>may be able to cope with increased demand. In the longer-term increased demand from new development with Options A and E would likely require investment in health infrastructure. With Option B (depending on location – see individual site assessments) it is likely that existing health infrastructure may not be sufficient to cope with an increased demand from extending the urban area in the long-term.</p> <p>With each of the Options there are likely to be opportunities to provide new areas of accessible green space and through well designed urban environments encourage healthier lifestyles (e.g. creating walkable neighbourhoods). Developer contributions to fund strategies/developments that improve health could also be sought from large developments. Ultimately, impacts on health will vary based on site specific circumstances and so there is some uncertainty as to the likely impact. Both positive and negative impacts are identified for the long-term for all options.</p> <p>Option D is likely to result in a small amount of development with effects on this objective not likely to be significant.</p> |
| 3.Reduce levels of crime and create vibrant communities | 0 | 0 | 0 | 0 | 0 | It is not expected that different spatial options for housing delivery will |

| | | | | | | |
|--|---|---|---|---|---|--|
| | | | | | | lead to significant effects on this objective for Options A, B, D or E. Housing delivery under all Options would yield opportunities to implement designing-out-crime principles in development design. Option C would essentially be creating a new community which is considered a significant positive effect. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | + | ? | ? | 0 | 0 | As levels of deprivation vary across Milton Keynes and levels and type of housing delivered will vary across the Borough, different spatial options could yield different results. It is unclear at this stage if any of the spatial options will yield different results on this objective other than with Option A which aims to support regeneration programmes which will target deprived areas. These likely to be implemented in the long-term. |
| 5.Ensure all sections of the community have good access to services and facilities | 0 | - | - | 0 | 0 | The location of new homes can affect access residents have to services and facilities depending on what existing facilities are present. Option B is unlikely to have many existing services and facilities nearby for residents such as shops, community facilities, etc. Option C is unlikely to have any. Appropriate provision for this would need to be made to support any development in these locations. Temporary negative effects are likely against this objective for Options B and C, although not significant. Option A may also need to make provision for services |

| | | | | | | |
|--|-----|-----|-----|---|-----|--|
| | | | | | | and facilities depending on the location of schemes however in the short-term there are unlikely to be any negative effects. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | I | I | I | 0 | I | Similar to Objective 2, there is likely to be a greater need for additional education facilities with Options B and C than there is for Options A or E, although all Options will likely require the delivery of new facilities to avoid negative effects. Negative effects are likely with Options B and C in the short to long-term and in the long-term with Options A and E unless appropriate facilities are provided. Option D is likely to result in a small amount of development with effects on this objective not likely to be significant. |
| 7.Combat climate change by reducing levels of carbon dioxide | I-- | I-- | I-- | 0 | I-- | The effects of new housing development against this objective were described in the appraisal of 'meeting housing need'. Sustainable construction can be incorporated under all policy options and car usage (and therefore emissions) is likely to increase with all policy options. The effects are likely to be greatest with Option C where sustainable transport alternatives are unlikely to exist and journey times in private car are likely to be greatest. Option B is essentially an urban extension and could potentially make use of existing public transport infrastructure however car usage is still likely to increase. Option A is likely to result in the lowest |

| | | | | | | |
|---|-----|-----|-----|---|-----|---|
| | | | | | | increase in car usage with more sustainable transport options available in the main urban area however this increase will still be significant. Option E will also lead to an increase in car usage however this will likely be distributed around the urban area. Option D is likely to result in a small amount of development with effects on this objective not likely to be significant. |
| 8.Maintain and improve the air quality in the borough | I-- | I-- | I-- | 0 | I-- | Similar effects to the above objective. |
| 9.Maintain and improve water quality and minimise the risk of flooding | 0 | I- | I- | 0 | 0 | Development on greenfield land would increase surface run-off and disrupt infiltration which can impact on water quality. This effect is likely to be greatest therefore with Options B and C. The risk of flooding is also increased by developing on greenfield land. The individual site assessments assess whether sites in the potential growth areas are in flood risk zones. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | 0 | 0 | 0 | 0 | 0 | This objective is unlikely to be significantly affected by the different spatial policy options. |
| 11.Conserve and enhance the borough's biodiversity | 0 | I-- | I-- | 0 | 0 | Biodiversity impacts can occur as a result of intensification and redevelopment within the urban area however significantly adverse effects against this objective are most likely to occur through development on greenfield land, unless appropriate |

| | | | | | | |
|---|---|----|----|---|---|--|
| | | | | | | mitigation/avoidance measures are put in place. Options B and C could therefore potentially result in significant negative effects against this objective. |
| 12. Conserve and enhance the borough's heritage and cultural assets | 1 | 0 | 0 | 0 | 1 | There is a greater concentration of heritage and cultural assets within the main urban area and so potential negative effects are more likely with spatial option A and E. Care would need to be taken regardless of where development occurred to aim to conserve and enhance the Borough's heritage and cultural assets. |
| 13. Protect and enhance soil quality throughout the borough | 0 | -- | -- | - | 0 | Impacts on soil quality are less likely to occur as a result of intensification and redevelopment within the urban area however significantly adverse effects against this objective are most likely to occur through development on greenfield land/ agricultural land, unless appropriate mitigation/avoidance measures are put in place. Options B and C could therefore potentially result in significant negative effects against this objective. |
| 14. Limit noise pollution | - | - | - | - | - | All policy options will likely lead to an increase in noise pollution due to an increase in activity and car usage. Option B might particularly affect this objective due to homes potentially being built so close to the motorway. Appropriate mitigation measures such as noise insulation would need to be incorporated. |

| | | | | | | |
|--|------------|-------------|-------------|----------|------------|---|
| <p>15. Encourage energy efficiency, renewable energy use and efficient use of natural resources</p> | <p>+++</p> | <p>+++</p> | <p>+/-</p> | <p>+</p> | <p>+++</p> | <p>There is likely to be a greater use of natural resources with Option C because of the need to deliver a significant amount of infrastructure and supporting services/facilities to make the option viable. There will be an opportunity to incorporate sustainable construction standards and renewable energy technologies into new development with all policy options.</p> |
| <p>16. Limit and reduce road congestion and encourage sustainable transportation</p> | <p>+/-</p> | <p>+/-</p> | <p>+/-</p> | <p>0</p> | <p>+/-</p> | <p>Car usage is likely to increase with all policy options. The effects are likely to be greatest with Option C where sustainable transport alternatives are unlikely to exist and journey times in private car are likely to be greatest. Option B is essentially an urban extension and both could potentially make use of existing public transport infrastructure however car usage is still likely to increase. Options A and E are likely to result in the lowest increase in car usage with more sustainable transport options available in the main urban area however this increase will still be significant.</p> |
| <p>17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites</p> | <p>0</p> | <p>--</p> | <p>--</p> | <p>-</p> | <p>?</p> | <p>Spatial Options B and C all involve development on significant amounts of greenfield land and so permanent negative effects are identified with these options. Option A primarily aims to develop on brownfield land.</p> |
| <p>18. Ensure high and stable levels of employment</p> | <p>+++</p> | <p>I+++</p> | <p>I+++</p> | <p>0</p> | <p>?</p> | <p>Transport links of new housing development to the city and other existing and proposed employment areas in the Borough will be important in ensuring</p> |

| | | | | | | |
|---|-----|------|------|---|---|---|
| | | | | | | high employment levels so achieving this objective is dependent on the location of new housing development. Option A is likely to yield significant positive effects. Option B may yield similar effects as it seeks development close to the main urban area however the extent of these effects is also dependent on whether employment opportunities are provided as part of any new housing development in those areas. The effects of Option C are also dependent on this. |
| 19. Encourage the creation of new businesses | +++ | I+++ | I+++ | 0 | ? | Transport links of new housing development to the city will help encourage the creation of new businesses. The most significant positive effects are likely to be as a result of Option A. |
| 20. Sustain economic growth and enhance competitiveness | +++ | I+++ | I+++ | 0 | ? | As Objective 18 above. |

Conclusions

The Council’s spatial development strategy should seek to deliver the identified housing need. The options appraised above all have the potential to help meet this need, some to a greater extent than others. Options B and C are more likely to deliver homes in the long-term rather than in the next few years given the investment in infrastructure and scale of development needed. Options A, D and E are likely to be able to deliver some homes in the short-term. Effects on the environment also vary with Options A and E likely to have the lowest negative impact on the environment compared to the other options which involve significant development on greenfield land. Option C is likely to require a significant investment in infrastructure to make any new settlement self-sufficient and associated negative environmental effects are likely to be significant as nearly all development will take place on greenfield land without existing sustainable transport infrastructure present.

The conclusions drawn for this appraisal suggest a strategy which delivers housing in line with policy options A, B, D and E would likely result in the most positive social and economic effects over the short, medium and long-term and minimise negative environmental effects. Furthermore, given the need to deliver 6,775 homes through the Local Plan, a strategy that seeks to deliver homes in several different locations and not focusing on only one of the growth options above would result in a more robust strategy that will likely deliver homes in the short, medium and long-term.

Settlement Hierarchy

The provision of new homes and jobs from 2016 to 2031 will take account of the Settlement Hierarchy set out below, and the opportunities provided by the completion of East-West Rail links and the new National Express Way between Oxford and Cambridge via Milton Keynes. Generally new development will be directed towards those settlements which rank the highest in the hierarchy while those lower end of the hierarchy will only see new development to meet identified local needs or where there are overriding regeneration objectives. This will ensure that new development takes place at the appropriate scale in the most sustainable locations.

Table 12: Settlement Hierarchy

| | | | |
|--|---|--|---|
| 1. Milton Keynes City Main areas for development will be: | | | |
| Central Milton Keynes | Uncompleted City estates; Expansion Areas and Strategic Land Allocations | New Strategic Growth Area; South-East Milton Keynes (post 2026) | Selective infill, regeneration and redevelopment opportunities. |
| 2. Key Settlements | | | |
| Newport Pagnell | | Olney | |
| 3. Other Villages | | | |
| In compliance with adopted Neighbourhood Plans | | Within defined settlement boundaries | |

The proposed settlement hierarchy is mostly in line with that adopted in the 2013 Core Strategy. This policy has not been appraised in as much detail as the other policies in this SA because there are recurring themes that determine the likely effects against the sustainability objectives. Given the existing infrastructure in place in the main urban area and key settlements, positive effects against many of the sustainability objectives are likely because concentrating development in these areas will:

- Minimise resource usage
- Make best use of existing health and education services and facilities
- Make best use of existing transport infrastructure and therefore limit private car usage
- Make sustainable transport a more viable option by concentrating growth where the majority of the population already resides
- Help support economic growth by locating close to existing and proposed employment premises
- Limit development on greenfield land and make best use of brownfield land, therefore reducing impacts on the natural environment.

For this reason, reasonable alternative policy options were also not considered for the settlement hierarchy and it is not considered necessary to make any significant changes to the approach taken in the Core Strategy.

Potential Strategic Housing Allocations

Many of the potential significant effects associated with significant new housing development were identified in the appraisal of “Meeting objectively assessed housing need”. In most cases these have not been repeated in each of the site appraisals and instead the focus here is on site specific effects.

A map showing the options for strategic housing and employment allocations is shown in Appendix 1.

Option A – Northern Growth Area

A sustainable urban extension on land north of the River Great Ouse between the West Coast Mainline and M1 motorway could potentially deliver in the region of 6,000 dwellings within the Plan period with the potential to provide further growth of up to 20,000 dwellings beyond 2036. The development will need to address significant constraints of the Ouse floodplain, and transport infrastructure as well as demonstrating how the development area can be adequately connected to the existing urban area to the south.

Table 13: Site Option A

| Sustainability Objective | Rank | Comments |
|---|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++I | This site could provide circa 8,000 – 10,000 homes and as such significantly contribute to the Borough’s housing need and any proposal would need to comply with sustainable construction standards in place. At this stage in the plan-making process it is unclear how much affordable housing will be provided or how sustainably constructed the homes will be but any proposal would need to comply with national and local policies in place. Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. The significant amount of infrastructure to deliver for this site and significant planning constraints could potentially impact on affordable housing delivery, |
| 2.Protect and improve residents' health and reduce health inequalities | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle network which would encourage walking and cycling. Additional traffic from development could lead to road-related health impacts. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Development in close proximity to the motorway may encourage car usage. New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents' health and wellbeing. The impacts will depend on implementation and the ability of existing infrastructure to cope with increased demand and the ability of infrastructure |

| | | |
|--|-----|--|
| | | to be sought to meet the needs of each development as well as those associated with population growth. Further work is required to assess infrastructure requirements, particularly regarding health infrastructure to see what impact development here will have on residents' health. |
| 3.Reduce levels of crime and create vibrant communities | I | New development offers the opportunity to design out crime within residential layouts. The effect against this objective depends on implementation. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +? | Provision of affordable housing can help to achieve this objective and new development can incorporate a mix of dwelling types and tenures to encourage mixed communities as well as providing a range of facilities locally, however a detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed, local facilities provided and whether any jobs will be created. |
| 5.Ensure all section of the community have good access to services and facilities | +I | New housing development will likely create additional need for services and facilities. Key services, facilities and employment areas are likely to be provided as part of the development given the size of the site. Access to services and facilities will depend on transport infrastructure provided as part of the proposal for the site, and whether existing and proposed services and facilities are sufficient to support an increased local population will need to be informed by an infrastructure assessment when the proposal comes forward. Development in close proximity to Junction 14 could encourage out-commuting. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | There are opportunities and likely a necessity to provide schools as part of the new development. When a more detailed proposal comes forward it will be possible to appraise against this objective in detail and assess whether existing and planned education facilities will be able to cope with demand. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private car usage would likely be the main mode of transport and an increase in car usage and car emissions likely. Increased carbon emissions as a result of the construction process are also likely. There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | -- | Large parts of the site are within Flood Zones 2 and 3 and significant mitigation measures are likely to be needed. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10.Reduce waste generation and encourage | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the |

| | | |
|--|-----|---|
| sustainable waste management in accordance with the waste management hierarchy | | site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |
| 11. Conserve and enhance the borough's biodiversity | -- | The Great Linford Gravel Pits and River Ouse biological notification sites are on the site. The River Ouse wildlife corridor is also on the site. The site is also composed of mostly greenfield land so there will be some additional impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. There are opportunities to extend the existing Linear Parks system into the area. |
| 12. Conserve and enhance the borough's heritage and cultural assets | | The area contains several archaeological notifications sites, an Ancient Monument called "Moated Site at Manor Farm" and several Grade 1 and 2 listed buildings . As such there is significant historic interest which could be affected by development. The extent of this will depend on how the development proposal takes this into account. The site also lies within an Area of Attractive Landscape. |
| 13. Protect and enhance soil quality throughout the borough | -- | The site has agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase and affect nearby residents. Proximity to the motorway could affect new residents unless properly mitigated against noise pollution. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/- | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to offset the overall increase in energy usage from new units. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | -- | Car usage is likely to increase in the short-term at least. There may be opportunities to extend the existing public transport network into the area however overall car usage in the short-term is likely to increase. Development adjacent to the M1 is likely to cause significant increased private road transport and congestion around Junctions 13 and 14 is likely to increase. There is a possibility to extend the existing cycle network into the area. Development is close to Wolverton Railway Station which may encourage sustainable transportation however given the amount of development proposed transport infrastructure in the area may require significant investment and improvement in the long-term. Development here may also provide an opportunity for a new railway station at Castlethorpe. There will be significant constraints to overcome when planning infrastructure delivery taking account of the flood zone and numerous heritage assets. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no |

| | | |
|--|----|--|
| brownfield sites before greenfield sites | | net improvement in efficiency and so it negatively impacts on this objective. |
| 18.Ensure high and stable levels of employment | +I | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will also be important in determining the effects on this objective. |
| 19.Encourage the creation of new businesses | +I | An increased local population may encourage the creation of new businesses. Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. |
| 20.Sustain economic growth and enhance competitiveness | +I | Employment land provided as part of the development should contribute to providing additional jobs. Development close to the M1 may encourage distribution related business for which evidence indicates a need. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. |

Option B - Land East of the M1 motorway (Milton Keynes East)

This site is to the east of the M1 motorway, south of the Newport Road and the village of Moulsoe. As a sustainable urban extension it could provide circa 5,000 dwellings during the Plan period.

Table 14: Site Option B

| Sustainability Objective | Rank | Comments |
|---|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++I | This site could provide circa 5,000 homes and as such contribute to the Borough's housing need and any proposal would need to comply with national sustainable construction standards in place. At this stage in the plan-making process it is unclear how much affordable housing will be provided or how sustainably constructed the homes will be but any proposal would need to comply with national and local policies in place. Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. |
| 2.Protect and improve residents' health and reduce health inequalities | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle network which would encourage walking and cycling. Additional traffic from development could lead to road-related health impacts. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Development in close proximity to the motorway may encourage car usage. New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents' health and wellbeing. The impacts will depend on |

| | | |
|--|-----|---|
| | | implementation and the ability of existing infrastructure to cope with increased demand and the ability of infrastructure to be sought to meet the needs of each development as well as those associated with population growth. Further work is required to assess infrastructure requirements, particularly regarding health infrastructure to see what impact development here will have on residents' health. |
| 3.Reduce levels of crime and create vibrant communities | I | New development offers the opportunity to design out crime within residential layouts. The effect against this objective is uncertain until a detailed development proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +? | Affordable housing provision can help to achieve this objective and new development can incorporate a mix of dwelling types and tenures to encourage mixed communities as well as providing a range of facilities locally, however a detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed, local facilities provided and whether any jobs will be created. |
| 5.Ensure all section of the community have good access to services and facilities | +I | Key services, facilities and employment areas are likely to be provided as part of the development given the size of the site. Access to services and facilities will depend on transport infrastructure provided as part of the proposal for the site, and whether existing and proposed community facilities are sufficient to support an increased local population will need to be informed by an infrastructure assessment when the proposal comes forward. Development in close proximity to Junction 14 could encourage out-commuting. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | There are opportunities to provide schools as part of the new development. When a more detailed proposal comes forward it will be possible to appraise against this objective in detail and assess whether existing and planned education facilities provision will be sufficient. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private car usage would likely be the main mode of transport and an increase in car usage and car emissions likely. Increased carbon emissions as a result of the construction process are also likely. There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | -I | Small parts of the western section of the site are within Flood Zones 2 and 3. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10.Reduce waste generation and | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward |

| | | |
|---|-----|---|
| encourage sustainable waste management in accordance with the waste management hierarchy | | it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |
| 11. Conserve and enhance the borough's biodiversity | -- | There are the Broughton Fields Ponds 1 and 2 biological notification sites on the site. Extensions to the existing linear park system may be difficult due to the motorway. The site is also composed of entirely greenfield land so there will still be some impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. |
| 12. Conserve and enhance the borough's heritage and cultural assets | | The area contains potential archaeological notification sites. As such there may be some historic interest which could be affected by development. The extent of this will depend on how the development proposal takes this into account. |
| 13. Protect and enhance soil quality throughout the borough | -- | The site lies on agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase and affect nearby residents. Proximity to the motorway could affect new residents unless properly mitigated against noise pollution. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/- | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to offset the overall increase in energy usage from new units. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | -- | Car usage is likely to increase in the short-term at least. Development adjacent to the M1 is likely to cause significant increased private road transport and congestion around Junctions 13 and 14 is likely to increase in the short-term. Homes here could benefit if included in the route of a potential Oxford to Cambridge Expressway. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective. |
| 18. Ensure high and stable levels of employment | + | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will be more important in determining the effects against this objective. |
| 19. Encourage the creation of new | + | An increased local population may encourage the creation of new businesses. Provision of premises out of which |

| | | |
|--|----|---|
| businesses | | businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20.Sustain economic growth and enhance competitiveness | +1 | Employment land provided as part of the development should contribute to providing additional jobs. Development close to the M1 may encourage distribution related business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. |

Option C - Land to the South East of Milton Keynes (Milton Keynes South East)
 Plan:MK recognises the available and deliverable land to the south east of the existing urban area around the settlements of Wavendon, Woburn Sands and Bow Brickhill and the development opportunities that this provides. It is proposed that land in this area will provide a total of 1,000 dwellings during the plan period.

Table 15: Site Option C

| Sustainability Objective | Rank | Comments |
|---|------|---|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++1 | The site could provide circa 1,000 homes and as such contribute significantly to the Borough’s housing need. It would be required to comply with national sustainable construction standards. At this stage in the plan-making process it is unclear how much affordable housing will be provided or what level of sustainable construction these homes will be built to (although national standards would be the minimum). Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. |
| 2.Protect and improve residents' health and reduce health inequalities | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle redway network which would encourage walking and cycling. Additional traffic from development could lead to road-related health impacts. New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents’ health and wellbeing. The impacts will depend on implementation and the ability of existing infrastructure to cope with increased demand and the ability of infrastructure to be sought to meet the needs of each development as well as those associated with population growth. Within a mile radius of the site are two health centres, two pharmacies, a dentist and an optician. The provision of several thousand dwellings may put strain on these facilities however at this stage it is unknown whether additional health facilities will be needed. As such the effects are uncertain at this stage and the site can be more fully appraised when a more detailed proposal comes forward. |
| 3.Reduce levels of crime and create vibrant communities | 1 | A full appraisal against this objective will be possible when a detailed proposal comes forward. |
| 4.Reduce the gap between the most | +? | Affordable housing provision, creation of jobs and provision of key services and facilities (e.g. education and community |

| | | |
|---|-----|---|
| deprived areas of Milton Keynes and the average | | facilities) can help to achieve this objective. A detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed and the number of jobs created and education facilities provision, among other things. Jobs would be created during the construction process, which can contribute, in the short term towards achieving this objective. |
| 5.Ensure all section of the community have good access to services and facilities | +I | There are existing services and facilities within close proximity to the site however it is unclear at this stage what extra provision will be needed, however details of this are likely to come forward with a more detailed development proposal. The site is well served by public transport with two rail stations to the immediate east and west of the site and further transport infrastructure improvements are planned in the immediate area, however plans are at an early stage. As such the effects are uncertain at this stage. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | The provision of several thousand homes on the site may put a strain on existing education facilities. Inclusion of additional education facilities in the development proposal may alleviate this however plans are at an early stage. Effects against this objective are uncertain at this stage. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase during and after construction, although mitigation/adaptation measures can be implemented. Greenfield land can also provide natural protection against climate change and developing on it will hinder this. There are two rail stations to the immediate east and west of the site which may minimise car usage however car usage and therefore emissions are still likely to increase as a result of the development in the short-term at least. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased emissions from cars and the construction process which could negatively impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | I | The site does not lie in a flood zone. Development on greenfield land can increase surface runoff by increasing impermeable surfaces in the area which can subsequently increase risk of flooding in the area. Mitigation measures can be implemented however the effects are uncertain until a more detailed development proposal comes forward. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective yet. |
| 11.Conserve and enhance the borough's biodiversity | --I | Within the site area are Area of Attractive Landscape, Open Countryside area and Wildlife Corridors. Development on the site is likely to have a negative impact on conserving and enhancing biodiversity, however the extent of this will depend on how it is implemented. This can be assessed when a detailed development proposal comes forward. |

| | | |
|---|------|---|
| 12. Conserve and enhance the borough's heritage and cultural assets | I | No sites of historic or cultural interest have been identified within the site or immediately adjacent and so no effects against this objective are identified. |
| 13. Protect and enhance soil quality throughout the borough | --I | The site lies on greenfield agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The exact impact development on this site will have however will be clearer when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/-I | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to national and local standards. The site lies on agricultural land and so developing here would not be considered an efficient use of natural resources. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | +/-? | There are two rail stations in close proximity to the site however car usage is likely to increase overall in the short term. Significant investment in the transport infrastructure in the vicinity of the site is likely and this may help reduce road congestion as well as encourage use of public transport. Both the potential development proposal and transport plans are at an early stage however so effects are uncertain at this stage. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | The site is located on greenfield land and so negatively impacts on this objective. |
| 18. Ensure high and stable levels of employment | +I | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will be more important in determining the effects against this objective. |
| 19. Encourage the creation of new businesses | +I | An increased local population may encourage the creation of new businesses. Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20. Sustain economic growth and enhance competitiveness | +I | Employment land provided as part of the development should contribute to providing additional jobs. |

Option D – Satellite Settlement – Gayhurst Garden Village

As an alternative to focusing development on the urban area, an option would be to consider the development of a new standalone settlement in the open countryside.

Table 16: Site Option D

| Sustainability Objective | Rank | Comments |
|--|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++I | The site could provide circa 8,000 homes and as such contribute significantly to the Borough’s housing need. It would be required to comply with national sustainable construction standards. At this stage in the plan-making process it is unclear how much affordable housing will be provided or what level of sustainable construction these homes will be built to (although national standards would be the minimum). Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. |
| 2.Protect and improve residents' health and reduce health inequalities | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle network which would encourage walking and cycling. Additional traffic from development could lead to road-related health impacts. As a standalone settlement providing circa 8,000 homes there is a need to provide a range of facilities and services to meet the needs of the increased population. The site is not in proximity to any existing health facilities. The proposed use of the site involves the provision of health facilities however exact details will come forward when a detailed proposal is made. As such the effects are uncertain at this stage. |
| 3.Reduce levels of crime and create vibrant communities | I | This proposal is essentially creating a new community. A full appraisal against this objective will be possible when a detailed proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +? | Affordable housing provision, creation of jobs and provision of key services and facilities (e.g. education and community facilities) can help to achieve this objective. A detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed and the number of jobs created and education facilities provision, among other things. Jobs would be created during the construction process which can contribute in the short term towards achieving this objective. |
| 5.Ensure all section of the community have good access to services and facilities | +I | The site does not benefit from close proximity to existing services and facilities. The proposed use of the site involves the provision of a range of facilities however exact details will come forward when a detailed proposal is made. Similarly, transport infrastructure provision and a travel plan are needed however details of this are likely to come forward with a more detailed development proposal. As such the effects are uncertain at this stage. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | The proposed use of the site involves the provision of a range of facilities including education uses however exact details will come forward when a detailed proposal is made. Effects against this objective are likely to be positive if education facilities are provided however they are uncertain at this stage. |

| | | |
|--|------|--|
| 7. Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase during and after construction, although mitigation/adaptation measures can be implemented. Greenfield land can also provide natural protection against climate change and developing on it will hinder this. There is an existing bus route close to the site with links to Newport Pagnell and Central Milton Keynes however car usage is likely to increase leading to increased emissions. |
| 8. Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased emissions from cars and the construction process too will negatively impact on air quality in the area. If employment uses and jobs are provided on site this may reduce the need to travel which could reduce emissions from cars. |
| 9. Maintain and improve water quality and minimise the risk of flooding | --I | Development on greenfield land can increase surface runoff by increasing impermeable surfaces in the area. Mitigation measures can be implemented however the effects are uncertain until a more detailed development proposal comes forward. |
| 10. Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective yet. |
| 11. Conserve and enhance the borough's biodiversity | --I | Within the site area are Area of Attractive Landscape, Open Countryside area, Wildlife Corridors, Local Wildlife Sites and Ancient Woodlands. Development on the site is likely to have a negative impact on conserving and enhancing biodiversity, however the extent of this will depend on how it is implemented. This can be assessed when a detailed development proposal comes forward. |
| 12. Conserve and enhance the borough's heritage and cultural assets | I | Within the site area are Heritage Sites and Ancient Woodlands, and in close proximity to the site are listed buildings and a Grade II Registered Park. As such there is some historic interest which could be affected by the development. The extent of this will depend on how the development proposal takes this into account. |
| 13. Protect and enhance soil quality throughout the borough | --I | The site lies on greenfield agricultural land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/-I | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to national and local standards. The site lies on agricultural land and so developing here would not be considered an efficient use of natural resources. |

| | | |
|--|----|--|
| 16.Limit and reduce road congestion and encourage sustainable transportation | -- | There are no rail stations in close proximity to the site. There is an existing bus route close to the site with links to Newport Pagnell and Central Milton Keynes however car usage is likely to increase. New road connections will also be required. There is potential to provide public transport and connect the site to existing cycleways however the details of this can only be appraised when a detailed proposal comes forward. If employment uses and jobs are provided on site this may reduce the need to travel, however significant investment in transport infrastructure is likely to be needed. |
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | The site is located on greenfield land and so negatively impacts on this objective. |
| 18.Ensure high and stable levels of employment | +I | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will be more important in determining effects against this objective. |
| 19.Encourage the creation of new businesses | +I | An increased local population may encourage the creation of new businesses. Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20.Sustain economic growth and enhance competitiveness | +I | Employment land provided as part of the development should contribute to providing additional jobs. |

Option E – MK North/Haversham Expansion

This possible site comprises an area smaller than Option A but within the same region. It is not within the flood zones but its predicted sustainability effects are similar in many respects. This site could deliver circa 8,000 homes.

Table 17: Site Option E

| Sustainability Objective | Rank | Comments |
|---|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++I | This site could provide circa 8,000 homes and as such contribute to the Borough's housing need and be required to comply with national sustainable construction standards. At this stage in the plan-making process it is unclear how much affordable housing will be provided or how sustainably constructed the homes will be. Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. |
| 2.Protect and improve residents' | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the |

| | | |
|--|-----|---|
| health and reduce health inequalities | | existing cycle network which would encourage walking and cycling. New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents’ health and wellbeing. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Development in close proximity to the motorway may encourage car usage. Further work is required to assess infrastructure requirements, particularly regarding health infrastructure to see what impact development here will have on residents’ health. |
| 3.Reduce levels of crime and create vibrant communities | I | New development offers the opportunity to design out crime within residential layouts. The effect against this objective is uncertain until a detailed development proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +? | Affordable housing provision can help to achieve this objective and new development can incorporate a mix of dwelling types and tenures to encourage mixed communities as well as providing a range of facilities locally, however a detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed, local facilities provided and whether any jobs will be created. |
| 5.Ensure all section of the community have good access to services and facilities | +I | Key services, facilities and employment areas are likely to be provided as part of the development. Access to services and facilities will depend on transport infrastructure provided as part of the proposal for the site, and whether existing and proposed services and facilities are sufficient to support an increased local population will need to be informed by an infrastructure assessment when the proposal comes forward. Development in close proximity to Junction 14 could encourage out-commuting. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | There are opportunities and likely a necessity to provide schools as part of the new development. When a more detailed proposal comes forward it will be possible to appraise against this objective in detail and assess whether existing and planned education facilities provision will be sufficient. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private road car usage would likely be the main mode of transport and an increase in car usage and car emissions likely. Increased carbon emissions as a result of the construction process are also likely. There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | I | The site is not within a flood zone but is in close proximity to a flood zone to the north and south of the site. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are |

| | | |
|---|------|---|
| | | not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |
| 11.Conserve and enhance the borough's biodiversity | --I | There is one biological notification sites called "the Wood between Gayhurst Farm and M1" on the site. The River Ouse wildlife corridor and Little Linford Local Wildlife Site are adjacent to the site. The site is also composed of mostly greenfield land so there will be some additional impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. There are opportunities to extend the existing Linear Parks system into the area. |
| 12.Conserve and enhance the borough's heritage and cultural assets | -I | The area contains several archaeological notifications sites and a few Grade 2 listed buildings. As such there is significant historic interest which could be affected by development and this may affect the amount of land that can be developed on. The extent of this will depend on how the development proposal takes this into account. The site also lies within an Area of Attractive Landscape. |
| 13.Protect and enhance soil quality throughout the borough | --I | The site has agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14.Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase and affect nearby residents. Proximity to the motorway could affect new residents unless properly mitigated against noise pollution. |
| 15.Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/-I | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to offset the overall increase in energy usage from new units. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources. |
| 16.Limit and reduce road congestion and encourage sustainable transportation | -I | Car usage is likely to increase without a viable public transport alternative. There may be opportunities to extend the existing public transport network into the area however overall car usage in the short-term is likely to increase. Development adjacent to the M1 is likely to cause significant increased private road transport and congestion around Junctions 13 and 14 is likely to increase. There is a possibility to extend the existing network into the area. Development is close to Wolverton Railway Station which may encourage sustainable transportation however given the amount of development proposed services from this station may require significant investment and improvement in the long-term. Development here may also provide an opportunity for a new railway station at Castlethorpe. |

| | | |
|--|----|---|
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective. |
| 18.Ensure high and stable levels of employment | +I | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will be more important in determining effects against this objective. |
| 19.Encourage the creation of new businesses | +I | An increased local population may encourage the creation of new businesses. Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20.Sustain economic growth and enhance competitiveness | +I | Employment land provided as part of the development would contribute to providing additional jobs. |

Option F – WEA Expansion

The WEA is currently under construction and is expected to deliver approximately 6,500 new homes alongside supporting retail, leisure and community uses. The WEA Expansion Land could potentially provide up to 1,000 homes and could benefit from access to services and facilities provided by WEA.

Table 18: Site Option F

| Sustainability Objective | Rank | Comments |
|---|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++I | This site could provide circa 1,000 homes and as such contribute to the Borough’s housing need and be required to comply with national sustainable construction standards. At this stage in the plan-making process it is unclear how much affordable housing will be provided or how sustainably constructed the homes will be. Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. |
| 2.Protect and improve residents' health and reduce health inequalities | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle network which would encourage walking and cycling. New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents’ health and wellbeing. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Further work is required to assess infrastructure requirements, |

| | | |
|---|-----|--|
| | | particularly regarding health infrastructure to see what impact development here will have on residents' health. |
| 3.Reduce levels of crime and create vibrant communities | I | New development offers the opportunity to design out crime within residential layouts. The effect against this objective is uncertain until a detailed development proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +? | Affordable housing provision can help to achieve this objective and new development can incorporate a mix of dwelling types and tenures to encourage mixed communities as well as providing a range of facilities locally, however a detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed, local facilities provided and whether any jobs will be created. |
| 5.Ensure all section of the community have good access to services and facilities | +I | Key services, facilities and employment areas are being provided as part of the WEA development. Access to services and facilities will depend on transport infrastructure provided as part of the proposal for the site, and whether existing and WEA proposed community facilities are sufficient to support an increased local population will need to be informed by an infrastructure assessment when the proposal comes forward. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | Schools are being provided as part of the larger WEA development. When a more detailed proposal comes forward it will be possible to appraise against this objective in detail and assess whether existing and planned education facilities provision will be sufficient. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private road car usage would likely be the main mode of transport and an increase in car usage and car emissions likely. Increased carbon emissions as a result of the construction process are also likely. There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | I | The development is not within an area of flood risk. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |

| | | |
|---|------|--|
| 11. Conserve and enhance the borough's biodiversity | --I | Part of North Bucks Way Wildlife Corridor lies in the south and local wildlife site Old Limestone Quarry is in the north west section of the site. River Great Ouse wet corridor is immediately north of the site. The site is also composed of entirely greenfield land so there will still be some impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. |
| 12. Conserve and enhance the borough's heritage and cultural assets | I | Part of the site is adjacent to the Calverton Conservation Area and three archaeological notification sites. As such there is some historic interest which could be affected by development. Housing density may need to be lowered to reduce impact. The extent of this will depend on how the development proposal takes this into account. |
| 13. Protect and enhance soil quality throughout the borough | --I | The site lies on agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase and affect nearby residents to the east of the site. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/-I | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to offset the overall increase in energy usage from new units. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | -I | Car usage is likely to increase without a viable public transport alternative. There is potential for the site to connect to the existing redway network thereby encouraging cycling and also potential for the site to connect to WEA infrastructure and public transport routes. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective. |
| 18. Ensure high and stable levels of employment | +I | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will be important to determine the effects against this objective. |
| 19. Encourage the creation of new businesses | +I | An increased local population may encourage the creation of new businesses. Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |

| | | |
|--|----|--|
| 20.Sustain economic growth and enhance competitiveness | +I | Employment land provided as part of the development should contribute to providing additional jobs. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. |
|--|----|--|

Option G – South East Milton Keynes – Wavendon and Woburn Sands

This site lies in the south-east of the city and could be suitable for a residential-led allocation to deliver circa 2000 homes. The site crosses the Borough boundary into Central Bedfordshire.

Table 19: Site Option G

| Sustainability Objective | Rank | Comments |
|---|------|---|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | +++I | This site could provide circa 2,000 homes and as such contribute to the Borough’s housing need and be required to comply with national sustainable construction standards. At this stage in the plan-making process it is unclear how much affordable housing will be provided or how sustainably constructed the homes will be. . Exact numbers of affordable housing would be determined when an application came in and be subject to viability and constraints, so there is some uncertainty. Without delivery of infrastructure and services to support mixed income housing this could lead to a negative effect on affordability in the area. |
| 2.Protect and improve residents' health and reduce health inequalities | +? | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle network which would encourage walking and cycling. New housing development can create additional demands for, or upon, infrastructure such as healthcare facilities, open space and sports and recreation facilities – all of which are important for residents’ health and wellbeing. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Further work is required to assess infrastructure requirements, particularly regarding health infrastructure to see what impact development here will have on residents’ health. |
| 3.Reduce levels of crime and create vibrant communities | I | New development offers the opportunity to design out crime within residential layouts. The effect against this objective is uncertain until a detailed development proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +? | Affordable housing provision can help to achieve this objective and new development can incorporate a mix of dwelling types and tenures to encourage mixed communities as well as providing a range of facilities locally, however a detailed appraisal against this objective will be possible once a detailed proposal comes forward which identifies the level of affordable housing proposed, local facilities provided and whether any jobs will be created. |
| 5.Ensure all section of the community have good access to services and facilities | +I | Key services, facilities and employment areas may need to be provided as part of the development. Access to services and facilities will depend on transport infrastructure provided as part of the proposal for the site, and whether existing and proposed services and facilities are sufficient to support an increased local population will need to be informed by an infrastructure assessment when the proposal comes forward. |

| | | |
|---|-----|---|
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | +? | Depending on capacity there may be a need to provide a school or schools as part of the new development. When a more detailed proposal comes forward it will be possible to appraise against this objective in detail and assess whether existing and planned education facilities provision will be sufficient. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private road car usage would likely be the main mode of transport and an increase in car usage and car emissions likely. Increased carbon emissions as a result of the construction process are also likely. There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | I | None of the potential development site is within a flood zone. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |
| 11.Conserve and enhance the borough's biodiversity | -I | The site is composed of mostly greenfield land so there will be some impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. |
| 12.Conserve and enhance the borough's heritage and cultural assets | I | The site area does not contain any sites of historic interest however it is in close proximity to a potential archaeological notifications site and some Grade II listed buildings. As such there may be some historic interest which could be affected by development. The extent of this will depend on how the development proposal takes this into account. |
| 13.Protect and enhance soil quality throughout the borough | --I | The site lies on agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14.Limit noise pollution | - | Development will lead to an increase in activity and car usage where there previously was very little and so noise pollution in the area is likely to increase and affect nearby residents. |

| | | |
|---|------|---|
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/-I | There is scope to incorporate a range of renewable energy solutions and ensure homes are sustainably constructed to offset the overall increase in energy usage from new units. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | -I | Car usage is likely to increase without a viable public transport alternative. The East/West Railway Line is in close proximity to the site and may encourage sustainable transportation in the long-term when redevelopment of the line is complete. In the short-term car usage is likely to increase. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on mostly greenfield land and so there will be only a small reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective. |
| 18. Ensure high and stable levels of employment | +I | Provided sufficient employment land is included within the development, this should contribute to maintaining high and stable levels of employment. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Transport links to the city will be more important. Redevelopment of the East/West Railway line may encourage economic growth in the region in the long-term. |
| 19. Encourage the creation of new businesses | +I | An increased local population may encourage the creation of new businesses. Provision of premises out of which businesses can operate could encourage the creation of new business. Redevelopment of the East/West Railway line may encourage businesses to locate in the region in the long-term. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20. Sustain economic growth and enhance competitiveness | +I | Employment land provided as part of the development should contribute to providing additional jobs. Redevelopment of the East/West Railway line may encourage economic growth in the region in the long-term. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. |

Option H – Land at Eaton Leys

This site crosses the boundary into Aylsebury Vale and currently has an outline planning application (application reference: 15/0133/OUTEIS) for the following:

Outline planning application with all matters reserved for a residential-led development including up to 1,800 dwellings, distributed between Aylesbury Vale and Milton Keynes as follows:

- *Within Milton Keynes; the development of up to **600 dwellings**, a local centre to include retail and a community centre, a health centre, land reserved for a one form of entry primary school, associated highway infrastructure including one proposed vehicular accesses with the A4146, one proposed pedestrian and cycle bridge crossing the river Ouzel, multi-functional public*

open space, informal amenity space, children's play space, open space incorporating the scheduled monument, surface water attenuation and strategic landscaping, and associated services and utilities infrastructure.

- *Within Aylesbury Vale; the demolition of all existing farm buildings (except farmhouse) and the development of up to 1,200 dwellings, one 2 forms of entry primary school, associated highway infrastructure including one proposed vehicular accesses with the A4146, one proposed pedestrian and cycle bridge crossing the river Ouzel, multi-functional public open space, informal amenity space, children's play space, playing fields, allotments, surface water attenuation and strategic landscaping, and associated services and utilities infrastructure*

The Council's Development Control Committee on 14 November, 2016 resolved to grant outline planning permission for the development, but a request has been made to the Secretary of State requesting that he calls in the planning application for his own determination and it is considered that allocating the site would help to reinforce the Council's commitment to see it developed as it would boost the housing land supply in the short-term.

The Council's assessment of the site is outlined in detail at the following webpage under item 5:

<http://milton-keynes.cmis.uk.com/milton-keynes/Calendar/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/5574/Committee/1102/Default.aspx>

Conclusions

Of the eight strategic housing sites appraised, several are considered to be potentially suitable housing sites if implemented appropriately, if planning constraints are taken into account when designing the scheme and if mitigation measures are incorporated where necessary. Site options A, D and E were considered potentially difficult to develop on due to significant constraints and/or significant investment in infrastructure needed to support development. Large parts of site A are located in flood risk zones 2 and 3, and it is considered that significant investment in transport infrastructure is likely to be needed. Significant investment in transport infrastructure is likely to be necessary to make site E a viable option as well. Site D is north of the main urban area and is likely to need significant investment in different types of infrastructure if it is to be a self-sufficient standalone settlement. Links to the main urban area are likely to need to be improved. Site G extends in to Central Bedfordshire and so further work is required to assess the practicalities of developing on this site. Sites F and G could potentially be suitable in the longer-term depending on the outcomes of further work and additional evidence collected.

Site B and C are considered to be suitable for allocation over the plan period if implemented appropriately, if planning constraints are taken into account when designing the scheme and if mitigation measures are incorporated where necessary. Site I is considered suitable for allocation as it has an application submitted which was granted by the Council, the final decision dependent on the SoS.

Non-Strategic Sites

Plan:MK will also look to allocate a number of small to medium sized non-strategic sites for housing development, so as to provide short-term flexibility and contingency as major new growth plans come forward. Sites of this nature will be predominantly located within the existing urban area however there is potential that some smaller extensions on the existing boundary of the urban area could also come forward. A number of sites have been submitted through previous consultation periods, whilst the Council can also utilise information from its Urban Capacity Study to find sites of this nature. These sites have been assessed to identify planning constraints which may affect development potential on these sites. They have not been appraised to the same level of detail as the strategic sites in this iteration of the SA.

Table 20: Initial assessment of non-strategic sites

| | Historic (Planning constraint) | Landfill and Minerals (Planning constraint) | Natural History (Planning constraint) | Protection (Planning constraint – didn't include air constraint) | Transport (Planning constraint) | Environment (Profiles) | Local Plan (Profiles) |
|---|---|---|---|--|--|--|--|
| Land at North Crawley (3 sites in all) | ALC grade 3 or 4 | None | Southern part of site to the east of pound land is within wet corridor – Chicheley Brook | Public rights of way footpaths running through all three sites. Individual TPO within southern site for horse chestnut tree. | None Potential access of Pound Lane (N Would need upgrading), Chicheley Road, Orchard Way, High Street and Folly Lane (Would need upgrading). | No notable species recorded within sites MK solid geology | All sites located within open countryside |
| Linford Lakes, for Temple view Developments Agent: DLP Planning | Site largely within other ALC classification and grade 3, but small section of site area in SW grade 2 Site wholly within Area of Attractive Landscape Potential archaeological heritage site located in the north of the site. 2 landfill sites within site boundary. | Site within 250m Landfill site buffer | Site wholly within biological notification site – Great Linford Gravel Pits. Site wholly within Wet Corridor – River Great Ouse. | A number of individual/group TPOs in southern side of site adjacent to Wolverton Road. One Public Right of Way bridleway route linking Wolverton road and Little Linford Lane through site Site within minor Groundwater Vulnerability Within a mix of Flood Zone 2/3 | None | No notable species recorded within sites MK solid geology | Site is located within open countryside, AAL, area liable to flooding, waste management sites within site, wet corridor. Part of Linford Lakes Area. |

| | | | | | | | |
|---|--|--|---|--|-------|-------------------|--|
| Little Linford Lane for grand Union Housing | <p>Site wholly within AAL.</p> <p>Three heritage sites within the site.</p> <p>Mostly ALC grade 3, with small area of grade 2 to SE of the site.</p> | <p>Small part of the northern area of the site has the location of sand and gravel deposits.</p> | <p>Site partly covered to the east with Road wildlife corridor M1.</p> <p>Site wholly within Wet corridor River Great Ouse.</p> | <p>Major aquifer to the north of the site, minor aquifer to the south of the site.</p> <p>Flood zone grade – bordering site to the west, some grade 2 and 3 to the north.</p> | None | Mostly MK solid 1 | <p>Open countryside, AAL, M1 road wildlife corridor, part of Linford Lakes Area</p> <p>Small area to north and south are within wet corridor River Great Ouse or flood zone 2/3.</p> |
| Land at Warrington Road, Olney | <p>Site is split ALC grade 2/3</p> <p>Heritage site</p> | <p>Half the SW of the site is the location for sand and gravel deposits.</p> | <p>SW of the site is Olney disused rail corridor</p> | <p>Major aquifer groundwater vulnerability covers whole of the site.</p> | None. | MK solid 1 | <p>Open countryside, disused rail corridor</p> |
| Land at Hanslope for Beesley | <p>Heritage site to north of site</p> <p>ALC grade 3</p> | None | None | <p>Public footpaths cross the site</p> | None | MK solid 1 | <p>Open countryside</p> |
| Land south of Lower End Road, Wavendon | Other ALC | None | None | <p>TPO groups cover the site</p> | None | MK solid 1 | <p>Open countryside</p> |
| Remaining part of Nampak site, Woburn Sands | <p>Predominantly urban land</p> | <p>Site covered by landfill 250m buffer, and has a landfill site within it.</p> | <p>Wildlife corridor, Woburn – Bletchley running along north edge of site</p> | <p>Minor aquifer covering most of the site</p> | None | MK solid 1 | <p>2 notable species found to the SW of the site.</p> |
| Olney Road, Lavendon for J Northern | <p>ALC grade 2</p> <p>All 3 sites within AAL</p> | None | None | <p>All sites within major aquifer, groundwater vulnerability zone</p> <p>Public right of way running through two sites to the north</p> <p>Flood zone 2 and 3 extents run alongside the north and north-west sides of the 2 sites to the north</p> <p>Individual TPO along west of site sized 0.51 acres or 1.27</p> | None | MK solid 1 | <p>Open countryside.</p> <p>All 3 sites within AAL.</p> <p>Area liable to flooding along west of site 0.51 acres or 1.27 acres.</p> |

| | | | | | | | |
|--|--|------|------|---|------|--|---|
| | | | | acres to the north. | | | |
| Land south of Lower End Road | ALC grade 3 | None | None | Public right of way running north to south through site. | None | MK solid 1 | Open countryside |
| Land south of Lower end Road, Wavendon | Mostly other ALC, small amount to the north of grade 3 | None | None | TPO groups cover the site | None | MK solid 1 | Open countryside |
| Land at Edwin Close, Bow Brickhill | Predominantly urban land | None | None | Public right of way running along south and west boundary of site. | None | MK solid 1 | Open countryside |
| Land at Haversham | 2 Heritage sites Majority of site within AAL ALC grade 2/3 | None | None | Some flood zone 2 to SW of site. Large area to south of site covered by Major aquifer. Large area to the north, small area to south covered by minor aquifer. Public rights of way across site in the north and west. | None | Most of the site is covered by MK solid 1. However to the south of the site, there is MK solid 1 and 2. | Open countryside. Mostly within AAL. Area to the north west corner of the site is recreation and open space. Area to the south of the site is within Linford Lakes area. Area to the south of the site is liable to flooding. |
| Land at Cranfield rd, Wavendon | ALC grade 3 | None | None | TPO groups cover site | None | MK solid 1 | Open countryside |
| Rectory Farm, Calverton | Mostly within Heritage site. ALC grade 4 | None | None | Site is within Calverton conservation area. Small area to the north within FZ 2. 3 grade 2 listed buildings within site to north. Small area to north covered by major aquifer groundwater | None | Mostly MK solid 1. Small area to south of site MK solid 1 and 2. | Open countryside. Conservation area covers the site. Small area liable to flooding to north. |

| | | | | | | | |
|------------------------------------|-----------------|--|---|--|---|------------|--|
| | | | | vulnerability zone. | | | |
| Land at Penn Road, Fenny Stratford | None | Landfill site covers whole site. | Local Wildlife site covers some of the site to the west Wildlife wet corridor covers entire site – Grand Union Canal | Public right of way path runs alongside the western boundary of the site. TPO individual in NE of site. | Highway corridor runs alongside western boundary of site. | MK solid 1 | Site within wet wildlife corridor – Grand Union Canal. Landfill site. |
| Land at Lower End Road, Wavendon | ALC grade 3 | None | None | None | None | MK solid 1 | Open countryside |
| Land at Stoke Goldington | Covered by AAL. | Small part of NE of the site is within 250m landfill buffer. | None | Site covered by Major aquifer groundwater vulnerability zone. | None | MK solid 1 | Open countryside. Covered by AAL |

4B. Appraisal of Development Strategy for Employment

The Council’s development strategy reviews Milton Keynes commitment to grow and develop the Milton Keynes local economy and capitalise on the Borough’s: a) location half way between London and Birmingham and as part of the single, knowledge-intensive cluster being developed in the Cambridge-Milton Keynes-Oxford corridor; b) Good and improving communications including superfast Broadband provision.

The 2015 Milton Keynes Employment Land Study (ELS) forecasts employment land requirements in the Borough up to 2031, and identifies a need for 319,800sqm of office floorspace, 35,100sqm of industrial floorspace, and 377,600sqm of warehousing floorspace.

The strategy options for supporting the economic needs of the Borough will be delivered by:

- A. The continued development and promotion of Central Milton Keynes as a hub for business-related knowledge based activity. To achieve this the Council will:
 - The Council will encourage the redevelopment of existing office developments which are no longer ‘fit for purpose’ and their replacement by office developments which provide a greater amount of floorspace than the buildings they replace.
 - The area between the West Coast main railway line and V7 Saxon Street, H5 Portway and H6 Childs Way will be developed as a Central Business District (CBD) with major mixed use office led development focused around Milton Keynes Central Railway station.
 - To facilitate the development of CMK as a business centre alternative means of transport other than the car including walking ,cycling and public transport systems will be developed and prioritised to ensure safe and convenient travel to and from the city centre.
- B. Retaining and developing existing employment sites
- C. The allocation of new employment land at appropriate locations to provide a flexible supply of sites to cater for future employment needs

In this case, the three options are not alternatives but rather three ways identified to meet the Borough’s employment needs.

Table 21: Development Strategy for Employment

| Sustainability Objective | Policy Option | | | Commentary |
|---|---------------|-----|----|---|
| | A. | B. | C. | |
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | 0 | +++ | -- | Option C could potentially have a negative impact on this objective as opting to retain and develop existing employment sites (Option B) is likely to mean more sites are available for housing development whereas Option C would result in the opposite. Significant positive effects are |

| | | | | |
|--|------|------|---|--|
| | | | | likely for Option B whilst significant negative effects are identified for Option C. Option A is unlikely to have any significant effects. |
| 2.Protect and improve residents' health and reduce health inequalities | 0 | 0 | 0 | No significant effects against this objective are identified. |
| 3.Reduce levels of crime and create vibrant communities | 0 | 0 | 0 | No significant effects against this objective are identified. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | I+++ | I+++ | ? | Options B and C would likely result in significant positive effects against this objective. The extent of the effects will likely depend on the type of employment floorspace provided and location of development. For example, office floorspace can provide high-density employment (more jobs) whilst warehousing is low-density and the skill-level of jobs provided is also likely to differ. Location of new sites under Option C and the type of jobs provided will determine who can access jobs which will determine in part the effects against this objective, so at this stage effects are uncertain. Option A is likely to result in an increase in highly skilled jobs which may not particularly target job growth in the most deprived areas of Milton Keynes. Option C could result in some potentially negative impacts. Although it will help generate jobs, allocating new land for employment use will reduce the amount of land available for housing which could result in higher house prices in the long-term. |
| 5.Ensure all sections of the community have good access to services and facilities | 0 | 0 | 0 | No significant effects against this objective are identified. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | 0 | 0 | None of the options are likely to have a direct impact on this sustainability objective however it is possible in the long-term that Option A may encourage improvements in education levels by aiming to attract and develop knowledge based activity in the Borough. |

| | | | | |
|--|------------|----------|-------------|---|
| <p>7. Combat climate change by reducing levels of carbon dioxide</p> | <p>+/-</p> | <p>+</p> | <p>--</p> | <p>Option B is likely to result in much lower carbon emissions in the short-term as retaining and developing existing employment sites is much less resource intensive than developing on new sites, and carbon emissions during the construction process are likely to be less than Option C. Positive effects against this objective are therefore identified in the short term for Option B. In the long-term allocating new sites for development might allow the incorporation of more sustainable construction and renewable technologies due to there being less design constraints. Positive effects for Option C in the long-term are therefore identified. Impacts on carbon emissions are also likely to depend on the location of development so uncertainty in the extent of effects are also identified for Option C. Locating development away from the urban area may potentially increase journey times by private car. Option A would likely result in positive effects due to encouraging development in a location highly accessible by public transport. Intensification of development in any case will result in some negative effects with all Options.</p> |
| <p>8. Maintain and improve the air quality in the borough</p> | <p>+/-</p> | <p>+</p> | <p>--</p> | <p>Similar to the effects on the above objective. Option A seeks to locate new development in a highly accessible location, thus minimising travel by private car and therefore reducing emissions. The effects of Option B and C are dependent on location with effects as described for Objective 7. Intensification in any case will result in some negative effects with all Options.</p> |
| <p>9. Maintain and improve water quality and minimise the risk of flooding</p> | <p>+</p> | <p>+</p> | <p>?+/-</p> | <p>Development on greenfield land would increase surface run-off and disrupt infiltration which can impact on water quality. This effect is likely to be greatest therefore with Option</p> |

| | | | | |
|---|-----|-----|-----|---|
| | | | | <p>C. Option C will results in new development which is likely to increase water use and water demand. Refurbishment under Option B provides an opportunity to incorporate water efficiency/quality measures into new development. This will also be possible under Option A.</p> <p>The risk of flooding is also increased by developing on greenfield land. The individual site assessments assess whether sites in the potential growth areas are in flood risk zones.</p> |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | +/- | +/- | +/- | All Options are likely to result in an increase in waste generation. All Options also offer opportunity to incorporate sustainable waste management measures into new development. Both significant positive and negative effects are identified. |
| 11.Conserve and enhance the borough's biodiversity | 0 | 0 | -- | Significantly adverse effects against this objective are most likely to occur through development on greenfield land, unless appropriate mitigation/avoidance measures are put in place. Option C is therefore likely to result in significant negative effects against this objective unless appropriate mitigation measures are put in place. |
| 12.Conserve and enhance the borough's heritage and cultural assets | I | I | I | Care would need to be taken regardless of where development occurred to aim to conserve and enhance the Borough's heritage and cultural assets. |
| 13.Protect and enhance soil quality throughout the borough | 0 | 0 | i-- | Impacts on soil quality are unlikely to occur as a result of developing on existing sites. Significantly adverse effects against this objective are most likely to occur through development on greenfield land/ agricultural land, unless appropriate mitigation/avoidance measures are put in place. Option C could therefore potentially result in significant negative effects against this objective. |
| 14.Limit noise pollution | - | - | - | All policy options will likely lead to an increase in noise pollution |

| | | | | |
|---|-----|-----|-----|--|
| | | | | due to an increase in activity and car usage. Appropriate mitigation measures such as noise insulation would need to be incorporated. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | + | + | +/- | Option C potentially involves development on significant amounts of greenfield land and so permanent negative effects are likely. Options A and B primarily aim to develop on brownfield land which is a more efficient use of land. Options A, B and C offer the opportunity to incorporate sustainable construction measures and renewable energy technologies into new development. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | +++ | ?- | ?- | Car usage is likely to increase with policy options B and C and to a lesser extent option A due to CMK being a highly accessible location by public transport with the Central Milton Keynes Railway station. Option A also seeks to develop walking, cycling and public transport systems as alternative means of transport. The negative effects are likely to be greatest with Option C where sustainable transport alternatives are less likely to exist if developing on greenfield land and journey times in private car potentially higher. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | +++ | +++ | -- | Option C is most likely to result in development on greenfield land and so potentially significant adverse effects against this objective are identified. Option B seeks to redevelop existing employment sites so significant positive effects are identified against this objective. |
| 18. Ensure high and stable levels of employment | +++ | +++ | +++ | Significant positive effects are identified for all options. The extent of positive effects will depend on the quantity of floorspace provided and employment density. Option C is likely to result in the highest increase in employment levels due to the quantity of floorspace likely to be provided. |
| 19. Encourage the creation of new businesses | +++ | +++ | +++ | Significant positive effects are identified for all options. Investment in employment |

| | | | | |
|---|------------|------------|------------|--|
| | | | | <p>floorspace as likely to encourage investment in the Borough which in turn can facilitate the creation of new businesses.</p> |
| <p>20.Sustain economic growth and enhance competitiveness</p> | <p>+++</p> | <p>+++</p> | <p>+++</p> | <p>The growth anticipated from each option is likely to depend on the type and quantity of employment floorspace provided. Option A seeks to develop the knowledge based economy and increases the amount of floorspace for the buildings that are replaced, however it is unclear at this stage how much floorspace this will yield. Option C will most likely provide a high quantity mixture of office, industrial and warehousing floorspace. Option B may not provide as much additional floorspace as Option C, instead focusing on ensuring a high quality of employment floorspace in Milton Keynes which may encourage investment in the Borough. Significant positive effects are anticipated with all policy options however the extent of effects varies according to the above.</p> |

Conclusion

The development strategy options for delivering economic growth in the Borough are all considered likely to have significant positive effects on Objectives 18, 19 and 20 in particular. Option A seeks to focus growth of the knowledge-based economy in Central Milton Keynes, whilst Option B seeks to protect and develop existing employment sites, and Option C seeks to develop new employment sites to meet identified need for employment floorspace. The specific sites to take forward under Option C are assessed in the next appraisal. The most appropriate strategy for Plan:MK should incorporate all Options due to the likely positive effects on Objectives 18, 19 and 20 identified for each of the Options. Given the amount of new employment floorspace required over the plan-period, Option B alone would unlikely be sufficient to help the Borough achieve economic growth and Options A and C are needed to ensure there is an adequate supply of employment floorspace to encourage new businesses to locate in the Borough.

Potential Strategic Employment Allocations

The 2015 Milton Keynes Employment Land Study (ELS) forecasts employment land requirements in the Borough up to 2031. A total requirement of 124 hectares of employment land was identified, which includes 94 hectares for warehousing, 21 hectares for office development and other business largely industrial need 9 hectares. The 124 hectares of land required was expected accommodate around 732,500 sqm of floorspace. Although the ELS assessed future employment land requirements to 2031 and not 2036, the Council expects to meet the need for future office and industrial development from its stock of vacant employment land. However, it will need to make additional allocations of land to meet the need.

The following sites are options considered for the delivery of employment land.

Option A – Land South of Bow Brickhill, South Caldecotte

The site, located in south-east Milton Keynes comprises 56.8ha of land which is broadly comparable with other employment sites around the Borough. This site is close to two other large employment sites.

Table 22: Site Option A (Employment)

| Sustainability Objective | Rank | Comments |
|--|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | 0 | No identified impact on this objective. |
| 2.Protect and improve residents' health and reduce health inequalities | +I | There is potential on the site to provide new areas of accessible green space and opportunities to connect to the existing cycle network which would encourage walking and cycling. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Development in close proximity to the A5 may encourage car usage. |
| 3.Reduce levels of crime and create vibrant communities | I | New development offers the opportunity to design out crime. The effect against this objective is uncertain until a detailed development proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +I | Provision of employment floorspace can provide jobs for local people and help reduce the gap between the most deprived areas of Milton Keynes and the average. The types of jobs provided and which groups of the population they will help employ will depend on the type of floorspace provided (i.e. warehousing/distribution, offices or industrial). |
| 5.Ensure all section of the community have good access to services and facilities | +I | The exact effect of development on this site will depend on what is provided as part of the development in addition to employment land. Provision of employment land in any case will have a positive effect on this objective. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | No identified impact on this objective. |

| | | |
|--|-----|--|
| 7. Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private road transport is likely to be the main mode of transport given the proximity of the site to the A5 and therefore emissions are likely to increase. There is scope to incorporate a range of renewable energy solutions and ensure employment premises are sustainably constructed. |
| 8. Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9. Maintain and improve water quality and minimise the risk of flooding | I | The site is not within a flood zone but flood risk zones 2 and 3 are immediately to the north and north-west of the site. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10. Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |
| 11. Conserve and enhance the borough's biodiversity | -I | There are no designated sites of biodiversity value within the site area. The site is composed of mostly greenfield land however so there will be some impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. There are opportunities to extend the existing Linear Parks system into the area. |
| 12. Conserve and enhance the borough's heritage and cultural assets | I | The area contains two archaeological notifications sites. As such there is some historic interest which could be affected by development and potential impacts on heritage would need to be addressed before any development could commence. The extent of this will depend on how the development proposal takes this into account. The site also lies within an Open Countryside area. |
| 13. Protect and enhance soil quality throughout the borough | --I | The site has agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development would lead to an increase in activity and car usage so noise pollution in the area is likely to increase and affect nearby residents. Proximity to the A5 could affect occupiers of the premises unless suitable mitigation measures are incorporated into development. |

| | | |
|---|-----|---|
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/- | <p>There is scope to incorporate a range of renewable energy solutions and ensure the premises are sustainably constructed to offset the overall increase in energy usage from new buildings. Higher densities of development would also increase efficiency.</p> <p>The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources.</p> |
| 16. Limit and reduce road congestion and encourage sustainable transportation | - | <p>Car usage is likely to increase without a viable public transport alternative. There may be opportunities to extend the existing public transport network into the area however overall car usage in the short-term is likely to increase. Development adjacent to the A5 is likely to cause significant increased private road transport and congestion is likely to increase. There is a possibility to extend the existing cycle network into the area. Development is close to Bow Brickhill and Fenny Stratford Railway Stations which may encourage sustainable transportation however given the amount of development proposed services from this station may require significant investment and improvement in the long-term.</p> |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | <p>Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective.</p> |
| 18. Ensure high and stable levels of employment | +++ | <p>Provision of employment floorspace can provide jobs for local people and should contribute to maintaining high and stable levels of employment. The types of jobs provided and which groups of the population they will help employ will depend on the type of floorspace provided (i.e. warehousing/distribution, offices or industrial). The number of people employed will also be affected by the type of floorspace provided as higher density office development will employ more people per sqm than warehouse development. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Planned transport links to the city will also be important in determining effects against this objective.</p> |
| 19. Encourage the creation of new businesses | +++ | <p>Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward</p> |
| 20. Sustain economic growth and enhance competitiveness | +++ | <p>Employment land provided should contribute to providing additional jobs and allow the local economy to grow. Effects against this objective can be fully appraised when a more detailed development proposal comes forward.</p> |

Option B – Land East of MK and South of Newport Pagnell

Table 23: Site Option B (Employment)

| Sustainability Objective | Rank | Comments |
|--|------|--|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | 0 | No identified impact on this objective. |
| 2.Protect and improve residents' health and reduce health inequalities | +1 | There is potential on the site to provide new areas of accessible green space and there may be opportunities to connect to the existing cycle network which would encourage walking and cycling, however this may be difficult as the M1 lies between the site and most of the urban area of Milton Keynes. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Development in close proximity to the M1 may encourage car usage which could negatively affect health due to air quality impacts and because walking is likely to decrease. |
| 3.Reduce levels of crime and create vibrant communities | 1 | New development offers the opportunity to design out crime. The effect against this objective is uncertain until a detailed development proposal comes forward. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +1 | Provision of employment floorspace can provide jobs for local people and help reduce the gap between the most deprived areas of Milton Keynes and the average. The types of jobs provided and which groups of the population they will help employ will depend on the type of floorspace provided (i.e. warehousing/distribution, offices or industrial). |
| 5.Ensure all section of the community have good access to services and facilities | +1 | The exact effect of development on this site will depend on what is provided as part of the development in addition to employment land. Provision of employment land in any case will have a positive effect on this objective. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | No identified impact on this objective. |
| 7.Combat climate change by reducing levels of carbon dioxide | --1 | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private road transport is likely to be the main mode of transport given the proximity of the site to the M1 and so car usage and therefore emissions are likely to increase in the short term at least. There is scope to incorporate a range of renewable energy solutions and ensure employment premises are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --1 | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |

| | | |
|--|-------------|---|
| <p>9.Maintain and improve water quality and minimise the risk of flooding</p> | <p>-I</p> | <p>The western section of the site is within Flood Risk Zone 2 and 3. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward.</p> |
| <p>10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy</p> | <p>-I</p> | <p>All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development.</p> |
| <p>11.Conserve and enhance the borough's biodiversity</p> | <p>--I</p> | <p>There is a wildlife corridor running through the middle of the site across the floodplain. The site is composed of mostly greenfield land however so there will be some impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. There are opportunities to extend the existing Linear Parks system into the area however this may be difficult as the M1 lies between the site and most of the urban area of Milton Keynes.</p> |
| <p>12.Conserve and enhance the borough's heritage and cultural assets</p> | <p>I</p> | <p>The area contains a few heritage sites. As such there is some historic interest which could be affected by development and potential impacts on heritage would need to be addressed before any development could commence. The extent of this will depend on how the development proposal takes this into account. The site also lies within an Open Countryside area.</p> |
| <p>13.Protect and enhance soil quality throughout the borough</p> | <p>--I</p> | <p>The site has agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward.</p> |
| <p>14.Limit noise pollution</p> | <p>-</p> | <p>Development would lead to an increase in activity and car usage so noise pollution in the area is likely to increase and affect nearby residents. Proximity to the M1 could affect occupiers of the premises unless suitable mitigation measures are incorporated into development.</p> |
| <p>15.Encourage energy efficiency, renewable energy use and efficient use of natural resources</p> | <p>+/-I</p> | <p>There is scope to incorporate a range of renewable energy solutions and ensure the premises are sustainably constructed to offset the overall increase in energy usage from new buildings. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources.</p> |
| <p>16.Limit and reduce road congestion and encourage sustainable transportation</p> | <p>-I</p> | <p>Car usage is likely to increase in the short term at least. There may be opportunities to extend the existing public transport network into the area however overall car usage in the short-term is likely to increase. Development adjacent to the M1 is likely to cause significant increased private road transport and congestion is likely to increase, particularly around Junctions 13 and 14 of the M1. There is a possibility to extend the existing cycle network into the area however this may be difficult to plan around the M1. There are not any railway stations close to the site.</p> |

| | | |
|--|-----|--|
| 17.Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective. |
| 18.Ensure high and stable levels of employment | +++ | Provision of employment floorspace can provide jobs for local people and should contribute to maintaining high and stable levels of employment. The types of jobs provided and which groups of the population they will help employ will depend on the type of floorspace provided (i.e. warehousing/distribution, offices or industrial). The number of people employed will also be affected by the type of floorspace provided as higher density office development will employ more people per sqm than warehouse development. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Planned transport links to the city will also be important in determining effects against this objective. |
| 19.Encourage the creation of new businesses | +++ | Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20.Sustain economic growth and enhance competitiveness | +++ | Employment land provided should contribute to providing additional jobs and allow the local economy to grow. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. |

Option C – Land East of MK and South of Newport Pagnell – Willen Road

Table 24: Site Option C (Employment)

| Sustainability Objective | Rank | Comments |
|---|------|---|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | 0 | No identified impact on this objective. |
| 2.Protect and improve residents' health and reduce health inequalities | +1 | There is potential on the site to provide new areas of accessible green space and there may be opportunities to connect to the existing cycle network which would encourage walking and cycling, however proximity to the M1 to the west of the site may cause an issue. New development could encourage healthier lifestyles through well designed urban environments that encourage walking and cycling however this is uncertain until a detailed development proposal is submitted. Development in close proximity to the M1 may encourage car usage which could negatively affect health due to air quality impacts and because walking is likely to decrease. |
| 3.Reduce levels of crime and create vibrant communities | 1 | New development offers the opportunity to design out crime. The effect against this objective is uncertain until a detailed development proposal comes forward. |

| | | |
|---|-----|--|
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | +I | Provision of employment floorspace can provide jobs for local people and help reduce the gap between the most deprived areas of Milton Keynes and the average. The types of jobs provided and which groups of the population they will help employ will depend on the type of floorspace provided (i.e. warehousing/distribution, offices or industrial). |
| 5.Ensure all section of the community have good access to services and facilities | +I | The exact effect of development on this site will depend on what is provided as part of the development in addition to employment land. Provision of employment land in any case will have a positive effect on this objective. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | 0 | No identified impact on this objective. |
| 7.Combat climate change by reducing levels of carbon dioxide | --I | As with all new development on greenfield land there are likely to be negative impacts on tackling climate change as carbon emissions increase. Private road transport is likely to be the main mode of transport given the proximity of the site to the M1 and car usage and therefore emissions are likely to increase. There is scope to incorporate a range of renewable energy solutions and ensure employment premises are sustainably constructed. |
| 8.Maintain and improve the air quality in the borough | --I | As mentioned above there is likely to be increased car emissions and developing on greenfield land will also impact on air quality in the area. |
| 9.Maintain and improve water quality and minimise the risk of flooding | I | The site does not lie within a flood risk zone. Development on greenfield land reduces surface run-off and can increase the risk of flooding if appropriate mitigation measures are not implemented. Longer term there may be substantial pressures on water resources, although there is scope to introduce water efficiency measures in new development. A more detailed appraisal against this objective can occur once a more detailed proposal comes forward. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | -I | All development will lead to a net increase in waste generation however until a detailed proposal comes forward it is unclear how waste will be managed and therefore the site cannot be fully appraised against this objective as yet. There is an opportunity however to design in resource efficiency measures with new development. |
| 11.Conserve and enhance the borough's biodiversity | --I | There is a wildlife corridor on the west side of the site. There is one notable species located to the north of the site. The site is composed of mostly greenfield land however so there will be some impacts on biodiversity, the extent of which will be determined when a detailed proposal comes forward. There are opportunities to extend the existing Linear Parks system into the area proximity to the M1 will need to be taken into account. |
| 12.Conserve and enhance the borough's heritage and cultural assets | I | There are two heritage sites to the west and south of the site. As such there is some historic interest which could be affected by development and potential impacts on heritage would need to be addressed before any development could commence. The extent of this will depend on how the |

| | | |
|---|------|--|
| | | development proposal takes this into account. The site also lies within an Open Countryside area. |
| 13. Protect and enhance soil quality throughout the borough | --I | The site has agricultural arable land and so developing on here will likely lead to negative impacts on soil quality. The extent to which green space is provided/retained will determine the exact impact however this will be fully assessed when a detailed proposal comes forward. |
| 14. Limit noise pollution | - | Development would lead to an increase in activity and car usage so noise pollution in the area is likely to increase and affect nearby residents. Proximity to the M1 could affect occupiers of the premises unless suitable mitigation measures are incorporated into development. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +/-I | There is scope to incorporate a range of renewable energy solutions and ensure the premises are sustainably constructed to offset the overall increase in energy usage from new buildings. Higher densities of development would also increase efficiency. The site lies on agricultural arable land and so developing here would not be considered an efficient use of natural resources. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | -I | Car usage is likely to increase in the short term at least. There may be opportunities to extend the existing public transport network into the area however overall car usage in the short-term is likely to increase. Development adjacent to the M1 is likely to cause significant increased private road transport and congestion is likely to increase, particularly around Junctions 13 and 14 of the M1. There is a possibility to extend the existing cycle network into the area however this may be difficult to plan around the M1. There are not any railway stations close to the site. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | -- | Comprehensive design and development of the site, along with higher densities could reduce the impact of development of the land and maximise the efficiency of land use. However, the site is located on greenfield land and so there will be no reuse of previously developed land and no net improvement in efficiency and so it negatively impacts on this objective. |
| 18. Ensure high and stable levels of employment | +++ | Provision of employment floorspace can provide jobs for local people and should contribute to maintaining high and stable levels of employment. The types of jobs provided and which groups of the population they will help employ will depend on the type of floorspace provided (i.e. warehousing/distribution, offices or industrial). The number of people employed will also be affected by the type of floorspace provided as higher density office development will employ more people per sqm than warehouse development. Effects against this objective can be fully appraised when a more detailed development proposal comes forward. Short term employment opportunities associated with development of the site are also possible. Planned transport links to the city will also be important in determining effects against this objective. |
| 19. Encourage the creation of new businesses | +++ | Provision of premises out of which businesses can operate could encourage the creation of new business. Effects against this objective can be fully appraised when a more detailed development proposal comes forward |
| 20. Sustain economic growth and enhance competitiveness | +++ | Employment land provided should contribute to providing additional jobs and allow the local economy to grow. Effects against this objective can be fully appraised when a more |

| | | |
|--|--|--|
| | | detailed development proposal comes forward. |
|--|--|--|

Conclusion

Site A is located in close proximity to two other large employment sites and comprises 56.8ha of land which could deliver a significant amount of employment floorspace. It is not considered that there are any significant planning constraints preventing development of the site and proximity to two railway stations may be beneficial in terms of encouraging public transport use. The western section of site B is within a flood zone however the site is considered to be developable provided appropriate mitigation measures are incorporated into any future development proposal. As further work is carried out on development proposals for the site the practicalities of developing on the site will become clearer. Given the size of the site and its location, development here would constitute an urban extension. Development close to the M1 may be advantageous for distribution based businesses which evidence indicates a need for. The site has also been considered as a strategic housing site and both employment and housing could be provided as part of a strategic urban extension. Site C is also considered to be potentially sustainable option. The site lies immediately adjacent to site B and the two could potentially be developed together as part of one development site.

4C. Appraisal of Development Strategy for Retail and Leisure

The Council's preferred approach seeks to achieve successful town centre locations that are able to support retail, leisure, entertainment and cultural offer to cater not only for the growing Borough population and for visitors, but also to make the city a more attractive location for young, skilled people to live and work.

The draft Plan's strategy strongly supports the primary shopping area of CMK as a regional shopping centre for comparison shopping. It also recognises CMK as a place able to accommodate significant new levels of growth supporting the Borough's economy.

Table 25: Development Strategy for Retail and Leisure

| Sustainability Objective | Rank | Comments |
|---|------|---|
| 1.Ensure that everyone has the opportunity to live in an affordable, sustainably constructed home | 0 | Policy SD1 confirms that residential development will continue to be supported in CMK and Campbell Park. Provisions are also included in Policy SD1 to promote CMK as a regional shopping centre, which is likely to lead to improved access to a range of new community and commercial facilities and better public transport. In addition to this, Plan:MK supports redevelopment and regeneration opportunities in and around Bletchley Town centre. Altogether these provisions will help to meet the day to day needs of new and existing residents; however no significant effects are identified against this objective. |
| 2.Protect and improve residents' health and reduce health inequalities | +++ | Provisions are included in these policies to improve access to new shops, services and facilities, which is likely to have a positive effect on mental health and well-being. New development in town centres will be required to link easily to existing pedestrian and cycle routes and to nearby open spaces and therefore is likely to have positive effects on health. This is especially significant given Milton Keynes has a high incidence of childhood obesity. Positive impacts are more likely to be felt in the long-term and permanent. |
| 3.Reduce levels of crime and create vibrant communities | +? | Provisions in these policies seek to achieve successful retail, leisure, entertainment and cultural offer in town centre locations. This is likely to have a positive impact on the aim of creating vibrant communities. The policies aim to promote and support the night-time economy and while this can help create vibrant communities it can also bring problems including alcohol-related crime and antisocial behaviour. In order to tackle any potential problems and to support further positive effects, secured by design principles should be incorporated as provisions in these policies. |
| 4.Reduce the gap between the most deprived areas of Milton Keynes and the average | + | Provisions are included in the policies to improve access to shops, facilities and public transport which may mean improved access to education and employment opportunities for certain sites. Deprivation however usually has more than one cause so only minor positive effects are identified against this objective in the long-term. |
| 5.Ensure all section of the community have good access to services and | +++ | Provisions are included in the policy to improve access to shops, facilities and public transport, require new social and commercial facilities to be provided in most accessible locations to meet the day to day needs of new and existing |

| | | |
|---|------|---|
| facilities | | residents. Incorporating good pedestrian and cycle routes from neighbouring estates into new town centre developments should result in improved access to services and facilities. |
| 6.Improve educational attainment and qualification levels so that everyone can find and stay in work | + | Provisions are included in Policy SD2 to support higher education services in CMK including a new university MK:IT. This may result in better qualified workforce but also, alongside improved access to social and community facilities may help create the environment encouraging entrepreneurship and attracting graduates to stay and live in MK. |
| 7.Combat climate change by reducing levels of carbon dioxide | +++? | The policies promote development that will be located in town centres and be relatively well served by walking, cycling and public transport which should have an overall positive effect on reducing transport related greenhouse gas emissions. New development located in CMK should consider connecting to a local CHP network and this together with sustainable design of new buildings will help to reduce greenhouse emissions. The policies should advocate that new development will be able to adapt to climate change and will support public transport and other than car means of transport e.g. cycling by not only providing a network of cycle routes, but also by requiring appropriate and adequate changing facilities and secure bike parking within new developments. |
| 8.Maintain and improve the air quality in the borough | +++? | Requirements for new development to be located in town centres will support public transport and other than car modes of transport and therefore will have a positive effect on air quality. The magnitude of positive effects will depend on site specific opportunities to implement sustainable transport solutions so there is some uncertainty to the overall effects. Effects are likely to be felt in the long-term and be permanent. Reference to climate change and pollution policies within Plan:MK which propose mitigation measures would strengthen the policy. |
| 9.Maintain and improve water quality and minimise the risk of flooding | +++? | The Policies do not included any references to flood management but where appropriate new development will have to comply with other policies of Plan:MK that require to take a strategic, integrated and sustainable approach to water resource management. Incorporating these measures from the outset will likely lead to significant permanent positive effects against this objective. Reference to flood management policies within Plan:MK would help strengthen these policies and ensure they result in improved flood management and improved water resource management. |
| 10.Reduce waste generation and encourage sustainable waste management in accordance with the waste management hierarchy | 0 | Specific mention of sustainable waste management is not included in these policies and so no effect is identified against this objective. Reference to waste management policies in the Waste Development Plan Document would help strengthen the policy. |
| 11.Conserve and enhance the borough's biodiversity | +? | Promoting the main town centre uses and retail development within identified town centres should lead to positive effects in terms of minimising the impact on the natural environment. However, effects will depend on the location of new development and how specific proposals are being delivered. Reference to policies relating to the |

| | | |
|---|------|--|
| | | natural environment within Plan:MK would help strengthen these policies. |
| 12. Conserve and enhance the borough's heritage and cultural assets | +? | The provisions of these policies are likely to result in positive effects against this objective. Policy SD1 requires new development to improve the vitality of the city centre and the overall mix of uses, but it is silent on the need of protecting heritage and cultural assets. If there is no alteration to the policy wording then a reference to heritage policies within Plan:MK should be considered as it would help strengthen the policies against this objective. |
| 13. Protect and enhance soil quality throughout the borough | 0 | Specific mention of protecting and enhancing soil quality is not included in the policies and so no effect is identified against this objective. |
| 14. Limit noise pollution | +? | Policy SD1 and SD2 support integrating new residential developments into CMK. Specific design/placemaking policies in Plan:MK will have to ensure that there are no negative effects on noise pollution, especially within mixed-use developments. Provisions are included in these policies to improve access to services and facilities and these will have to be served by sustainable transport solutions. This could reduce car usage and therefore limit noise pollution. Minor positive effects are therefore identified in the short and long-term. |
| 15. Encourage energy efficiency, renewable energy use and efficient use of natural resources | +? | The provisions of these policies are likely to result in more development coming forward in town centre locations therefore leading to more efficient use of land. New development located in CMK should consider connecting to a local CHP network and this together with sustainable design of new buildings will help to reduce greenhouse emissions. Currently there are no specific and direct requirements on sustainable construction and renewable energy included in these policies which would affect this objective. Reference to policies relating to sustainable construction within Plan:MK would help strengthen these policies. |
| 16. Limit and reduce road congestion and encourage sustainable transportation | +++? | The provisions of these policies will help ensure that all main town centre uses are directed to town centres/primary shopping areas. This should mean that most sites are relatively well-served by existing, improved or new pedestrian and cycle routes. Also, town centre locations are well-served by sustainable transport solutions. Further development within town centres is likely to have a positive impact on the provision of key transport infrastructure to help address congestion. The magnitude of positive effects against this objective will depend on site specific opportunities to implement sustainable transport solutions so there is some uncertainty to the overall effects. |
| 17. Ensure the sustainable and efficient use of land by encouraging the development of brownfield sites before greenfield sites | +? | The provisions of these policies are likely to ensure there is more new development in town centre locations which maximises the land-use potential of more sustainably located sites. This in turn may result in a more efficient use of land however ultimately effects against this objective will be dependent on site specific circumstances. |
| 18. Ensure high and stable levels of | +++ | Promoting new commercial and social facilities and retail development within town centre locations should have a |

| | | |
|--|-----|--|
| employment | | positive effect on the economy and the primacy of town centres. It is likely to support existing jobs and create new employment in these areas by maximising the opportunities of co-location and creating business and industry clusters that are highly accessible. Positive impacts are more likely to be felt in the long-term and permanent |
| 19.Encourage the creation of new businesses | +++ | The provisions of these policies will help identify new land for development and direct new development towards town centres and the edge of centres. The policies will help ensure that accessibility to town centres and the urban environment is improved which will directly impact on vitality and viability of these locations and will encourage the creation of new businesses and therefore supporting local employment opportunities. Positive impacts are more likely to be felt in the long-term and permanent |
| 20.Sustain economic growth and enhance competitiveness | +++ | The provisions of these policies will help ensure that all town centres are able to attract new development and contribute towards achieving this objective. Positive impacts are more likely to be felt in the long-term and permanent |

Conclusion

By promoting new town centre uses in each of the identified centres and local shops and facilities/services in places that are more easily accessed by either walking, cycling or public transport, this policy is likely to have a positive effect on promoting healthier lifestyles. Milton Keynes has high levels of childhood obesity so significant positive effects are identified against Objective 2.

The promotion of new town centre uses and local shops is likely to help create jobs and so contribute to reducing the gap between the most deprived areas of Milton Keynes and the average (Objective 4) and ensuring high and stable levels of employment (Objective 18). The policies seek to ensure the Borough’s centres remain competitive and so contribute to sustaining economic growth and enhancing competitiveness (Objective 20). The provision of new premises may give an opportunity for new businesses to locate in town centres, therefore helping to achieve Objective 19. New shops, especially in local centres which are within walking distance of residents will help contribute to all sections of the community having good access to services and facilities (Objective 5). The provision of certain types of town centre uses may provide opportunities for the attainment of qualifications and therefore contribute to achieving Objective 6.

Overall, the impact of these policies on most of the environmental objectives will depend on implementation i.e. design, layout, scale and massing of development. These policies do however seek development within existing centres and so new development is unlikely to take place on greenfield land thus minimising any negative environmental effects. By developing on brownfield land this will help ensure an efficient use of land and help achieve Objective 17.

5. Mitigation

A range of potential negative effects, particularly against environmental objectives have been identified as a result of the policy options put forward. These potential negative effects in some cases can potentially be overcome by adequate mitigation measures incorporated into the design of any development proposal or offset through off-site measures. Other policies in the Plan would seek to mitigate these effects and also deliver positive environmental effects. Where appropriate it has been identified within each of the appraisals where mitigation measures are likely to be needed. Mitigation measures will be considered in detail in the next version of the SA report when the remaining Plan:MK policies have been appraised.

6. Conclusions

This initial sustainability appraisal report has considered the sustainability impacts of the reasonable alternative policy options (where reasonable alternatives have been identified) for the development strategy and strategic site developments to take forward in the Borough over the next 15 years through Plan:MK. In general with the Plan:MK strategic objectives and development strategy options considered a range of significant positive effects are predicted, however negative effects, particularly with regards to the environmental sustainability objectives are also considered likely. Recommendations have been made at the end of each policy assessment, stating which reasonable alternatives (if there are any) would be the best option in sustainability terms.

Due to the Borough's high housing targets and economic growth targets a large amount of development is needed to meet that need. This and the Greenfield land identified to help deliver this growth means negative environmental effects on things like air quality and tackling climate change are likely as a consequence of seeking to achieve the Borough's other social and economic objectives. Opportunities through new development to create positive environmental effects however are also identified such as incorporating renewable technologies into new development.

Although not appraised at this stage, a range of strategic and development management policies to deliver significant positive environmental benefits as well as mitigation against the negative environmental effects associated with growth will be included in Plan:MK. These policies will be similar to those in the current Local Plan recently Core Strategy (2013).

With many of the strategic sites allocation options appraised, it was found that significant positive (on social and economic objectives) and negative (environmental objectives) effects are likely however the specifics of any development proposals on the site and how policies are implemented will determine the extent of these effects. A number of planning constraints were identified on several potential strategic allocations. Whilst negative scores may have been marked against certain sustainability objectives because of this it does not mean the sites cannot be developed on and adequate mitigation/avoidance measures incorporated into the design of any development proposal on the site can potentially overcome these constraints. In some cases planning constraints may be very significant and together with significant investment in infrastructure needed to make any future development viable, the site may not be considered suitable for development in the short to medium-term.

In appraising strategies/allocations that would result in significant growth and development in the Borough, many negative environmental effects on issues such as climate change and air quality were anticipated. It is recognised that these effects even with mitigation measures would still be significant due to the impact development has on the environment. The SA helps to identify where these effects would be most severe so as to appropriately balance the needs of the population with that of conserving and enhancing the environment. The next iteration of the SA will also identify where possible specific ways to mitigate against these effects and identify where possible positive effects on these sustainability objectives from other policies in the Plan.

Overall the development strategy and strategic site allocations have been formed to meet specific needs based on up-to-date evidence, and the strategic and development management policies which will be appraised in the next iteration of the

SA report will demonstrate how Plan:MK seeks to achieve positive environmental and other benefits and mitigate against any potential negative impacts identified in this version of the SA.

7. Next Steps

Following the publication of the draft Plan:MK, its evidence base and its supporting documents, including this SA report, representations received will be analysed by the Council. Modifications to Plan:MK will be made where necessary and the SA amended to reflect any changes. The next iteration of the SA report will also include a detailed assessment of all the strategic and development management policies included in Plan:MK and complete stages B4 and B5 of the SA process which consider ways of mitigating the adverse effects and maximising the beneficial effects, and also ways of monitoring the effects of implementing the Plan:MK policies. The remaining policy topic areas not appraised in this iteration of the Plan include:

- Economy and retail
- Sustainable construction and renewable energy
- Managing and reducing flood risk
- Biodiversity and geodiversity
- Milton Keynes Heritage
- Open Space, Leisure and Recreation
- Design
- Homes and Neighbourhoods
- Culture and Community
- Connectivity
- Infrastructure Delivery

Appendix 1: Location of Options for Strategic Housing and Employment Sites

