



# MK City Plan 2050: Health Impact Assessment.



Scoping report



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Regulation 18 version

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# 1 Executive Summary

- 1.1.1 This Health Impact Assessment Scoping Report supports the development of the MK City Plan 2050 for Milton Keynes. The City Council has duties to plan for the future growth and development of the city and improve the health and wellbeing of its residents. The MK City Plan 2050 will provide direction on the future growth and development of Milton Keynes through to 2050. The Public Health team therefore wishes to ensure that improving health and wellbeing is a core theme within the MK City Plan 2050 and influences the policies that the Planning Service will deliver over the next two decades.
- 1.1.2 Health encompasses complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity. Wellbeing signifies a state in which every individual realises their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to their community. Health and wellbeing are profoundly influenced by various factors, the ‘wider determinants of health’ or the ‘building blocks of health’, many of which are shaped by the built environment. Housing quality, transport, green spaces, job stability, and clean air are pivotal determinants of our resident’s health. Planning significantly affects these aspects.
- 1.1.3 This will be the first Health Impact Assessment conducted on a Milton Keynes development plan document. This recognises the pivotal role planning has in the determinants of our residents’ health and the need to take a strategic approach to help to address health inequalities in the city.
- 1.1.4 The Health Impact Assessment of the MK City Plan 2050 aims to support policy development that encourage positive impacts on the health and well-being of our residents. By addressing potential challenges and working to tackle health inequalities, Milton Keynes can become an exemplar for health focussed Local Plan development. Continued collaboration between planners, public health, and the community will support the successful development and implementation of the NCP and the focus on the health and well-being of MKCC residents.
- 1.1.5 The City Council needs to have an up-to-date Local Plan to meet the needs of the city. The current Plan:MK was adopted in 2019 and this directs the strategy for meeting the city’s needs until 2031. In 2021, the City Council adopted the Milton Keynes Strategy for 2050 to set out a way forward for the City with Seven Big Ambitions, including one to build strong communities that support health and wellbeing.
- 1.1.6 The MK City Plan 2050 will deliver the vision of the 2050 Strategy and the Ambitions and Objectives Consultation Document from January 2023 named four themes to enable this:
1. Economic and Cultural Prosperity.
  2. People Friendly and Healthy Places.
  3. High Quality Homes and Neighbourhoods; and
  4. Climate and Environmental Action.
- 1.1.7 The Health Impact Assessment will take a systematic approach to ensure a comprehensive assessment and understanding of the plan’s impact on health and wellbeing. The HIA will follow seven stages:
1. Screening – deciding whether to conduct an assessment.
  2. Scoping – selecting the health determinants and issues to assess and the method for doing so.

3. Analysis – gathering evidence and assessing the project’s effects.
4. Reporting – present conclusions and recommendations.
5. Implementation – following through with the recommendations.
6. Monitoring – collect or examine further data/indicators.
7. Evaluation – review the robustness and effectiveness of the assessment and its outcomes to improve practice.

1.1.8 The methodology for the HIA will be based on qualitative assessment, however the use of quantitative assessments will be relevant to some policies including those related to transport. The policies and site allocations selected for assessment will ensure a proportionate assessment. The World Health Organisation’s HEAT tool will estimate the economic value of reduced mortality arising from anticipated modal shift to active travel from policies and/or projects.

1.1.9 Various assessments, policies, and strategies inform professional judgments on health impacts, including the Milton Keynes Joint Strategic Needs Assessment, Health and Wellbeing Strategy, and others:

- Milton Keynes Joint Strategic Needs Assessment.
- Milton Keynes Children’s and Young People’s JSNA.
- Milton Keynes Health and Wellbeing Strategy.
- Director of Public Health’s Annual Report 2019/20 – Homelessness and Health.
- Director of Public Health’s Annual Report 2022/23 – Taking local action to address excess weight in Milton Keynes.
- BLMK Musculoskeletal Health Needs Assessment – February 2022.
- Gambling and Problem Gambling in Milton Keynes 2020.
- The Well-being and Mental Health needs of the Population in Bedfordshire, Luton and Milton Keynes (BLMK) 2022.
- MK Together Partnership: Our ambition for health and social care
- Milton Keynes Market Position Statement 2022-2027.
- Milton Keynes Council Plan 2022-2026.
- BLMK Health and Care Partnership Priorities.
- National Planning Policy Framework.

1.1.10 These documents, whilst providing context for the assessment, also contain important data and evidence on our resident’s health and wellbeing. Therefore, these will contribute to the evidence base underpinning the assessment. Data and evidence from the Office for Health Improvement and Disparities (OHID) and other sources are integrated throughout the report, reinforcing its evidence base.

1.1.11 Taking account of all the information before us, the report concludes with the scope of the HIA and the explanation for the decision to scope in or out those factors.

**The Factors currently scoped in are:**

- Health inequalities.
- Healthy lifestyles.
- Safe and cohesive communities.

- Health and social care services.

**The Factors currently scoped out are (and covered by the Sustainability Appraisal):**

- Socioeconomic conditions.
- Environmental conditions.

1.1.12 This report serves as the foundational document for the Health Impact Assessment, offering a structured approach to evaluate the impact of the MK City Plan 2050 on the health and well-being of Milton Keynes residents.

## 2 Introduction

- 2.1.1 Milton Keynes City Council is preparing a new Local Plan, the Milton Keynes MK City Plan 2050 (MKCP) to provide direction on the future growth of the area. Milton Keynes City Council states that the aim of the MKCP is that “By 2050, [...] Well-planned ambitious growth has created greater economic prosperity and a high quality of life and wellbeing for all. [...] healthy and sustainable places to live, learn and work” (1).
- 2.1.2 The MKCP will influence what development will take place, how much and where developments will be located. Adopting a spatial approach, the MKCP will consider a wide range of economic, social and environmental matters that manage change in ways that benefit Milton Keynes’s people and its environment.
- 2.1.3 Milton Keynes City Council Public Health team has worked closely with planning colleagues while they develop the MKCP. The Public Health team wishes to ensure that improving health and wellbeing is a core theme throughout the document and that this theme influences the policies that the planning team will deliver over the next two decades.
- 2.1.4 The purpose of this HIA is to consider the potential effects of the draft policies and site plans on population health and wellbeing and to identify ways to protect and promote health and reduce health inequalities. The HIA provides the following information:
- High level population health profile;
  - Evidence review of each issue where significant impacts are likely;
  - Potential opportunities in the selected draft policies and site plans to enhance health and wellbeing;
  - Potential conflicts in the selected draft policies and site plans that could reduce health and wellbeing; and
  - Advice (e.g. changes to the Plan, issues for public consultation or monitoring).
- 2.1.5 This report defines health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. Wellbeing is defined as a state in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. Health and wellbeing are influenced by a range of factors, termed the ‘wider determinants of health’.
- 2.1.6 The focus of this report is on community health and wellbeing and not on occupational health and safety. The terms ‘health’, ‘population health’ and ‘health and wellbeing’ are used interchangeably. This HIA supports MKCC in producing a Local Plan consistent with providing a high level of protection to population health. This report is set out as follows:
- section 3 details the background for the Milton Keynes MK City Plan 2050;
  - section 3 sets out the methods for the HIA;
  - section 4 provides an overview of relevant legislation, regulation, policy, and health priorities;
  - section 5 sets out a baseline for MK;
  - section 6 gives the findings of the scoping process including the review of MKCP policies and of site plans;
  - section 7 sets out references; and
  - section 8 provides the appendices.



## 3 Background to the MKCP

### 3.1 Milton Keynes Strategy for 2050

- 3.1.1 Milton Keynes City Council is required to have an up-to-date Local Plan to meet the needs of the city. MK's current Local Plan, Plan:MK (2), was adopted in 2019 and this sets out the strategy for meeting the City's needs until 2031.
- 3.1.2 The population of Milton Keynes grew by over 15% between 2011 and 2021 from 248,800 to 287,000. By 2050, it is expected that the population of Milton Keynes will grow to 384,400.
- 3.1.3 To set out the way forward, the Council adopted the Milton Keynes Strategy for 2050 back in 2021 and the strategy incorporates Seven Big Ambitions for Milton Keynes in 2050:
1. Strengthen those qualities that make Milton Keynes **SPECIAL**;
  2. Make Milton Keynes a **LEADING GREEN AND CULTURAL CITY** – by global standards;
  3. Ensure everyone has their own **DECENT HOME** to rent or buy;
  4. Built safe communities that support **HEALTH AND WELLBEING**;
  5. **PROVIDE JOBS FOR EVERYONE** by supporting our businesses, and attracting new ones;
  6. Offer better opportunities for everyone **TO LEARN** and develop their skills;
  7. Make it **EASIER FOR EVERYONE** to travel on foot, by bike, and with better public transport.
- 3.1.4 The MK 2050 Strategy also sets out some of the City's strengths and weaknesses, the former including our people; our location; and our economy. Whereas our challenges include our health and wellbeing, our affordability, and our skillset.

### 3.2 Milton Keynes MK City Plan 2050

- 3.2.1 The role of the MK City Plan 2050 is to deliver on the vision set out within the 2050 Strategy, as well as built on the current Plan:MK to plan the city's development until 2050, which is reflected in the MK City Plan 2050 Ambition (1):
- “By 2050, Milton Keynes City and rural hinterland will have continued to evolve as an innovative and successful place, founded upon its unique history and special characteristics. Well-planned ambitious growth has created greater economic prosperity and a high quality of life and wellbeing for all. Communities enjoy access to a range of good-quality affordable homes that meet their needs, better and wider economic and cultural opportunities, and healthy and sustainable places to live, learn, and work, supported by infrastructure that is characteristic of a thriving and sustainable place”.
- 3.2.2 The MK City Plan 2050 will meet the following needs:
- legislative need to review and update local plans
  - gives communities certainty, enabling neighbourhood plans
  - enables longer term infrastructure planning and delivery
  - enables other services to plan ahead
  - enables delivery of other MKCC strategies e.g. housing and transport
  - deliver the seven key ambitions of the MK2050 strategy
- 3.2.3 Figure 3-1 sets out the themes for the MK City Plan 2050 as published in the Ambitions and Objectives consultation in January 2023 (1).

**Figure 3-1: MKCP: themes**

|  |
|--|
| <p><b>Economic and Cultural Prosperity Theme</b></p> <ol style="list-style-type: none"><li>1. Strengthen Milton Keynes’ important role in the regional and national economy, with Central Milton Keynes at the heart of a diverse and resilient economy, enabling better access to education, skills and training, and economic opportunities for its communities.</li><li>2. Strengthen Milton Keynes’ role as a regional, national, and international centre of cultural and creative significance by conserving its unique heritage and helping to create a greater diversity and quality of places where culture is produced and enjoyed.</li><li>3. Support the maintenance and creation of thriving centres for shopping and leisure.</li></ol> <p><b>Healthy Places Theme</b></p> <ol style="list-style-type: none"><li>1. Create inclusive and safe homes, neighbourhoods and places that encourage greater physical activity, social interaction, and healthier lifestyles.</li><li>2. Support the provision of facilities and infrastructure that promote good physical and mental health amongst communities in MK.</li></ol> <p><b>High Quality Homes and Neighbourhoods Theme</b></p> <ol style="list-style-type: none"><li>1. Provide a range of affordable homes to those who need them and to meet wider demands.</li><li>2. Support the renewal and regeneration of the built environment within those neighbourhoods and communities that need it.</li><li>3. Aid the delivery of social infrastructure required to enable people and communities within MK to prosper and have a high quality of life.</li><li>4. Create walkable mixed-use neighbourhoods that allow people to access amenities, facilities, and services easily and safely through walking and cycling.</li></ol> <p><b>Climate and Environmental Action Theme</b></p> <ol style="list-style-type: none"><li>1. Shape the built environment and transport systems to help achieve net zero carbon emissions by 2030 and be carbon negative by 2050.</li><li>2. Support the efficient use of resources as part of a circular economy.</li><li>3. Enable a zero-waste economy by 2050 with waste managed as a valuable resource for meeting energy needs through low or zero carbon pathways.</li><li>4. Create space for nature and deliver significant gains in biodiversity.</li><li>5. Ensure that communities and nature cope well with and can bounce back from the predicted negative effects of climate and environmental change.</li></ol> |
|--|

From Milton Keynes City Council ([1](#))

### **Consultation on MKCP**

- 3.2.4 The MK City Plan 2050: Ambition and Objectives Consultation 2023 ([1](#)) and the Sustainability Appraisal Scoping Report ([1](#)) were published for public consultation between 31 January and March 2023.
- 3.2.5 The MK City Plan 2050 will be subject to several stages of statutory consultation in accordance with legislative requirements during the course of its preparation.
- 3.2.6 Lessons from, and reflections on, a technical consultation event are presented on page 41.

# 4 Methods for undertaking the HIA

## 4.1 Introduction

4.1.1 The HIA will identify and provide strategic advice for the challenges and opportunities presented by the emerging MKCP. HIA is a systematic and pragmatic process by which the potential health effects arising from policies, plans, programmes and projects are examined and management strategies are agreed.

Figure 4-1: Determinants of health and well-being



Barton and Grant (3) developed from the model by Dahlgren and Whitehead (4) and accessible in Dahlgren and Whitehead (5)

4.1.2 HIA uses the WHO definition of health as a 'state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity' (6).

4.1.3 There are a number of determinants of health, as illustrated in Figure 4-1, which can affect individuals directly or indirectly. Examining how a proposed plan influences these determinants and the likely effects on the health of communities and individuals and suggesting ways in which to manage these effects are primary roles for HIA.

4.1.4 HIA is an *ex ante* process, which means that it is undertaken before the plan is implemented. The intention is to enable 'constructive modifications' to be made as the

plan is being developed should potentially negative unintended consequences be identified or if there are further opportunities to create a salutogenic environment. The following guidance documents will be used for this HIA:

- 2021: Health Impact Assessment Guidance: A Manual and Technical Guidance (7);
- 2021: Health Impact Assessment (HIA) and Local Development Plans (LDPs): A Toolkit for Practice (8);

4.1.5 The guidance documents below have been noted.

- 2020: Draft guidance on assessing health impacts in strategic environmental assessment (9);
- 2020: Guide for local authority public health and planning teams to improve the use of HIAs in spatial planning (10);
- 2010: Health Impact Assessment of Government Policy (11); and
- 2007: Draft guidance on health in Strategic Environmental Assessment (12).

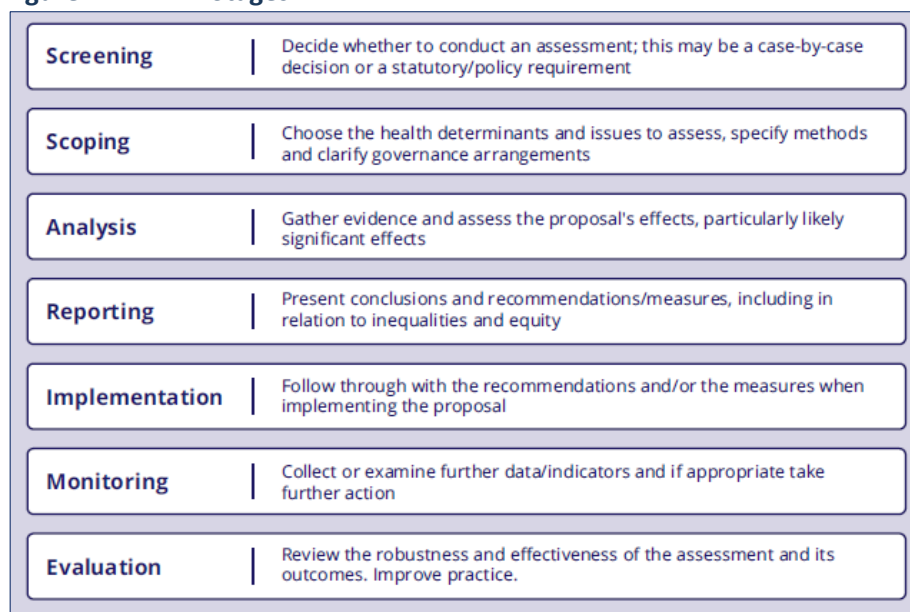
4.1.6 This HIA is strategic in its analysis, but it does not seek to duplicate the Sustainability Appraisal (SA) that is being conducted on the Milton Keynes MK City Plan 2050 (13). However, it is expected there will be crossover with the SA in parts such as active travel infrastructure and climate change.

4.1.7 Some elements of the process are sequential, although there is also interaction between the various stages. The HIA will take a strategic approach consistent with the remit of assessing a strategic level plan. The HIA refers to good quality published evidence to support its advice. Where possible evidence from peer reviewed systematic reviews and randomised control trials is used as these represent the most robust form of evidence on which to base decisions.

## 4.2 Stages

4.2.1 The stages of HIA are illustrated in Figure 4-2.

**Figure 4-2: HIA Stages**



Source:  
Pyper et al (7)

## Screening

- 4.2.2 Milton Keynes City Council has undertaken to conduct an HIA and sets out its reasoning in the consultation on ambitions and objectives for the MKCP (see Figure 4-3).

### Figure 4-3: MKCP and HIA

The Health Impact Assessment will help us make choices about the strategy and policies within the MK City Plan 2050 that promote a built environment which best prevents ill-health, promotes good health and reduces health inequalities. It provides an objective assessment tool for addressing the barriers and enablers for creating healthy places, providing evidence-based practical recommendations to promote and protect the health of local communities.

From Milton Keynes City Council ([1](#))

## Scoping

- 4.2.3 This scoping stage is based on the Ambition and Objectives Consultation document ([1](#)). The scoping exercise is an iterative and collaborative process. The scope identifies technical, temporal and spatial aspects: determinants of health; area; general population; vulnerable population groups; indicative health outcomes / measures. See Table 7-3. The spatial scope uses the following hierarchy:

- Site specific eg wards in MK
- Local: MK and greater MK
- Regional: SE
- National: England

## Analysis

- 4.2.4 The analysis will provide constructive comment and opportunity to consider modifications to be made to the draft policies and site plans. The policies will be considered in relation to their potential effects on health as indicated by Figure 4-1. The commentary will primarily be based on expert opinion with reference to relevant scientific literature and stakeholder comment where appropriate. A review of scientific literature will be conducted and consultation on the MKCP is ongoing and findings will be incorporated. Other evidence that is being gathered to support the policy development will also be considered.

## Reporting

- 4.2.5 The reporting will be influenced by the relationship of the HIA to the development of the Plan and to the ongoing Sustainability Appraisal process. The HIA will identify significant effects and seek to mitigate/enhance them. The HIA will report any significant effects that are not addressed.

## Implementation, Monitoring and Evaluation

- 4.2.6 This will be identified through the development of the Plan and through the HIA process.

## **4.3 Governance**

- 4.3.1 The HIA is conducted by the Milton Keynes City Council Public Health team with assistance from external consultants.

## **4.4 Approach**

- 4.4.1 The analysis will mostly be qualitative. A qualitative analysis will be conducted on MKCP policies and site plans using information from scientific evidence, the population profile and consultation. The HEAT tool is presented as a possible assessment tool (see page 44). Professional judgements will be made regarding the potential effect of policies on health and on health inequalities.
- 4.4.2 The number of policies selected for assessment will ensure a proportionate assessment. The selection will be made by the Milton Keynes City Council Public Health team, with the aim of including a mix of both large- and small-scale development and a range of different land use allocations (e.g. housing and employment).

## **4.5 Engagement**

- 4.5.1 As part of the Health Impact Assessment (HIA) process, there is the opportunity to facilitate wider community engagement work using creative arts that supports and builds on the engagement approach for the MK City Plan 2050.
- 4.5.2 This recognises and builds on the feedback received from the March 2023 City Plan Stakeholder Conference, where there was strong engagement with and calls from different community groups to be involved in the preparation of the MK City Plan 2050.
- 4.5.3 Ben Cave Associates and Speak Up! Act Out! have been commissioned to hold a series of creative workshops in Milton Keynes during Summer 2024. The workshops will provide opportunities for individuals and communities to share their stories, and experiences of life in Milton Keynes in 2024, in new and creative ways.
- 4.5.4 Each workshop will run for 2-3 hours. The workshops will be offered to community members and groups enabling them to provide feedback that can help inform the policies in the MK City Plan 2050. Councillors and council officers will be invited to participate in some of these workshops. It is anticipated that this will provide input to the theme of *Creating People-Friendly and Healthy Places*.
- 4.5.5 The workshops will produce resources, material and information that can enable them to inform the policies in the MK City Plan 2050. The exact nature of the creative output will be decided with the groups but may include writing; film; a live performance; photography, illustration. There will be a written report and findings will also be presented in the Health Impact Assessment (HIA).

# 5 Policy

5.1.1 The professional judgements will be informed by Health Priorities, Policy, Regulation and Legislation. These are set out below.

## 5.2 Milton Keynes: health priorities

5.2.1 The Milton Keynes Health and Wellbeing Strategy 2018-2028 (14) seeks to enable people to lead fulfilling lives, and to be actively involved in families and communities. The strategy has been informed based on detailed analysis of data contained within the Joint Strategic Needs Assessment. The HWBS has three themes, each with supporting priorities.

**Table 5-1: Milton Keynes Health and Wellbeing Strategy themes and priorities**

| Theme         |     | Priority  |
|---------------|-----|---|
| Starting Well | SW2 | Help children and young people to better mental health  |
|               | SW3 | Prevent smaller problems from escalating and needing specialist social care and health services                                     |
|               | SW4 | Make it easier for children and young people to eat well and become more active   |
|               | SW5 | Improve the life chances of children and young people with special educational needs and disabilities                               |
|               | SW6 | Promote access to green spaces and public transport for children and young people   |
|               | SW7 | Support the wellbeing of all pregnant women   |
| Living Well   | LW2 | Improve the lives of everyone living with mental illness through raised awareness and more effective support services               |
|               | LW3 | Reduce the risk of heart disease, cancer and stroke through increasing healthy living and reducing smoking and alcohol consumption  |
|               | LW4 | Tackle the number of rough sleepers and the rise of households in temporary accommodation and reduce low quality housing            |
|               | LW6 | Maximise the use of local organisations including pharmacists to provide more advice and guidance in the community                  |
|               | LW7 | Ensure people with autism receive earlier diagnosis, access to high quality information and more employment opportunities           |
| Ageing Well   | AW1 | Older citizens are supported to stay healthy and maintain their independence  |
|               | AW2 | Promote choice and control for older citizens, helping them to live at home, with adaptations where needed, for as long as possible |
|               | AW3 | Develop high quality out of hospital services to reduce the need for hospital admission and get people home safely and quickly      |
|               | AW5 | Increase earlier diagnosis of dementia through raised awareness and more effective services   |
|               | AW6 | Promote positive mental health and reduce social isolation through strengthening social support and social networks                 |
|               | AW7 | Respond in a positive and proactive way to the needs of our ageing population   |

From Milton Keynes Health and Wellbeing Strategy 2018-2028 (14)

5.2.2 The Milton Keynes Children and Young People’s Joint Strategic Needs Assessment 2019-2021 (15) aims to tackle local inequalities in children's and young people's health and wellbeing by focusing on family, environment, life skills, knowledge and experience in pregnancy, birth and early years as well as the school-aged years.

**Table 5-2: Milton Keynes Joint Strategic Needs Assessment Children & Young People: sections and priority areas**

| Section                       |    | Priority areas   |
|-------------------------------|----|--|
| Healthy Birth and Early Years | 1. | Develop and retain our highly skilled and motivated 0-5 workforce across the system supporting integrated working across health, social care and education.  |
|                               | 3. | Support parents and carers to ensure their children are ready to learn. This includes increasing uptake of the integrated health and education review and free nursery places at 2 and 3 years where applicable.   |
|                               | 5. | Reduce unintentional injuries in under 5s.   |
| The School-Aged Years         | 1. | Schools in Milton Keynes must continue be supported to achieve good health, wellbeing and resilience for all pupils, including the most vulnerable, through a whole-school approach that includes high-quality and effective Personal Social & Health Education, Relationships & Sex Education, Health Education and Physical Education. |
|                               | 4. | Create environments that promote physical activity and healthier lifestyle choices and use the NCMP data as a measure to focus outcomes to tackle excess weight in children and young people across Milton Keynes.   |
|                               | 5. | Ensure excess weight is everybody’s business by working in partnership, and by developing a workforce, which is confident and competent in addressing excess weight.   |
|                               | 9. | Children and young people are supported to transition between into educational stages and into employment and training.  |

From Milton Keynes Joint Strategic Needs Assessment. Children & Young People (15).

**Director of Public Health’s Annual Report 2019/20 – Homelessness and Health**

5.2.3 Ill health can be a cause and consequence of homelessness. Being homeless is associated with extremely poor health outcomes relative to those of the general population. In 2012 the average age of death of homeless people was 47 years for men and 43 for women compared to 74 and 80 for the general population. Homeless people are more likely to have poor physical and mental health, and people with physical and mental health problems are more vulnerable to becoming homeless. As with other risks to public health, prevention and early intervention can keep people housed appropriately, preventing the escalation of health and social issues that can lead to the loss of stable accommodation and worsening health.

5.2.4 Important drivers of homelessness include:

- **Socioeconomic factors** including relationship breakdown, poverty and debt;
- **The supply of affordable housing;**
- **Changes to the welfare system;**
- **Health, social, and behavioural risk factors** including complex needs, substance misuse, mental ill health, offending behaviour, and vulnerable groups such as veterans.



## Director of Annual Health’s Annual Report 2022/23 – Taking Local Action to Address Excess Weight in Milton Keynes

- 5.2.5 Two out of three adults and two in five 11-year olds living in Milton Keynes are overweight or obese. Excess weight is a major cause of ill health and death locally and disproportionately affects some of our poorest communities.
- 5.2.6 There are significant costs to society from excess weight which include costs to the health service as well as economic costs to individuals and the wider economy from lost working days and economic inactivity.
- 5.2.7 However, tackling excess weight is not simply a matter of educating individuals to make healthier choices. The people who are most likely to become overweight or obese are those whose lives are shaped by work, school, and social environments that promote overeating and inactivity.
- 5.2.8 The report highlights the use of Health Impact Assessments for planning applications as a way to address inactivity. An office block in Central Milton Keynes was being extended and converted to provide 237 flats. The HIA review identified a lack of playspace in the local area and the negative impacts on children’s physical and mental health. The developer was then required to provide a play area in the courtyard as a condition of receiving planning permission.
- 5.2.9 Ambition 1 (3) states that:  
 “The City Council continues, through its planning and transport responsibilities, to make it easier and safer for residents to walk, cycle and use public transport where it is appropriate to do so, and support greater access to greenspace”.

### The well-being and mental health needs of the population in BLMK (2022)

- 5.2.10 A needs assessment set out the prevalence of mental health disorders and the level of wellbeing in the local population (16). Milton Keynes has the highest level of anxiety in the BLMK authorities and has below national average for mean life satisfaction, worthwhileness of life and happiness. Since the publication of this needs assessment the Office for Health Improvement and Disparities (OHID) has published data which shows the number of deaths by suicide in Milton Keynes has increased from 9.4 per 100,000 in 2018/20 to 12.9 per 100,000 in 2019/21. This is the third highest rate in the South East of England and also higher than any of the neighbouring authorities:

**Table 5-3: Suicide rate (persons) 2019-21. ONS/OHID**

| Area                  | Count     | Rate per 100,000 people |
|-----------------------|-----------|-------------------------|
| England               | 15,4000   | 10.4                    |
| South East            | 2,558     | 10.6                    |
| <b>Milton Keynes</b>  | <b>91</b> | <b>12.9</b>             |
| Bedford               | 52        | 11.7                    |
| Buckinghamshire       | 157       | 11.0                    |
| West Northamptonshire | 100       | 9.5                     |
| Luton                 | 43        | 7.9                     |
| Central Bedfordshire  | 56        | 7.6                     |

## BLMK Musculoskeletal Health Needs Assessment (2022)

- 5.2.11 The BLMK Musculoskeletal (MSK) Needs Assessment was produced by the BLMK-wide MSK commissioning unit to address factors including unmet need, prevention, and to project future to needs (17). It forms part of the MKCC JSNA. The MSK Needs Assessment quotes the following findings: MSK conditions are the leading cause of disability in the UK accounting for 30.5% of all years live with disability; 26% of all adults' report being diagnosed with at least one mental illness within their lifetime; and it is estimated that in England 4.6m people live with both a long-term physical health condition and a mental health problem. Co-morbid mental health and musculoskeletal disorders have serious implications, affecting people's motivation and ability to self-manage and adapt healthy behaviours such as exercising.

**Table 5-4: Bedfordshire, Luton, and Milton Keynes Musculoskeletal Health Needs Assessment – February 2022**

| Section            |     | Summary   |
|--------------------|-----|---|
| Overview & Need    | 1.  | 21% of the global burden of disease is due to MSK conditions in the UK. Although MSK conditions tend to be long term, they are less likely to be a cause of death. MSK conditions can lead to many years of life impacted by disability, this is measured in Years Lived with Disability (YLD). |
|                    | 2.  | 725 people over 65 years old fractured their hip in BLMK (2020/21) and average Quality of Life (QoL) score for people living with MSK conditions in BLMK was 0.60 which is significantly worse than adults living without (0.90).   |
|                    | 3.* | The prevalence of long term MSK in MK is 16.7% (2022). This is above the SE regional average of 16.4% but below the England average of 17.6%  |
|                    | 4.  | MSK accounted for the second most common reason for issuing a fit note by GPs in the BLMK area at 16% of all fit notes compared to the England average of 14.5%.  |
|                    | 5.* | The odds ratio of reporting a mental health condition among people with and without a MSK condition is 1.5 in MK. This is in the 2 <sup>nd</sup> highest quintile for England.  |
| Preventative Needs | 1   | MK ranks second out of the BLMK authorities for the MSK risk factor prevalence of excess weight, physical inactivity, and smoking.  |

\* data taken from OHID's Fingertips.

## Gambling and Problem Gambling in Milton Keynes (2020).

- 5.2.12 The review of Gambling and Problem Gambling in Milton Keynes was published in 2020 (18). This estimates that around 95,000 people will have gambled in the last four weeks and that approximately 1,500 adults have a problem with gambling. A further 7,300 are at low or moderate risk of gambling-related harm.
- 5.2.13 The study has also found that gambling premises and gambling machines are disproportionately located in the more deprived areas of Milton Keynes, which increases access for those already at heightened risk of problem gambling. This is individuals who have mental health issues, are unemployed or employed in routine/manual jobs, are homeless or have substance misuse issues.

**Table 5-5: Number of gambling machines and licences by ward**

| Ward                             | Machines   | Machine licenses | Premise licenses |
|----------------------------------|------------|------------------|------------------|
| Central Milton Keynes            | 173*       | 14               | 7                |
| Bletchley Park                   | 101        | 10               | 8                |
| Wolverton                        | 60         | 12               | 4                |
| Newport Pagnell North & Hanslope | 53         | 9                | 2                |
| Newport Pagnell South            | 33         | 11               | 1                |
| Stony Stratford                  | 23         | 9                | 1                |
| Bletchley East                   | 23         | 8                | 1                |
| Broughton                        | 22         | 6                | 1                |
| Stantonbury                      | 17         | 4                | 1                |
| Bletchley West                   | 16         | 3                | 1                |
| Monkston                         | 16         | 4                | 1                |
| Loughton & Shenley               | 15         | 3                | 1                |
| Campbell Park & Old Woughton     | 14         | 6                | 0                |
| Olney                            | 13         | 6                | 0                |
| Bradwell                         | 11         | 5                | 0                |
| Woughton & Fishermead            | 10         | 2                | 1                |
| Shenley Brook End                | 9          | 4                | 0                |
| Tattenhoe                        | 9          | 2                | 1                |
| Danesborough & Walton            | 7          | 3                | 0                |
| <b>Total</b>                     | <b>625</b> | <b>121</b>       | <b>31</b>        |

\* This figure includes The Casino MK, which had 84 machines

Table from MKCC (18)

- 5.2.14 The report has made several recommendations on prevention, early intervention, and treatment. The recommendation relating to the location of gambling machines and premises was to be confirmed with Licensing, Planning and Regeneration.

### **MK Together Health and Care Partnership: ‘Our ambition for health and social care’ (2024)**

- 5.2.15 In September 2022, the BLMK Integrated Care Board agreed to delegate several functions to be delivered by the Milton Keynes Health and Care Partnership (MK Together), which consists of the Council and the main local NHS partners in MK. This agreement is known as the ‘MK Deal’ (19) aims to enable everyone in our city to live longer, healthier lives. Building on the MK Deal, in 2024 MK Together adopted ‘Our ambition for health and social care’, which seeks to take a place-based approach to address the following priorities:

- Improving system flow;
  - Focussing on timely discharge from hospitals/bedded care, particularly ensuring that people can live healthy and independent lives at home.
- Children and Young People Mental Health;
  - Focussing on early intervention, particularly for children at greater risk of poor mental health such as looked-after children.
- People with Complex Needs;

- Focussing on delivering improved outcomes for people who have complex needs, including reducing the use of placements outside of MK (out of area placements).
  - Tackling Obesity
    - Focussing on a whole systems approach to tackling obesity, including through increasing access to healthy food and improving the environment in MK.
- 5.2.16 The 'Tackling Obesity' priority would be most impacted by the MK City Plan 2050, however the plan will also have influence other priorities through the delivery of the right homes, including adaptable and specialist homes, in the right places.

### **Milton Keynes Market Position Statement 2022-2027 (December 2022)**

- 5.2.17 The Market Position Statement (MPS) sets out how the Council will deliver Adult Social Care (ASC) services in the future to ensure that people are supported to lead healthy independent lives for as long as possible (20). The MPS provides information and analysis of adult care and support services in MK to help shape services in the short, medium, and longer term.
- 5.2.18 MKCC provided ASC services to 2,838 people in 2021/22, an increase of almost 8% on the previous year in 2020/21 where 2,635 people received ASC services. 1,716 of these people were aged over 65 and 1,122 under 65. Within the 18-64 age group of service users, 52% of people have a learning disability.

#### *Care and Support of people aged over 65*

- 5.2.19 The MPS reports that the number of residential care and nursing beds in MK has reduced despite the increase in older people living in MK. There is a 70/30 split in favour of self-funded vs social care funded placements (20).
- 5.2.20 As reflected in the Musculoskeletal JSNA, the MSP states that there is a disproportionately high number of reported injuries from falls within MK in relation to its population size and demographics. Older people are at greatest risk of falling and suffering a permanent injury from a fall. By 2040 approximately 16,000 residents of MK will be predicted to have a fall an increase of 4,000 from 2025 predictions.
- 5.2.21 Good quality, adaptable housing for older people is highlighted as a priority within the MPS as it has a key role in supporting people in the community and tackling loneliness and isolation. Importantly our residents' feedback to Healthwatch in 2019 showed that our residents attached a high importance to staying in their own homes for as long as possible when they get older. In MK achieving the right mix of housing for an aging population would include:
- Increasing range of housing choices across tenures to facilitate 'downsizing' or 'rightsizing'.
  - Increasing the support of **extra care** housing to provide a genuine alternative to registered care.
- 5.2.22 Dementia is highlighted within the MPS as a key focus for MK. The prevalence of dementia increases with age, from 1 in 30 at 70 years old to 1 in 5 at 80 years old. Our population is predicted to have a significant rise in the number of older people in the future, from 39,586 in 2021 to 58,700 by 2040. (Census 2021 and POPPI 2040 projections). POPPI projections indicate the population aged 85 and over will increase by 133% from 1,800 in 2020 to 4,200

by 2040. The current cost of dementia care in MK is £113m per year and is expected to rise to £213m by 2030.

### *Care and Support of people aged under 65*

- 5.2.23 Milton Keynes wants to support working age people with a physical and/or sensory disability to be as independent as possible, using the Social Model of Disability, which considers the barriers people face and encourages society to be more inclusive and to make reasonable adjustments.
- 5.2.24 The Projecting Adult Needs and Service Information (PANSI) ([21](#)) estimates that the number of people aged 18-64 with impaired mobility in MK will increase from 8,800 to 9,100 by 2040. PANSI also estimates that adults aged 18-64 with a severe visual impairment and/or severe hearing impairment will remain broadly similar at approximately 100 and 1000 people respectively over the period to 2040.
- 5.2.25 In Milton Keynes, PANSI estimates that the number of working-age adults with a learning disability will also remain broadly similar at approximately 4000 people, of which approximately 900 will have a moderate or severe learning disability. A key concern is that the number of younger people with a moderate to severe learning disability who are living at home with their parents will rise. These parent carers will be aging and there will be an increase in need for more accommodation and care options.
- 5.2.26 Through the Homes not Hospitals work and the efforts to return residents from out-of-area placements, the MPS reports that increasing numbers of people with learning disabilities and complex needs will require appropriate accommodation and support to live successfully in the community.
- 5.2.27 The MPS identifies that there is an opportunity for improved choice of housing options for working-age disabled adults, including the provision of lifetime homes. This is further emphasised through the need for increasing local provision and providing good quality accommodation to enable residents to return home from hospital or out-of-area. Likewise, provision of accommodation suitable for people with autism and incorporates autism friendly design features is also important.
- 5.2.28 Mental Health will impact 1 in 4 people who will experience an episode of mental ill health and almost half of all adults will experience at least one episode of depression. Common Mental Health Problem prevalence in Milton Keynes is predicted to increase moderately in all areas from an existing position of below-average wellbeing and above-average rate of deaths by suicide.
- 5.2.29 For people affected by substance misuse, sourcing good quality affordable housing and developing or adapting specialist accommodation where required, is a priority set out in the MPS. Time-limited supported housing to enable and support people to transition from hospital and out-of-area placements is also required, in addition to intensive housing support with rehabilitation.
- 5.2.30 The Council supports young people as they become adults in accordance with the statutory duties made in the Care Act 2014 ([22](#)) and the Children and Families Act 2014 ([23](#)). The Children's Act 1989 ([24](#)) makes duties for the Council to prepare and support children for leaving care.
- 5.2.31 Lastly, the role of carers cannot be understated. It is known that the number of family and unpaid carers living or supporting someone in MK is likely to increase as our population grows and ages. An increase in older and younger carers is also expected.

## Milton Keynes Council Plan 2022 – 2026

5.2.1 The Council Plan (25) sets out how the Council’s corporate priorities to deliver on the Strategy for 2050, our long-term vision for the future of the city, seeks to ensure that everyone in MK can lead happy, healthy lives. The plan sets out ten principles for the Council, which are:

1. Ambitious in what we do.
2. Public Service at its best.
3. Meeting our financial challenges.
4. Value for money services.
5. Opportunity for all.
6. Supporting vulnerable people.
7. Prevention is better than cure.
8. Well planned growth and renewal.
9. Equality, diversity, and inclusion.
10. The importance of co-operation and partnerships.

5.2.2 Five key priorities and associated outcomes are established from these principles, these are:

1. **A diverse and inclusive economy:** which will deliver a strong and robust economy, high quality placemaking, and a centre for culture and creativity.
2. **Decent, affordable, homes in a high quality environment:** which will deliver improved access to affordable housing, delivery of regeneration and renewal, and well planned growth.
3. **Tackling social inequalities:** which will deliver excellent services for our children and young people, mitigating the rise in child poverty and the impact of the cost-of-living crisis, and a more equal, diverse, and inclusive Milton Keynes that welcomes and supports everyone.
4. **Supporting cleaner, safer, and healthier communities:** which will deliver doing the essentials well, a cleaner and safer MK, and improved health and wellbeing.
5. **Action on climate change:** which will deliver the world’s leading sustainable city, sustainable public transport and mobility, and mitigate the impact of climate change.

## 5.3 NHS England

5.3.1 In September 2021, NHS England issued guidance on the development of place-based partnerships as part of the statutory ICSs (26). This considers the role of place within the health and care system, for example the importance of community understanding of place, the way that services may be planned and delivered across one or more local authority footprints and the range of partners that need to be involved in this planning and delivery. NHS England sets out activities and approaches for place-based partnerships:

- Health and care strategy and planning at place;
- Service planning;
- Service delivery and transformation;
- Population health management;
- Connect support in the community;
- Promote health and wellbeing; and

- Align management support.

### Bedfordshire, Luton and Milton Keynes Health and Care Partnership

5.3.2 The Bedfordshire, Luton and Milton Keynes Health and Care Partnership (BLMK) is the Integrated Care System for MK and lists five priorities for health and social care (27). These are set out in Table 5-6 below.

**Table 5-6: Bedfordshire, Luton and Milton Keynes Health and Care Partnership priorities**

| Priority   | Focus  |
|------------|--|
| Start Well | <p>Ensuring that all mothers, parents, children and young people have access to the support they need to achieve good family health and wellbeing</p> <p>Improving educational achievement across the whole of our population to better prepare children and young people for employment</p> <p>Supporting children, young people and their families who are most vulnerable and need support from a range of services</p>   |
| Live Well  | <p>Health improvement and disease prevention – supporting people individually and in their communities, including action to address the social determinants of health and inequalities in access, outcomes and quality of health and social care.</p> <p>Early detection of health conditions – supporting better understanding of the signs and symptoms of ill health, looking for opportunities to make early interventions to stop people’s health from worsening, and supporting better uptake of screening programmes.</p> <p>Optimal management of long-term conditions – giving people the information and tools that they need to manage their own health and care, where possible, and better co-ordinating care where people need help from more than one health or social care provider.</p>         |
| Age Well   | <p>Support and empower older people to manage their own health as well as tackling ill health and long-term conditions amongst older people.</p> <p>Identify those who need more support to maintain good health and wellbeing, and focus on personalised care planning based around what matters most to people.</p> <p>Identify and manage frailty and people who have several health conditions at once</p> <p>Deliver consistent and co-ordinated care to people in their own home where possible, and support those people who are no longer able to live in their own homes</p> <p>Ensure people at the end of their life have a health and care offer which supports the wishes of the individual and their family/carers.</p>  |
| Growth     | <p>Developing the NHS providers as Anchor Institutions to support growth</p> <p>Developing and delivering the ICS’s approach to sustainability, including delivery of the net zero NHS commitments</p> <p>Developing the ICS’s approach to research and development, including encouraging and incentivising investment in research in BLMK</p> <p>Developing skills in the local population and support employment pathways for local people</p> <p>Taking a more sustainable approach to procurement, taking into account social and environmental factors</p> <p>Identifying opportunities to work together across health and housing services to help support people to live healthily in their own homes</p> <p>Maximising the potential growth opportunities for BLMK through the Oxford-Cambridge Arc</p> |

| Priority              | Focus  |
|-----------------------|--|
| Reducing inequalities | <p>Ensuring continuity of care for women from Black, Asian and minority ethnic (BAME) communities and the most deprived groups</p> <p>Ensuring annual health checks for people with serious mental illness (SMI)</p> <p>Driving uptake of vaccinations and earlier diagnosis of cancer</p> <p>Investing in local voluntary, community and social enterprise organisations to support people in different, proactive ways</p> <p>Working with Primary Care Networks (PCNs) to identify and target high priority cohorts</p> |

## 5.4 National Planning Policy

5.4.1 The National Planning Policy Framework (NPPF) frames planning policy and planning determinations (28). The statements that are relevant to health and wellbeing are quoted in Table 5-7.

**Table 5-7: National Planning Policy Framework**

| Paragraph | Text  |
|-----------|---|
| 8         | <p>‘Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):</p> <p>a social objective – to support strong, vibrant and healthy communities ... by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being.’</p>   |
| 34        | <p>‘Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). ...’</p>   |
| 88        | <p>‘Planning policies and decisions should enable:</p> <p>a) the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed new buildings;</p> <p>b) the development and diversification of agricultural and other land-based rural businesses;</p> <p>c) sustainable rural tourism and leisure developments which respect the character of the countryside; and</p> <p>d) the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.’</p>  |
| 89        | <p>‘Planning policies and decisions should support the role that town centres play at the heart of local communities, by taking a positive approach to their growth, management and adaptation. Planning policies should:</p> <p>a) define a network and hierarchy of town centres and promote their long-term vitality and viability – by allowing them to grow and diversify in a way that can respond to rapid changes in the retail and leisure industries, allows a suitable mix of uses (including housing) and reflects their distinctive characters;</p> <p>c) retain and enhance existing markets and, where appropriate, re-introduce or create new ones;</p> <p>f) recognise that residential development often plays an important role in</p> |



| Paragraph | Text   |
|-----------|--|
|           | ensuring the vitality of centres and encourage residential development on appropriate sites.'  |
| 96        | 'Planning policies and decisions should aim to achieve healthy, inclusive and safe places which ...<br>(a) promote social interaction ...<br>(b) are safe and accessible ... and<br>(c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.'   |
| 97        | 'To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should: ... take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community ... [and] guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs ...'.  |
| 102       | 'Access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities.'   |
| 104       | 'Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users ...'.   |
| 108       | 'Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: ...<br>(c) opportunities to promote walking, cycling and public transport use are identified and pursued; ... and<br>(e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.'  |
| 109       | '... Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health ...'  |
| 114       | 'In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:<br>a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;<br>b) safe and suitable access to the site can be achieved for all users;<br>c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance...; and<br>d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.' |
| 123       | 'Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions ...'.  |
| 128       | 'Planning policies and decisions should support development that makes efficient use of land, taking into account ...<br>(e) the importance of securing well-designed and beautiful, attractive and healthy places.'   |
| 131       | 'The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to   |

| Paragraph | Text  |
|-----------|---|
|           | communities. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process.'  |
| 135       | 'Planning policies and decisions should ensure that developments:<br>(b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping ...<br>(d) ... create attractive, welcoming and distinctive places to live, work and visit ... and<br>(f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.'  |
| 136       | 'Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.' |
| 159       | 'New development should be planned for in ways that:<br>a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and<br>b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design...'   |
| 160       | 'To help increase the use and supply of renewable and low carbon energy and heat, plans should:<br>a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts);<br>b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and<br>c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.'         |
| 180       | 'Planning policies and decisions should contribute to and enhance the natural and local environment by:<br>e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;'   |
| 181       | 'Plans should: ... allocate land with the least environmental or amenity value, ... ; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.'   |

| Paragraph | Text  |
|-----------|---|
| 191       | <p>‘Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment ... In doing so they should:</p> <p>(a) ... avoid noise giving rise to significant adverse impacts on health and the quality of life;</p> <p>(b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and</p> <p>(c) limit the impact of light pollution from artificial light on local amenity.’</p> |
| 192       | <p>‘Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants ... Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications.’</p>  |
| 216       | <p>... in relation to minerals, ‘Planning policies should ...</p> <p>(f) set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on ... human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality ...’.</p>  |

## 5.5 Regulatory Standards

5.5.1 The HIA will have regard to the following UK regulatory standards.

- UK regulatory standards for noise (29-32), acknowledging there are also World Health Organization’s (WHO) guide values (33-36).
- UK statutory standards for air quality (37,38), acknowledging there are also WHO guide values (39).
- UK statutory standards for water quality (40), acknowledging there are also WHO guide values (41).

## 5.6 Legislation

5.6.1 The Clean Air Act (1993) (as amended) aims to reduce pollution from smoke, grit and dust and gives local authorities powers to designate smoke control areas (42). The Air Quality Standards Regulations 2010 (37) transpose into English law the requirements of Directives 2008/50/EC (43) and 2004/107/EC (44) on ambient air quality.

5.6.2 Part III of the Environmental Protection Act 1990 (as amended) manages the control of emissions (including dust, noise and light) that may be prejudicial to health or a nuisance (45). Control of Pollution Act 1974 (46) (as amended) provides the definition of Best Practicable Means (BPM) to minimise noise (and vibration), including prior consent for works on construction sites. It also establishes the meaning of an environmental hazard (including in relation to health and the disposal licences). The Environmental Permitting (England and Wales) Regulations 2016 (47) manage and reduce pollution from certain industrial activities through permitting, monitor compliance with permit conditions.

- 5.6.3 In the UK all drinking water, whether from public supplies or other sources, has to meet standards laid down in the EU Drinking Water Directive (98/83/EC) (48). The Water Supply (Water Quality) Regulations 2016 transpose these requirements for England (40).
- 5.6.4 The Health and Safety at Work etc Act 1974 (49) places the following duties on employers:
- “It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees.”
  - “It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety.”
- 5.6.5 Electricity Safety, Quality and Continuity Regulations 2002 (50) impose requirements regarding the installation and use of electrical networks and equipment, including provisions relating to substation enclosure.
- 5.6.6 Section 2B of the National Health Service Act 2006 (51) (as inserted by Section 12 of the Health and Social Care Act 2012 (52)) requires that the Council must take steps for improving the health of the people in its area.
- 5.6.7 Section 116 of The Local Government and Public Involvement in Health Act 2007 (53) requires the Council to produce a Joint Strategic Needs Assessment and Joint Health and Wellbeing Strategies, covering the health and social care needs of their population. Section 116B (as inserted by Section 193 of the Health and Social Care Act 2012 (52)) requires the Council, in exercising any functions, to have regard to these assessment and strategies.

## 6 Population health baseline

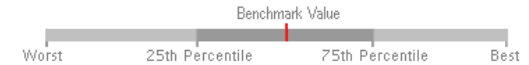
6.1.1 The Office for National Statistics (ONS) states that Milton Keynes' population increased by around 38,200 between 2011 and 2021. ONS observes other changes for Milton Keynes between 2011 and 2021:

- The population increased by 15.4%, from just over 248,800 in 2011 to around 287,100 in 2021.
- The average (median) age of Milton Keynes increased by two years, from 35 to 37 years of age.
- Around 206,100 Milton Keynes residents said they were born in England. This represented 71.8% of the local population. The figure has risen from around 194,200 in 2011, which at the time represented 78.1% of Milton Keynes' population. India was the next most represented, with around 8,200 Milton Keynes residents reporting this country of birth (2.9%). This figure was up from just over 4,100 in 2011, which at the time represented 1.7% of the population of Milton Keynes. The number of Milton Keynes residents born in Romania rose from around 350 in 2011 (0.1% of the local population) to just over 6,100 in 2021 (2.1%). In 2021, 12.4% of usual residents in Milton Keynes identified their ethnic group within the "Asian, Asian British or Asian Welsh" category.
- The percentage of people in very good health in Milton Keynes increased by 2.5 percentage points
- The percentage of households including a couple without children decreased by 2.7 percentage points.
- The percentage of people who were identified as being disabled and limited a lot decreased by 1.9 percentage points
- The percentage of people who did not identify with at least one UK national identity in Milton Keynes increased by 3.2 percentage points
- Private renting increased by 3.6 percentage points
- The percentage of people (aged five years and over) providing up to 19 hours of weekly unpaid care decreased by 2.5 percentage points

6.1.2 OHID Local Authority Health Profiles ([54](#)) provide a local, regional and national baseline. See Figure 6-1.

Figure 6-1: MK summary health profile (2024)

● Better 95%   ● Similar   ● Worse 95%   ○ Not applicable   
 Quintiles: Best ○ ○ ○ ○ ○ Worst   ○ Not applicable  
 Recent trends: — Could not be calculated   ➔ No significant change   ↑ Increasing & getting worse   ↑ Increasing & getting better   ↓ Decreasing & getting worse   ↓ Decreasing & getting better



| Indicator  | Period          | Milt Keynes  |       |       | South East England region (statistical) |       | England |       |       |  |
|--|-----------------|--------------|-------|-------|---|-------|---------|-------|-------|--|
|  |                 | Recent Trend | Count | Value | Value                                   | Value | Worst   | Range | Best  |  |
| <b>Life expectancy and causes of death</b>                       |                 |              |       |       |   |       |         |       |       |  |
| Life expectancy at birth (Male, 3 year range)                    | 2020 - 22       | —            | -     | 79.2  | 80.1                                    | 78.9  | 73.4    |       | 82.5  |  |
| Life expectancy at birth (Male, 1 year range)                    | 2022            | —            | -     | 79.5  | 80.6                                    | 79.3  | 73.8    |       | 82.7  |  |
| Life expectancy at birth (Female, 3 year range)                  | 2020 - 22       | —            | -     | 82.5  | 83.8                                    | 82.8  | 79.0    |       | 86.3  |  |
| Life expectancy at birth (Female, 1 year range)                  | 2022            | —            | -     | 82.5  | 84.1                                    | 83.2  | 79.2    |       | 87.0  |  |
| Under 75 mortality rate from all causes                          | 2022            | ➔            | 784   | 345.8 | 298.3                                   | 342.3 | 580.4   |       | 225.3 |  |
| Under 75 mortality rate from all circulatory diseases            | 2022            | ➔            | 160   | 71.6  | 63.1                                    | 77.8  | 133.1   |       | 47.9  |  |
| Under 75 mortality rate from cancer                              | 2022            | ➔            | 287   | 130.1 | 114.3                                   | 122.4 | 174.1   |       | 85.6  |  |
| Suicide rate (Persons, 10+ yrs)                                  | 2020 - 22       | —            | 85    | 11.3  | 10.4                                    | 10.3  | 18.3    |       | 4.2   |  |
| <b>Injuries and ill health</b>                                   |                 |              |       |       |   |       |         |       |       |  |
| Killed and seriously injured (KSI) casualties on England's roads | 2022            | ➔            | 93    | 63.6* | 95.1*                                   | 94.5* | 538.9   |       | 26.7  |  |
| Emergency Hospital Admissions for Intentional Self-Harm          | 2022/23         | ↓            | 275   | 92.4  | 138.3*                                  | 126.3 | 382.6   |       | 40.9  |  |
| Hip fractures in people aged 65 and over                         | 2022/23         | ➔            | 190   | 503   | 509*                                    | 558   | 744     |       | 370   |  |
| Percentage of cancers diagnosed at stages 1 and 2                | 2021            | ➔            | 526   | 59.8% | 56.2%                                   | 54.4% | 46.5%   |       | 61.2% |  |
| Estimated diabetes diagnosis rate                                | 2018            | —            | -     | 78.0% | 75.2%                                   | 78.0% | 54.3%   |       | 97.5% |  |
| Estimated dementia diagnosis rate (aged 65 and older)            | 2023            | ➔            | 1,955 | 66.5  | 61.6                                    | 63.0  | 47.7    |       | 83.9  |  |
| <b>Behavioural risk factors</b>                                  |                 |              |       |       |   |       |         |       |       |  |
| Admission episodes for alcohol-specific conditions - Under 18s   | 2020/21 - 22/23 | —            | 40    | 19.1  | 28.6*                                   | 26.0  | 75.5    |       | 3.8   |  |
| Admission episodes for alcohol-related conditions (Narrow)       | 2022/23         | ↓            | 977   | 378   | 376*                                    | 475   | 856     |       | 247   |  |
| Smoking Prevalence in adults (18+) - current smokers (APS)       | 2022            | —            | -     | 13.8% | 11.5%                                   | 12.7% | 21.8%   |       | 4.6%  |  |
| Percentage of physically active adults (19+ yrs)                 | 2022/23         | —            | -     | 65.9% | 70.2%                                   | 67.1% | 51.4%   |       | 80.5% |  |
| Overweight (including obesity) prevalence in adults (18+ yrs)    | 2022/23         | —            | -     | 63.2% | 62.8%                                   | 64.0% | 77.7%   |       | 45.8% |  |

Figure 6-1 continued ...

| <b>Child health</b>  |                     |   |         |       |       |       |       |  |  |       |
|--|---------------------|---|---------|-------|-------|-------|-------|--|--|-------|
| Under 18s conception rate / 1,000  | 2021                | → | 63      | 11.9  | 10.7  | 13.1  | 31.5  |  |  | 1.1   |
| Smoking status at time of delivery   | 2022/23             | ↓ | 203     | 7.3%  | 8.1%  | 8.8%  | 19.4% |  |  | 3.4%  |
| Baby's first feed breastmilk (previous method)   | 2018/19             | – | -       | *     | 72.7% | 67.4% | 43.6% |  |  | 98.7% |
| Infant mortality rate  | 2020 - 22           | – | 38      | 3.9   | 3.3   | 3.9   | 7.6   |  |  | 1.4   |
| Year 6 prevalence of obesity (including severe obesity) (10-11 yrs)  | 2022/23             | ↑ | 930     | 23.5% | 19.4% | 22.7% | 31.7% |  |  | 12.0% |
| <b>Inequalities</b>  |                     |   |         |       |       |       |       |  |  |       |
| Deprivation score (IMD 2019)   | 2019                | – | -       | 18.0  | 15.5  | 21.7  | 45.0  |  |  | 5.8   |
| Smoking prevalence in adults in routine and manual occupations (18-64) - current smokers (APS)                         | 2022                | – | -       | 23.3% | 22.7% | 22.5% | 38.1% |  |  | 6.5%  |
| Inequality in life expectancy at birth (Male)  | 2018 - 20           | – | -       | 8.4   | 7.9   | 9.7   | 17.0  |  |  | 2.6   |
| Inequality in life expectancy at birth (Female)  | 2018 - 20           | – | -       | 7.2   | 6.0   | 7.9   | 13.9  |  |  | 1.2   |
| <b>Wider determinants of health</b>  |                     |   |         |       |       |       |       |  |  |       |
| Children in relative low income families (under 16s)   | 2022/23             | → | -       | 16.3% | 13.1% | 19.8% | 42.2% |  |  | 5.2%  |
| Children in absolute low income families (under 16s)   | 2022/23             | ↓ | 8,539   | 13.5% | 10.6% | 15.6% | 35.7% |  |  | 4.2%  |
| Average Attainment 8 score   | 2022/23             | – | -       | 45.9  | 47.3  | 46.2  | 36.1  |  |  | 58.4  |
| Percentage of people in employment   | 2022/23             | ↑ | 139,700 | 80.7% | 78.0% | 75.7% | 62.3% |  |  | 88.3% |
| Homelessness: households owed a duty under the Homelessness Reduction Act  | 2022/23             | – | 1,929   | 17.7  | 10.3  | 12.4  | 32.7  |  |  | 5.3   |
| Violent crime - hospital admissions for violence (including sexual violence)   | 2020/21 - 22/23     | – | 220     | 24.4  | 24.5* | 34.3  | 122.3 |  |  | 12.5  |
| <b>Health protection</b>   |                     |   |         |       |       |       |       |  |  |       |
| Winter mortality index   | Aug 2021 - Jul 2022 | – | 40      | 6.7%  | 8.6%  | 8.1%  | 30.1% |  |  | -6.8% |
| New STI diagnoses (excluding chlamydia aged under 25) per 100,000  | 2022                | → | 1,138   | 389   | 325   | 480   | 3,048 |  |  | 160   |
| <span style="background-color: #2e8b57; color: white; padding: 2px;">New data</span> TB incidence (three year average) | 2020 - 22           | – | 69      | 8.2   | 5.4   | 7.6   | 41.3  |  |  | 0.8   |

- 6.1.3 The NOMIS census 2011 and 2021 provide data on the demographics of the population around topics such as age, occupation, modes of transportation, accommodation type, education level, general health and disabilities, among other indicators relevant for policy development.
- 6.1.4 In addition to the above summary health profile and NOMIS census data, baseline information will support the analysis of the draft policies and site plans by theme. Suggested indicators for each Milton Keynes MK City Plan 2050 theme are provided in Table 9-1.

# 7 The scope

7.1.1 This is based upon a review of themes in the ambition and objectives document (1). Table 7-1 shows the determinants of health that will be examined in the HIA. Table 7-2 sets out population groups that could be selected. Each of these lists can be adapted to meet the requirements of the assessment. Table 7-3 brings these together and sets out the technical, temporal and spatial scope of the assessment.

**Table 7-1: Determinants of health for MKCP HIA**

| Scoped In / Out | Determinant of health and specific issues, including risk factors | Relevance * | Rationale   |
|-----------------|---|-------------|---|
| In              | Health inequalities:  |             | A key driver for public health policy. Note that the areas for development may not overlap with the areas of deprivation within Milton Keynes.<br>Physical and mental health: adverse effects heightened during cost-of-living crisis. Ability to enable families to stay close and to afford housing.  |
|                 | Health inequalities between population groups                     | ✓           |   |
|                 | Health inequalities between geographical areas                    | ✓           |   |
| In              | Healthy lifestyles:   |             | The ambitions and objectives have a clear focus on active lifestyles.<br>Access to healthy, affordable, and nutritious food.<br>Access to health protecting and promoting goods and services and infrastructure   |
|                 | Healthy lifestyles and leisure activity opportunities             | ✓           |   |
|                 | Nutrition   | ✓           |   |
| In              | Safe and cohesive communities:                                    |             | The ambitions and objectives have a clear focus on inclusive and safe homes, neighbourhoods, and places.<br>Fuel poverty and cost of living   |
|                 | Housing, buildings and connecting routes                          | ✓           |   |
|                 | Poverty, social exclusion and crime                               | ✓           |   |
| Out             | Socioeconomic conditions:   |             | This will be covered by the socio-economic assessment in the SA, so it has been scoped out. It is important to health and wellbeing and to reducing inequalities in health so a watching brief will be maintained on the socio-economic assessment and it may be scoped in.   |
|                 | Education   | X           |   |
|                 | Employment (including quality)                                    | X           |   |
| Out             | Environmental conditions:   |             | This is scoped out of the assessment on human health as effects from noise emissions and emissions to air will be assessed in the SA. Environmental conditions are key determinants of health and wellbeing. There is a growing evidence base of the links between poor air quality and damage to health and of noise and damage to health. The findings of the SA will be kept under review. |
|                 | Air quality   | ✓           |   |
|                 | Water   | X           |   |
|                 | Soil  | X           |   |
|                 | Noise and vibration   | ✓           |   |



| Scoped In / Out | Determinant of health and specific issues, including risk factors | Relevance * | Rationale  |
|-----------------|---|-------------|--|
| In              | Health- and social-care services:                                 |             | The MKCP and the ICS both intend to create healthy places. Strategic planning needs to enable provision of infrastructure for health and social care for all ages. |
|                 | Access to health- and social-care activities/services             | ✓           |  |
|                 | Occupational safety and health                                    | X           |  |

\* The relevance of the individual issue to the assessment.

**Table 7-2: Population groups**

| Population   | Associated characteristics within population   |
|--|--|
| General population   | residents  |
|  | service providers  |
|  | visitors to the area   |
|  | road users   |
| <i>Vulnerability due to young age</i>                              | children   |
|  | young adults   |
|  | unborn children (and their mothers)  |
| <i>Vulnerability due to older age</i>                              | older people   |
|  | frail elderly  |
| <i>Vulnerability due to income (low income or insecure income)</i> | unemployed people  |
|  | people on low incomes  |
|  | people with regular shift work   |
|  | people with low job security or with few progression prospects   |
|  | people unable to work due to poor health   |
| <i>Vulnerability due to health status</i>                          | people with existing poor physical or mental health  |
|  | carers of people with existing poor physical or mental health  |
| <i>Vulnerability due to social disadvantage</i>                    | people who experience social isolation   |
|  | people who experience discrimination (including people from black and minority ethnic groups and people who identify as being part of faith and belief groups) |

| Population  | Associated characteristics within population  |
|---|---|
| <i>Vulnerability due to access and geographic factors</i> | people experiencing barriers in access to services, amenities, or facilities (including barriers experienced by service providers)  |
|   | people living in areas known to exhibit high deprivation or poor economic and/or health indicators  |
|   | people near the location of changes occurring because of the proposal activities. Although these groups may not be 'vulnerable' they are likely to be more sensitive to the changes |
| <i>Vulnerability due to environmental factors</i>         | people with disabilities  |

**Table 7-3: Technical, temporal and spatial scope**

| Determinant of health       | Area                   | General population      | Vulnerable population groups   | Indicative health outcomes / measures |
|-----------------------------|------------------------|-------------------------|--|---------------------------------------|
| <b>Health inequalities:</b> | Site specific<br>Local | residents               | <ul style="list-style-type: none"> <li>— children</li> <li>— young adults</li> <li>— unborn children (and their mothers)</li> <li>— older people</li> <li>— people who experience social isolation</li> <li>— people who experience discrimination (including people from black and minority ethnic groups and people who identify as being part of faith and belief groups)</li> <li>— people with existing poor physical or mental health</li> <li>— carers of people with existing poor physical or mental health)</li> <li>— people with disabilities</li> </ul> | See Table 9-1                         |
| <b>Healthy lifestyles:</b>  | Site specific<br>Local | residents<br>road users | <ul style="list-style-type: none"> <li>• children</li> </ul>   | See Table 9-1                         |

| Determinant of health                        | Area                           | General population   | Vulnerable population groups   | Indicative health outcomes / measures |
|--|--------------------------------|--|--|---------------------------------------|
|  |                                |  | <ul style="list-style-type: none"> <li>— young adults</li> <li>— unborn children (and their mothers)</li> <li>— older people</li> <li>— people who experience social isolation</li> <li>— people who experience discrimination (including people from black and minority ethnic groups and people who identify as being part of faith and belief groups)</li> <li>— people with existing poor physical or mental health</li> <li>— carers of people with existing poor physical or mental health)</li> <li>— people with disabilities</li> </ul> |                                       |
| <p><b>Safe and cohesive communities:</b></p> | <p>Site specific<br/>Local</p> | <p>residents<br/>service providers<br/>visitors to the area<br/>road users</p> | <ul style="list-style-type: none"> <li>— children</li> <li>— young adults</li> <li>— unborn children (and their mothers)</li> <li>— older people</li> <li>— people who experience social isolation</li> <li>— people who experience discrimination (including people from black and minority ethnic groups and people who identify as being part of faith and belief groups)</li> <li>— people with existing poor physical or mental health</li> </ul>   | <p>See Table 9-1</p>                  |

| Determinant of health                    | Area                   | General population   | Vulnerable population groups  | Indicative health outcomes / measures |
|--|------------------------|--|---|---------------------------------------|
|  |                        |  | <ul style="list-style-type: none"> <li>— carers of people with existing poor physical or mental health)</li> <li>— people with disabilities</li> </ul>  |                                       |
| <b>Environmental conditions</b>          | Site specific<br>Local | residents<br>service providers<br>visitors to the area<br>road users | <ul style="list-style-type: none"> <li>— children</li> <li>— young adults</li> <li>— unborn children (and their mothers</li> <li>— older people</li> <li>— people with existing poor physical or mental health</li> <li>— carers of people with existing poor physical or mental health)</li> <li>— people with disabilities</li> </ul> | See Table 9-1                         |
| <b>Health- and social-care services:</b> | Site specific<br>Local | residents<br>service providers                                       | <ul style="list-style-type: none"> <li>— People experiencing barriers in access to services, amenities or facilities (including barriers experienced by service providers)</li> </ul>   | See Table 9-1                         |

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# 9 Appendices

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# A. Technical conference: ‘A Changing Place – Planning for growth and diversity in MK’

- A.1.1. Outside of the statutory consultation, in March 2023 Milton Keynes City Council hosted a conference on ‘A Changing Place – Planning for growth and diversity in MK’. The aim of the conference was to consider best practice approaches to inform the development of MK as city so that it can meet the needs of its residents and adapt to meet environmental and society challenges ; and to share and explain this evidence to Councillors and other important local stakeholders.
- A.1.2. Some of the issues arising from the conference and to be addressed in this assessment include the:
- **Culture:** role of culture in bringing life to the city; and the focus can be on ‘grand projects’ but ‘meanwhile’, or temporary, uses are productive and more dynamic eg skateboarding culture and improvement in engagement; enable people to spend time in the city without spending money
  - **Homes and place:** homes for life including the accessibility of dwellings; simple design requirements: provide public toilets, benches; design of toilets is culturally sensitive (bidet, squat toilet); use of space and the cost of design – many ‘healthy’ interventions are low cost – pay attention to the spaces between buildings; importance of simple actions that give people confidence in using the environment (benches; wayfaring; maintenance of pavements and footpaths; variety of needs of ‘cyclists’); social infrastructure needed to complement ‘harder’ infrastructure.
  - **Implementation:** Give confidence to investors – all parties sure to get a good & fair deal. This emphasises the importance of ensuring that advice from the HIA can be implemented.
  - **Importance of diversity in planning and of coproduction:** race & ethnicity (incl. refugee groups); gender; LGBTI+; age; homeless. Each of these groups/populations will also experience health inequalities.
- A.1.3. A key theme emerging from the Conference was that MKCC needs to engage widely as the NCP is prepared. MKCC reports that it has started a comprehensive engagement programme to ensure meaningful and inclusive engagement about the MK City Plan 2050 and key evidence studies. The early engagement will focus on 'people-friendly and healthy places'.

## B. Indicators for the MKCP

B.1.1. Table 9-1 shows a preliminary effort to identify indicators for the health effects arising from the MKCP.

**Table 9-1: Indicators for the MKCP**

| Themes   | Indicators (PHE Fingertips)  |
|--|--|
| <b>Economic and Cultural Prosperity Theme</b>  |  |
| <ol style="list-style-type: none"> <li>1. Strengthen Milton Keynes' important role in the regional and national economy, with Central Milton Keynes at the heart of a diverse and resilient economy, enabling better access to education, skills and training, and economic opportunities for its communities.</li> <li>2. Strengthen Milton Keynes' role as a regional, national, and international centre of cultural and creative significance by conserving its unique heritage and helping to create a greater diversity and quality of places where culture is produced and enjoyed.</li> <li>3. Support the maintenance and creation of thriving centres for shopping and leisure.</li> </ol> | <p>Income deprivation, English Indices of Deprivation (ward level)</p> <p>Unemployment (Percentage of the working age population claiming out of work benefit) (ward level)</p> <p>Long-Term Unemployment- rate per 1,000 working age population (ward level)</p> <p>Job density (MK level)</p>  |
| <b>Healthy Places Theme</b>  |  |
| <ol style="list-style-type: none"> <li>1. Create inclusive and safe homes, neighbourhoods and places that encourage greater physical activity, social interaction, and healthier lifestyles.</li> <li>2. Support the provision of facilities and infrastructure that promote good physical and mental health amongst communities in MK.</li> </ol>   | <p>Utilisation of outdoor space for exercise/health reasons (MK level)</p> <p>Life expectancy at birth, (upper age band 90 and over) male and female (ward level)</p> <p>Deaths from causes considered preventable, under 75 years, standardised mortality ratio (ward level)</p> <p>Percentage of people who reported having a limiting long term illness or disability (ward level)</p> <p>Density of fast food outlets (MK level)</p> |

| Themes   | Indicators (PHE Fingertips)   |
|--|---|
| <b>High Quality Homes and Neighbourhoods Theme</b>   |   |
| <ol style="list-style-type: none"> <li>1. Provide a range of affordable homes to those who need them and to meet wider demands.</li> <li>2. Support the renewal and regeneration of the built environment within those neighbourhoods and communities that need it.</li> <li>3. Aid the delivery of social infrastructure required to enable people and communities within MK to prosper and have a high quality of life.</li> <li>4. Create walkable mixed-use neighbourhoods that allow people to access amenities, facilities, and services easily and safely through walking and cycling.</li> </ol>   | <p>Households with overcrowding based on overall room occupancy levels (ward level)</p> <p>Affordability of homeownership (MK level)</p> <p>Loneliness: Percentage of adults who feel lonely often or always or some of the time (MK level)</p> <p>Percentage of adults walking or cycling for travel at least three days per week (MK level)</p> <p>Access to Healthy Assets &amp; Hazards (AHAH) Index (LSOA level)</p> |
| <b>Climate and Environmental Action Theme</b>  |   |
| <ol style="list-style-type: none"> <li>1. Shape the built environment and transport systems to help achieve net zero carbon emissions by 2030 and be carbon negative by 205</li> <li>2. Support the efficient use of resources as part of a circular economy.</li> <li>3. Enable a zero-waste economy by 2050 with waste managed as a valuable resource for meeting energy needs through low or zero carbon pathways.</li> <li>4. Create space for nature and deliver significant gains in biodiversity.</li> <li>5. Ensure that communities and nature cope well with and can bounce back from the predicted negative effects of climate and environmental change.</li> </ol> | <p>Air pollution: fine particulate matter (new method - concentrations of total PM<sub>2.5</sub>) (MK level)</p> <p>Deaths from respiratory diseases, all ages, standardised mortality ratio (ward level)</p> <p>Access to woodland (MK level)</p> <p>Winter mortality index (MK level)</p>   |

## C. World Health Organization HEAT model

- C.1.1. The WHO Health Economic Assessment Tool (HEAT) model (55) can be used to calculate the possible reduction in premature deaths and monetized benefits from deaths avoided from the transportation changes proposed in the MKCP. The data requirements for the model are shown in Table 9-2. HEAT estimates the economic value of reduced mortality resulting from specified amounts of walking or cycling, mainly regarding commuting and regular leisure activities. HEAT calculates the monetary value of health effects from road crashes, air pollution and carbon emissions and can be used for various purposes. Some examples of how it has been used are summarised below (see paragraphs C.1.3 and C.1.4).
- C.1.2. The HEAT tool is an online application. It requires data on population size, mode of transport, traffic speeds, air pollution, crash fatality rates, among others. Table 9-2 below shows a static overview of the data inputs required when working with the HEAT tool. The tool can assume and generate average data input based on the geographical location. The output is more accurate and useful when the data is specifically gathered or calculated for the study population in question.

**Table 9-2: Data requirements for WHO HEAT**

| Component  | Input |
|--|-------|
| <b>1 Comparison and time scale</b>   |       |
| Reference case only (ie with development)  |       |
| Reference case + comparison (ie no development and with development; before and after; or scenarios A and B) |       |
| Year for ref case  |       |
| Year for comparison case   |       |
| Over how many years should the impacts be calculated?  |       |
| <b>2 Impacts to calculate</b>  |       |
| Physical activity  | Y/N   |
| Air pollution  | Y/N   |
| Crash risk   | Y/N   |
| Carbon emissions   | Y/N   |
| <b>3 Data on motorized modes [for carbon emissions]</b>  |       |
| Car (driver)   | Y/N   |
| Car (passenger)  | Y/N   |
| Motorcycle   | Y/N   |
| Local bus  | Y/N   |
| Lightrail  | Y/N   |
| Train  | Y/N   |
| Local traffic conditions when people walk or cycle (Mean speed of traffic)                                   |       |
| 32 km/h  |       |
| 45 km/h  |       |

| Component  | Input |
|--|-------|
| 20 km/h  | ✓     |
| 60 km/h  |       |
| <b>4 Data input</b>  |       |
| Walking data/cycling data/bikeshare data   |       |
| Data source : hypothetical scenario; population survey; intercept survey; count data; modelled data; app-based data                                  |       |
| For each transport mode  |       |
| Data unit or type  |       |
| Time   |       |
| Distance   |       |
| Trips  |       |
| Mode share   |       |
| Motorized modes data (for each mode chosen in 3)   |       |
| Unit: time; distance; trips; frequency; mode share   |       |
| Amount per person per day  |       |
| <b>5 Population data</b>   |       |
| Total population size for your city if available in HEAT background data   |       |
| Percent of total population within the age range you are assessing for walking/cycling/bikesharing in the reference case [calculated automatically]  |       |
| Population size used for your assessment of walking/cycling/bikesharing in the reference case  |       |
| Percent of total population within the age range you are assessing for walking/cycling/bikesharing in the comparison case [calculated automatically] |       |
| Population size used for your assessment of walking/cycling/bikesharing in the comparison case   |       |
| Data adjustment [For walking/cycling/bikeshare]  |       |
| Percentage adjustment to exclude walking or cycling due to factors unrelated to your assessed intervention or scenario here                          |       |
| Adjust your data as necessary to reflect long-term averages  |       |
| Take-up time for active travel demand  |       |
| Active travel characteristics [For walking/cycling/bikeshare]  |       |
| Proportion of new trips  |       |
| Proportion for transport   |       |
| Proportion “in traffic”  |       |
| Substitution of physical activity  |       |
| Additional parameters  |       |
| All-cause mortality rate for walking/cycling/bikeshare in the reference case   |       |
| All-cause mortality rate for walking/cycling/bikeshare in the comparison case  |       |
| Air pollution  |       |
| PM <sub>2.5</sub> concentration  | 10.5  |
| Fatality rates for crashes [For walking/cycling/bikeshare] & [for reference case and comparison case]  |       |
| Road fatalities for walking/cycling/bikeshare  |       |

| Component  | Input     |
|--|-----------|
| Corresponding annual total of walking/cycling/bikeshare for the population |           |
| Fatality rate used in the HEAT assessment for walking/cycling/bikeshare    |           |
| Value of Statistical Life (VSL) – choose currency format                   |           |
| International dollars (Int\$), adjusted for purchasing power parity (PPP)  | 4,392,000 |
| US dollars (US\$), based on market exchange rates (MER)                    | 3,906,000 |
| <b>6 Investment costs – to calculate C-B ratio</b>                         |           |
| Walking  | USD       |
| Cycling  | USD       |
| Bikesharing  | USD       |
| <b>7 Economic discounting</b>  |           |
| year to discount (or inflate) future (or past) economic values to.         |           |
| Discount rate  |           |
| Inflation rate   |           |
| Parameter review   |           |

C.1.3. The HEAT model has been used for different purposes. A Swedish HIA applied the HEAT tool to data on commuters in Stockholm. It found that if car commuters who lived a 30 minute cycle journey from their work (110,000 people) switched to biking to work there would be health benefits of up to 16.2 fewer premature deaths per year (56).

C.1.4. Other studies using the HEAT tool have shown that

- as a result of the mortality reduction of all age groups together, cycling prevents approximately 6,500 deaths in the Netherlands each year; this is a six-month increase in life expectancy for all age groups of which more than half is achieved by cycling among adults aged 65 years and older (57),
- the resources required for a separated cycle path project in Coventry would be covered in their entirety by savings attributable to increased physical activity if the cycle path was used by an additional 267 cyclists per km (58); and
- the monetized benefits from deaths avoided substantially exceed the direct infrastructure costs of US and Canadian active travel investments (59,60).

