Melton Climate Change Study

Document C: Green and Blue Infrastructure and Sustainable Transport

Melton Borough Council

Final report
Prepared by LUC
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Melton Climate Change Study

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Introduction

1.1 The National Planning Policy Framework (NPPF) defines Green Infrastructure (GI) as 'a network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity' **[See reference 1]**.

1.2 Elements of a GI network can include:

- Managed and natural greenspace: public parks and gardens, recreation, sports pitches and play space, nature conservation sites, woodland, allotments and community gardens
- Linear linkages and corridors: footpaths, promoted walking routes and cycles routes, railway lines and river corridors
- Elements of the built environment: roadside verges, street trees, public realm, private gardens, greening features (such as green walls, green roofs and parklets) and sustainable drainage systems (such as rain gardens and swales)
- Aspects of the wider landscape and countryside: farmland, wetlands/floodplains and wildlife habitats.

1.3 The above list is not exhaustive and the case for investment in green infrastructure to combat climate change is already well set out in further detail elsewhere, for example, the TCPA's Perfect Factsheet 3: GI and Climate Change **[See reference 2]**.

1.4 Unlike grey infrastructure, such as roads and drainage pipes, which tend to have a single function, GI can deliver multiple functions or benefits. These include enhancing biodiversity, providing opportunities for recreation, improving health and wellbeing, contributing to economic development, removing water pollution and reducing flood risk and reducing air pollution.

1.5 GI can also contribute to the mitigation of and adaptation to the effects of climate change in several ways.

- Trees, vegetation and soils sequester and store carbon, helping to mitigate the causes of climate change. It is estimated that one mature tree sequesters 21.6kg of CO_2 each year **[See reference 3]**.
- Urban greening interventions provide a notable cooling effect, and help to reduce the Urban Heat Island effect, for example a park is estimated to cool temperatures by 1.5 – 3.5^{o}C **[See reference 4]**. While modelling has shown that greening roofs across urban centres could decrease temperatures by more than 7^{o}C **[See reference 5]**.
- GI can be used to help reduce flood risk. Sustainable drainage systems reduce surface water flood risk; approximately 1,000m^3 of run-off can be retained by a rain garden of 0.5ha size **[See reference 6]**. A typical medium-sized deciduous tree can intercept over 10,000l of rainfall per year, helping to reduce surface water flooding **[See reference 7]**.
- GI can enhance air quality, removing pollutants such as particulate matter and nitrogen dioxide which are likely to increase in concentration due to climate change **[See reference 8]**.
- The integration of GI along walking and cycling routes can increase the attractiveness of active travel and reduce the reliance on cars **[See reference 9]**.
- Well planned GI can also help to reconnect habitats and increase their resilience to the effects of climate change.

1.6 This chapter discusses the benefits of GI and provides recommendations for immediate policy options MBC should adopt to maximise these benefits. It also provides suggestions for further research which could add to or enhance these

recommendations. The chapter focuses on the benefits of GI in relation to carbon sequestration and tackling the urban heat island effect. This study also covers the role of GI in water management in document D and in enhancing active travel opportunities in chapter 2 of this document.

1.7 It should be noted that MBC are currently in the process of preparing a new Green Infrastructure Strategy and Action Plan. This will include a detailed analysis of the existing GI network in the Borough and identify challenges and opportunities.

1.8 The recommendations within this chapter should be considered alongside the updated strategy to ensure that the recommendations taken forward are embedded in the most recent evidence available. This, along with the upcoming Local Nature Recovery Strategy, should be referred to for specific recommendations for habitat connectivity and resilience which lie outside the scope of this study.

Green infrastructure

Context

1.9 Melton borough has a diverse mix of GI assets, including the Grantham Canal, the Rivers Wreake and Eye, Sites of Special Scientific Interest, Country Parks, Nature Reserves and Local Wildlife Sites. There is also a comprehensive public rights of way network including six promoted routes, the most notable being the Jubilee Way, with several dismantled railway corridors providing sustainable access routes and opportunity for further improvement. The whole of the Brough sits within the standard for the provision of an accessible greenspace within 15 minutes of home showing good overall provision of greenspaces. Melton's borough's suburban and rural nature means that private gardens make up a relatively large proportion of overall green coverage within settlements.

1.10 This chapter focuses on how new and improved GI can be delivered through new development. However, it should be noted that 85% of the Borough is agricultural land and many of the opportunities to significantly enhance the climate change benefits from the GI network will be on this land. This agricultural land incorporates hedgerows, woodlands, grasslands and soils which store and sequester carbon and provide important habitats. However, agricultural land has experienced key declines in biodiversity **[See reference** 10**]**. Farmland, particularly arable land also has a relatively low carbon storage value and there are opportunities to diversify farming and land management practices to enhance these benefits, as identified in MBC's climate change strategy.

National Policy context

1.11 The NPPF **[See reference** 11**]** recognises the range of benefits GI can provide. It includes a requirement for local plans to include a strategic policy on GI (paragraph 20). It also states that climate adaptation measures in new development should include planning for GI (paragraph 159). Paragraph 175 states that all major development should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. Recognising the role that trees have in mitigating and adapting to climate change, the NPPF also includes a requirement for all new streets to be tree lined and that opportunities are taken to incorporate trees elsewhere in developments (para 136). It also states that arrangements must be in place for the maintenance of new trees and that existing trees should be retained wherever possible.

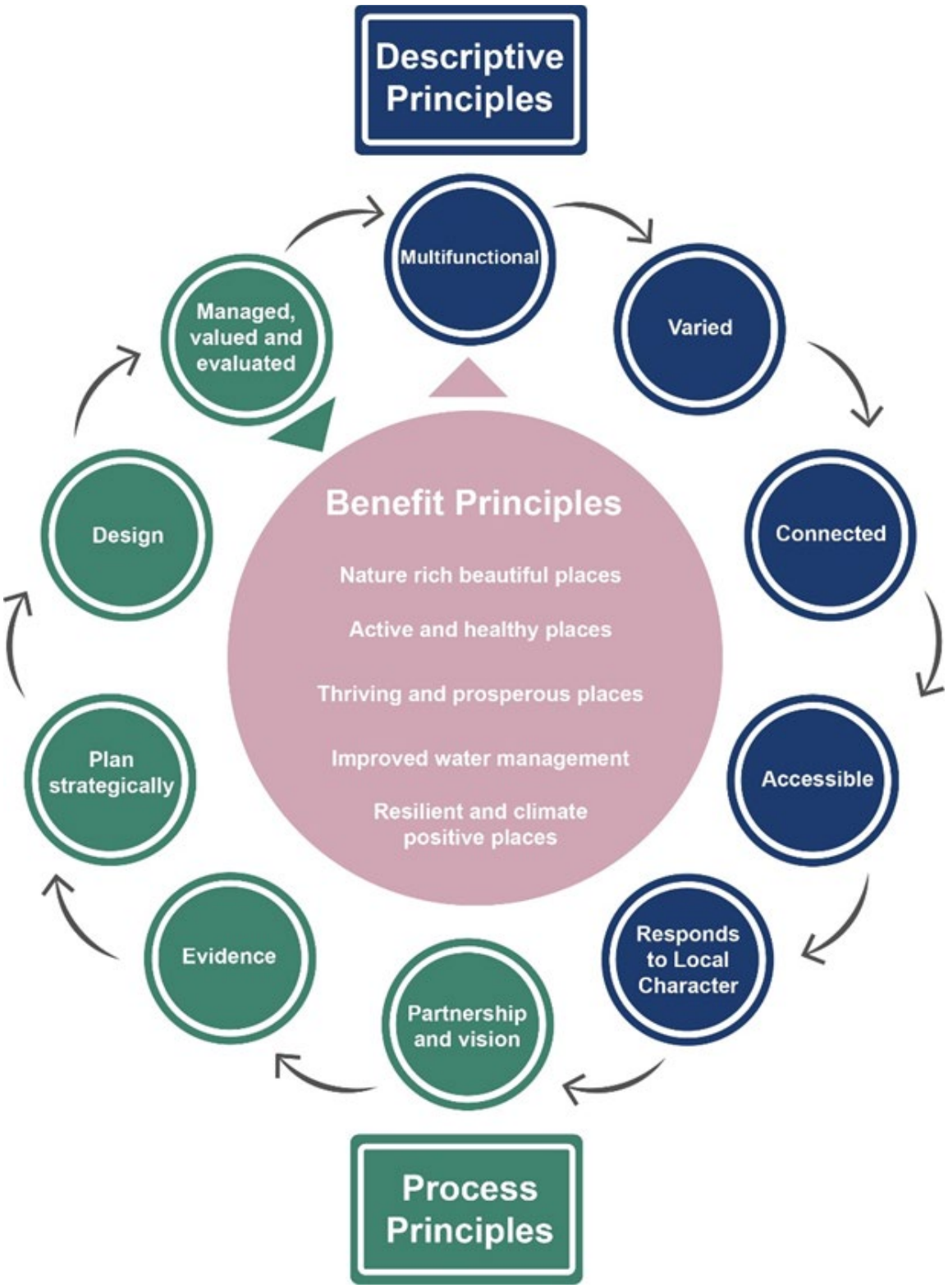
1.12 The 25 Year Environment Plan sets long-term targets for national environmental improvements, it specifies requirements for habitat creation, multi-functional SuDS and semi-natural places close to where people live. It also committed the government to establishing a Green Infrastructure Framework for England **[See reference** 12**]**.

Natural England Green Infrastructure Framework

1.13 The GI Framework, developed by Natural England (NE), was published in 2023 **[See reference** 13**]**. It intends to help local planning authorities and developers meet requirements in the NPPF to consider GI in local plans and in new development. It supports better planning for good quality GI and helps to target the creation or improvement of GI, particularly where existing provision is poorest. The GI framework fulfils the Government commitment, as set out in the 25 Year Environment Plan, to establish a cross-government project that reviews and updates GI standards. The Framework is comprised of;

- Green Infrastructure Principles, which set out why GI is important
- Green Infrastructure Standards, define what good GI looks like
- Green Infrastructure Maps
- Green Infrastructure Planning and Design Guide
- Green Infrastructure Process Journeys.

Figure 1.1: 15 principles of the Green Infrastructure Framework



1.14 Figure 1.1 sets out the 15 principles of the framework, split into benefit, descriptive and process principles. Principle 5 of the framework (resilient and climate positive places) sets out why GI makes places more resilient and adaptive to climate change and how GI can help to meet zero carbon and air quality targets. It also sets out that GI itself should also be designed to adapt to climate change to ensure long term resilience.

1.15 The Green Infrastructure Standards are a key component of the Green Infrastructure Framework. They define what good green infrastructure 'looks like' and how to plan it strategically to deliver multiple benefits for people and nature. When used together, these Green Infrastructure Standards will help stakeholders to deliver the 15 Green Infrastructure Principles and enable everyone to benefit from good GI provision. The five Headline Green Infrastructure Standards are:

- S1: Green Infrastructure Strategy Standards: directs local authorities to apply the GI Framework Principles and Standards locally (adapting them to local context where appropriate) to set out local GI policies, proposals and development requirements in development plans and local design codes.
- S2: Accessible Greenspace Standards: specifies that all development should meet set quantity, size and distance criteria for greenspace based on NE's accessible greenspace standards or locally adopted open space standards. This should include a quality standard for new greenspace.
- S3: Urban Nature Recovery Standard: specifies that development proposals should identify their contribution to nature recovery and the creation and restoration of wildlife rich habitats which can contribute to the delivery of local nature recovery objectives.
- S4: Urban Greenspace Greening Factor: is a planning tool to improve the quantity and quality of greening in urban environments. The adoption of this standard for major development involves setting a target UGF score for new development. The target score can be set locally (informed by local context and GI needs) but Natural England recommend setting a score of 0.3 for commercial development, 0.4 for residential development and, where appropriate, 0.5 for residential greenfield development. The total UGF score for a development is calculated based on multiplying UGF scores for different land cover types by the spatial area covered by each and then dividing the

total by the total site area **[See reference** 14**]**. Natural features such as street trees and hedgerows achieve higher scores than amenity grassland and permeable paving, which have a higher score than tarmac roads. It is applied to major developments and sets a target score for the proportion of GI within a development site for specific land uses.

- S5: Urban Tree Canopy Cover Standard: requires major development proposals to be designed to contribute to meet a locally set area wide canopy cover target.

1.16 The GI framework is also supported by a Green Infrastructure Planning and Design Guide which provides evidence based practical guidance on how to plan and design good GI and in a way that complements the National Model Design Code and National Design Guide. It shows how to apply the GI Framework to design in a locally distinctive way and in different types of areas. It provides guidance on how tools such as Biodiversity Net Gain, Urban Greening Factors and Local Nature Recovery Strategies can support design of good GI **[See reference** 15**]**.

Carbon sequestration

1.17 Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing the impact of climate change.

1.18 GI captures and stores carbon, providing climate change mitigation benefits. Trees are particularly effective at achieving this, but other habitats also store carbon and habitat diversity is important to enhance biodiversity and contribute to nature recovery. Table 2.2 below sets out a short list of habitat types, including trees and other habitats that can help sequester carbon, along with their varying rates of carbon sequestration. As the table shows, compared with other habitat types, tree planting (in particular woodland) has the greatest potential to boost land-based carbon sequestration in the Borough. However, it is noted that vegetation such as scrub also has good potential.

Table 1.1: Carbon sequestration rates for typical habitat types [See reference 16]

Habitat	Carbon sequestration (tCO2e/ha/yr)
Broadleaved woodland	5.7
Neutral and semi-improved grassland	0.4
Scrub	3.7
Native and non-native Hedgerow	2
Reedbed	3.3

1.19 In 2019 the Borough had only 5% woodland cover, compared to an English average of 10% **[See reference 17]**. The Committee on Climate Change has indicated that the UK needs to achieve an average of 30,000ha of new woodland planting per year up to 2050 to help sequester and store atmospheric carbon and mitigate the effects of climate change, but to date delivery is falling well short of this target. The Borough's climate change strategy recognises the role that the natural environment has in storing carbon and providing resilience to climate change. It identifies opportunities to diversify agricultural practices to increase woodland planting and enhance biodiversity.

1.20 While land use change leading to large scale woodland planting will optimise carbon sequestration in the Borough, increasing tree cover in urban areas and within new development will provide carbon sequestration benefits. It is estimated that one mature tree sequesters 21.6kg of CO_2 each year, evidencing the contribution that individual street trees can make to carbon sequestration as well as providing benefits for urban cooling and natural flood management **[See reference 18]**.

Local Policy

1.21 Policy EN8: Climate Change in the Melton Local Plan requires all development to demonstrate how the need to mitigate and adapt to climate

change has been considered (subject to considerations of viability). This includes consideration of green infrastructure in accordance with Policy EN3: which states that green infrastructure must provide more than one of a set list of benefits. One of these is that new green infrastructure should make provision for mitigating and adapting to climate change, including through tree planting. Policy EN9 (ensuring energy efficient and low carbon development) also promotes consideration of GI opportunities for cooling from tree planting and landscaping.

1.22 MBC's design of development SPD assists developers in meeting the design quality requirements of the Local Plan. It promotes the use of design features such as green roofs to support climate change adaptation and promotes 'making room for water', the use of sustainable urban drainage (SUDs) to manage surface water and also provide additional habitats. It also includes references to:

- providing green roofs/walls for water management and insulation;
- trees for solar shading/air quality/intercepting rainwater and
- use of GI to create attractive routes that encourage active travel.
- it encourages the use of green roofs for biodiversity and to capture rainwater.
- it includes requirements to retain natural assets including trees on a development site wherever possible, and to integrate SuDS as natural assets into development.

1.23 The Local Plan was adopted prior to the development of the NE GI Framework. A Green Infrastructure Strategy for Melton borough is currently in development. It will provide additional guidance on the preparation of an updated strategic GI policy for the Melton Local Plan Partial Update. It, alongside the developing Local Nature Recovery Strategy, will provide an opportunity to consider local context in relation to providing good quality GI across the Borough.

Policy option 1: require the retention and provision of trees and vegetation in new development.

1.24 MBC could require the retention and provision of trees and vegetation in new development. As an example, Policy G1 in Cornwall's **Climate Emergency DPD** requires street trees and other vegetation to be integrated into street design and public open spaces:

> Street trees and other greening shall be integrated into street design and public open spaces wherever possible while remaining sympathetic to the historic environment. Streets should be designed to accommodate tree pits, whilst maintaining the space for the necessary runs of services, such as those for water, electricity and sewage.

1.25 The adopted Local Plan refers to mitigating the impacts of climate change through tree planting in policy EN3. MBC's design SPD states that street trees must be integrated into developments and provides further guidance on their placement, consideration of soil characteristics and maintenance, and preference for native species of local provenance. As outlined, the NPPF incorporates a requirement that existing trees are retained where possible, that all new streets are tree lined, that additional tree planting is encouraged and that measures are in place to secure the long-term maintenance of newly planted trees.

1.26 Landscape and historic character are an important consideration in the Borough, which is an attractive rural area with a rich natural environment and built heritage. It is therefore important that a landscape led approach is taken to the design of GI in new development, and this should include consideration of the most appropriate layout and species of street trees. There may be circumstances where evidence can be provided that the provision of street trees would have negative impacts on local character and in this case the policy must be flexible to accommodate trees elsewhere on a development site.

Policy option 2: set an urban tree canopy cover standard for major development.

1.27 MBC could enhance this policy by adopting an urban tree canopy cover standard for major development, as per the fifth standard of the NE GI Framework.

1.28 A recently adopted example of a policy requiring retention and planting of trees in new developments (major and minor) is **Policy G3 in Cornwall's Climate Emergency DPD [See reference 19]**. It distinguishes between major and minor development proposals and requires major developments to provide, canopy coverage equal to a specified percentage of the site area:

> All major development should provide, through the retention of existing and or / the establishment of new, canopy coverage equal to at least 15% of the site area (excluding areas of the site that are priority habitat types) in accordance with a Cornwall Council approved calculator or metric).
>
> 1) Any proposal to remove canopy on the site should be justified in accordance with the canopy mitigation hierarchy [defined in the supporting text].
>
> 2) Where a pre-development site already contains canopy that exceeds the 15% requirement, the development proposal should ensure the retention of as much canopy as possible on site in line with the mitigation hierarchy and should justify the losses proposed. An alternative canopy cover percentage, as evidenced by a council approved canopy metric, should be agreed with the Local Authority.
>
> 3) Where there are significant ecological, historical, landscape or operational reasons to justify a canopy requirement of less than 15% on site and this can

be fully evidenced, an alternative percentage of canopy provision shall be agreed with the Council.

4) Minor development sites (with the exception of householder development and Change of Use (not creating new dwellings or additional floorspace) are not required to demonstrate the 15% canopy target but should explore all options in relation to canopy provision, and take appropriate measures to both avoid or reduce harm to existing onsite trees. Proposals shall include where appropriate and practicable provision of new canopy.

5) New canopy should provide a mix of species that are resilient to pests, diseases and climate change and should be delivered in sustainable locations, in a manner that supports the growth and spatial requirements of canopy. New canopy should positively contribute to the climate resilience of the site in a manner which protects and enhances existing canopy.

1.29 The supporting text defines the 'canopy mitigation hierarchy' and requires proposals to demonstrate how the onsite layout and design of the development has:

- a) Explored options to avoid causing harm to existing canopy;
- b) Explored options to reduce harm to existing canopy;
- c) Explored the above options before canopy is removed and restored.

1.30 The supporting text also explains that “in order to both encourage on-site retention of existing trees and to plant new trees, the Council has determined that a 15% canopy coverage, as measured by the overhanging spread of a mature tree, is an achievable aim for major developments in the Cornish climate and fits generally within the character of the Cornish landscape.”

1.31 Policy DM34 in **Wycombe District's Local Plan 2019** **[See reference 20]** is more ambitious, requiring most development to achieve a 25% canopy coverage, justified by the district's existing overall canopy coverage of 25%.

1.32 The Urban Forestry and Woodland Advisory Committee Network advises that inland areas should aim for 20% tree canopy cover and apply this to new developments **[See reference 21]**. Others suggest targets should be higher. The Woodland Trust has advocated for a minimum 30% tree canopy cover on all development sites **[See reference 22]**.

1.33 Natural England states that the adoption of an urban tree canopy cover standard must be based on a locally determined baseline. MBC would therefore need to undertake research to understand the existing tree canopy cover across the Borough and what would be an appropriate and achievable canopy cover target. Datasets such as the National Tree Map are available to undertake this analysis with relative ease and NE published an updated process guide in September 2024 which includes guidance for Local Authorities on the adoption of each of the standards **[See reference 23]**.

Evaluation

1.34 Although detailed data on canopy cover is not available, given Melton borough's low woodland cover (5%), a 25% or 30% target is unlikely to be justifiable target. However, the ambition of canopy cover targets set by other areas shows the contribution the adoption of a tree canopy cover standard could have in increasing overall canopy cover in Melton borough.

1.35 It should be noted that canopy cover targets have been explored and disregarded by other areas who considered a narrow focus on trees in development site to potentially be prohibitive to the realisation of a more biodiverse mix of habitats which meet nature recovery priorities for the local area. Therefore, this standard should not be considered in isolation and local nature recovery priorities should also be identified when assessing the appropriateness of an Urban Tree Canopy Cover Standard.

1.36 These policy requirements relate to the master planning and urban design of new streets and communities. They should be straight forward to deliver if considered from the outset of the site design process.

1.37 NE's GI Framework **[See reference 24]** includes GI design guidance and online mapping and a range of training materials to support GI planning and design.

1.38 The installation of street trees may involve more infrastructure, and therefore cost, than many may assume. These include supply, delivery, installation, tree guard and tree grille, warranty, traffic management and watering/ongoing management. A cost benefit analysis by GreenBlue Urban **[See reference 25]** modelled the installation cost of a standard 18-20cm (7-8") London Plane street tree, including supply, delivery, installation, tree guard and tree grille, warranty, traffic management and watering, planted in a 1m x 1m (3¼ ft x 3¼ ft) pit, to be £4,946 when rooting volume was greatly enhanced by the Root Space system to provide 25m³ (885 ft³) of available rooting space. However, the report notes that in all probability the value of tree benefits can provide a net positive.

1.39 Long-term maintenance of trees is also required and involves ongoing expenditure. Lack of maintenance can mean that some trees don't reach maturity and provide meaningful carbon sequestration and other ecosystem services. Maintenance arrangements for new trees, must be established prior to planting to ensure value for money, healthy growth and effective performance.

1.40 Ensuring that mature, existing trees can be maintained in developed spaces can be a very cost-effective solution when the long-term multi-functional benefits of these trees are considered **[See reference 25]**.

Urban cooling

1.41 Increased temperatures due to climate change are likely to be felt more acutely in urban areas due to the urban heat island effect, whereby larger

conurbations are much warmer that the surrounding rural areas **[See reference 26]**. This is caused primarily by two main factors:

- Buildings and other hard surfaces being warmed by solar radiation. The physical properties of steel, concrete and other building materials are such that they trap more heat than plants do. Heat absorbed by these surfaces during the day is released into the atmosphere at night causing a general warming of urban air.
- Lower levels of vegetation in an urban environment reduce the amount of cooling possible through evapotranspiration (the release of moisture which cools the surrounding air).

1.42 Other contributing factors to the urban heat island effect include; waste heat from air conditioning and air pollution from vehicles and industry.

1.43 Integrating more green infrastructure into urban environments can tackle the urban heat island effect by:

- Providing direct shade from heat and UV radiation.
- Increasing cooling from evapotranspiration.

1.44 Reducing the urban heat island effect through the use of GI will have knock on benefits for carbon emissions through a decrease in the need for air conditioning. Green roofs and walls can also act as insulation during the winter, and therefore similarly reduce the need for heating in those buildings. Reducing the urban heat island effect through green infrastructure would also have significant benefits for health and wellbeing.

1.45 Local context is important to consider when considering policy options to address the urban heat island effect in the Borough. Overhearing risks in the Borough have been shown to be much higher in the centre of Melton Mowbray and to a lesser degree within the most densely built up areas of Asfordby. Other areas outside of settlements such as Old Dalby business park and Langar airfield also experience increased overheating risks due to the large quantity of hard surfaces **[See reference 27]**. A targeted application of the policy options provided

below is therefore suggested, recognising the general benefits of GI to help reduce overheating risks alongside new development, with greater weight given to the provision of measures in areas that are already more susceptible to overheating. As with all green infrastructure, its implementation would have multi-functional benefits however, and the policies would have other benefits for other areas which are not subject to acute urban heating should the policies be adopted across the borough.

1.46 Two policy options are provided which would assist in reducing urban heating in high risk areas in Melton. It should be noted that the policy options for street trees and a tree canopy cover standard would also provide a significant benefit in reducing the urban heat island effect. It is estimated that the sheltering effect of trees could save 3-9% on energy bills for each property in the UK where trees are planted in the correct position relative to the building **[See reference** 28**]**.

Policy option 3: introduce a policy encouraging the incorporation of green roofs and walls where feasible

1.47 MBC could introduce a policy encouraging the incorporation of green roofs and walls where feasible. As an example, Sutton's climate change adaptation policy incorporates a requirement for green roofs and walls to be incorporated into new development where feasible **[See reference** 29**]**.

Policy 33: Climate Change Adaptation

Proposed developments should minimise vulnerability of people and property and be fully adapted and resilient to the future impacts of climate change by:

b. Minimising overheating and contribution to the urban heat island effect by permeating the development with blue and green spaces and by incorporating a range of natural cooling measures as part of the design and layout, including

passive design measures such as building orientation, shading, planting and soft landscaping, trees, ponds, SuDS measures and other surface water features. All major developments should:

- Incorporate and manage green roofs or green walls where feasible

Evaluation

1.48 The integration of green roofs and walls into new development is an effective way of reducing heat in urban areas, improving the thermal performance of buildings by cooling them in the summer, reducing the need for air conditioning in the summer and heating in the winter. A study in Italy showed that the temperature under the surface of an extensive green roof was 12 degrees Celsius cooler in summer than surrounding conventional roofs. They can also increase the attractiveness of buildings and the wider urban environment and provide benefits for biodiversity. They also have significant benefits for surface water management by capturing rainwater and reducing peak flows as well as filtering out pollutants **[See reference** 30**]**.

1.49 Green roofs are distinguished into intensive and extensive by their relative maintenance requirements. Intensive roofs require intensive maintenance and generally have a deeper substrate meaning that they are heavier and therefore the structural considerations and costs of their implementation will be greater. Extensive green roofs generally consist of low growing and drought tolerant vegetation and also have a shallower substrate making their delivery and maintenance costs lower. However, they have limited biodiversity value and cannot hold rainwater **[See reference** 31**]**. These are the two main benefits attributed to green roofs in MBC's Design SPD **[See reference** 32**]** so if implemented as a policy, accompanying design guidance or reference to Natural England's design guidance should be provided to encourage the integration of more biodiverse roofs **[See reference** 33**]**.

1.50 Local character will be a consideration as to the applicability of green roofs, especially on any development sites close to or in the conservation areas in Melton Mowbray and Asfordby **[See reference** 34**]**.

1.51 Green walls are split into green facades and living walls. Green facades are traditional walls where climbing plants are planted into the ground or into planter boxes. These are low maintenance and can often be incorporated more easily when taking local character into account. Living walls are much more intensive in their installation and maintenance and depending on their extent can require the integration of complex irrigation systems. Costs for installing green roof and walls are outlined in Table 1.2 and Table 1.3 **[See reference** 35**]**.

Table 1.2: Green Roof costings

Extensive green roof	**Unit**	**£**
Flat roof system, 90mm depth, sedum mat or plugs	m^2	335

Biodiverse green roof	**Unit**	**£**
Flat roof system, 150mm depth, planted with wildflowers	m^2	285

Intensive green roof	**Unit**	**£**
Up to 400mm deep growing medium, benches, bins, paving flags on pedestals, turf, shrubs, some trees. Waterproof membranes, additional drainage infrastructure and containment not included	n/a	n/a
Lower specification (dependent on depth, planting and level of public access features)	m^2	235
Higher specification (dependent on depth, planting and level of public access features)	m^2	600

Table 1.3: Vertical greening and green / living walls costs

Direct greening (self-attached climbers, no support)	**Unit**	**£**
Plant supply and planting	item	50

Living wall (modular systems)	**Unit**	**£**
150mm planting depth, self-contained fabric modules, established on installation, DPM, dripline, guttering and outlets to drains	m^2	600
Irrigation system to the above, break tank, controller, solenoid valves, plant feeders etc.	n/a	n/a
10-30m^2	Item	4,000
Over 150m^2	item	10,500

Policy option 4: Test the viability of introducing an Urban Greening Factor for new development.

1.52 MBC could test the viability of introducing an Urban Greening Factor for new development. Greenspace factor tools have been applied across the UK since their initial development in Europe during the 1990s. In England various areas have adopted a greenspace factor tool over the last 15 years. In 2023 Natural England incorporated the greenspace factor tool as one of their five headline standards for GI in England, the method within the framework is based on that within the adopted London Plan.

1.53 The urban greening factor has been developed as a tool to increase the level of green infrastructure in new development. It awards scores to different types of GI, with those deemed to deliver more benefits scoring higher. For example, an intensive green roof scores higher than an extensive sedum green roof. It benefits from being a simple planning tool to use and can make a direct impact on increasing the quantity and quality of GI in development.

1.54 It is not compulsory for planning authorities to adopt the tool and its implementation should be based on local context and need but they provide detailed surface cover weighting criteria which they encourage the use of although the target scores can be changed based on the local analysis.

1.55 As an example, Sutton's climate adaptation policy also includes the following:

- for previously developed sites - aim to achieve an increase in overall green space coverage of at least 10% compared to baseline conditions prior to development.
- for previously developed sites - aim to achieve an improved Green Space Factor (GSF) score of at least +0.2 compared to the baseline GSF score prior to redevelopment.
- greenfield sites - aim to achieve a GSF score of at least 0.5

1.56 The City of London's City Greening policy incorporates the Urban Greenspace Factor **[See reference** 36**]**.

Policy OS2: City Greening

2. Major development proposals will be required to:

- Include an Urban Greening Factor (UGF) calculation demonstrating how the development will meet the City's target UGF score of 0.3 as a minimum; and
- Submit an operation and maintenance plan to demonstrate that the green features will remain successful throughout the life of the building.

Evaluation

1.57 NE recommends that the UGF is only used for major developments and therefore the delivery of GI in other development would need to rely on strong strategic GI policy in MBC's Local Plan.

1.58 While the tool is simple to use it would be necessary for MBC to produce guidance on how to calculate a UGF score for a development such as that produced by Southampton Council **[See reference** 37**]**. However, NE recommends that the surface cover weighting scores it has produced are used so this should be a straightforward exercise **[See reference** 38**]**.

1.59 The standard was also designed to be used in urban areas where the risks of urban heating and the benefits of increased levels of GI more generally are greater. It is therefore likely that MBC may choose to adopt the standard only in Melton Mowbray and larger villages. However, the standard has wider benefits than just tackling the UHI and has been used in other areas, including through the adoption of a higher target score for greenfield sites which may be of more relevance to Melton.

1.60 A common challenge from developers when asked to deliver GI is viability especially in the face of competing requirements for the provision of other infrastructure and affordable housing. It is recommended that MBC undertake further research to establish the viability of adopting a UGF. This should follow the guidance produced by NE **[See reference** 39**]**.

Recommendations

1.61 Based on the discussion of policy options to enhance of the use of GI to deliver climate change mitigation and adaptation benefits in the Borough, the following recommendations should be considered by MBC for integration into the Local Plan or for further exploration.

1.62 Firstly, there is a need for the Local Plan to ensure a clear recognition of the linkages between GI and climate change mitigation and adaptation. One of the best ways to ensure this is for any strategic Climate Change policy to contain direct reference to the Local Plan's strategic GI policy and vice versa.

1.63 The strategic GI policy should require the retention and provision of trees in new development, including a requirement for all new streets to be tree lined, where this does not affect the local landscape or historic character. This will align with NPPF and recognise the carbon sequestration benefits from trees and their effects on reducing urban heating and reducing surface water flood risk,

1.64 MBC should undertake further research to establish the benefits of adopting a tree canopy cover standard for major development. This should consider analysis of existing canopy cover in the Borough and how this would align with emerging local nature recovery priorities. The recently updated process journey provides further direction on the analysis required.

1.65 MBC should incorporate a requirement that green roofs and walls are integrated into new development where it is feasible to do so and this does not affect local historic character. This will support adaptation to the urban heat island effect, alongside biodiversity, surface water and wellbeing benefits. This policy is stronger regarding areas which experience greater overheating risk in the centre of Melton Mowbray. MBC should undertake further analysis to identify the exact target areas for this policy.

1.66 MBC's Design of Development SPD (or any other future design guidance produced) could also be updated to differentiate between types of green roof and express preference for intensive or biodiverse extensive to maximise the multi-functional benefits of these roofs, especially for biodiversity and surface water management.

1.67 MBC should undertake further research into the adoption of an urban greening factor. This research should follow the NE guidance on establishing locations for implementation and target scores. This can be supplemented with an analysis of recent planning applications to test potential impacts on viability.

1.68 Finally, it should be noted that this study cannot make local context considerations to the level that the updated GI Strategy and Action Plan can so all recommendations in this study should be considered alongside the updated Strategy once this has been published to ensure that they are in line with the best available evidence.

Chapter 2

Sustainable Travel and Transport

Introduction

2.1 This chapter focuses on sustainable travel and transport issues, including reducing the need to travel. The NPPF defines sustainable transport modes as *'Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra-low and zero emission vehicles, car sharing and public transport.'* It highlights that need to consider transport issues from the earliest stages of plan-making and development proposals.

2.2 The transport sector is a key source of GHG emissions nationally (27% of the UK total in 2019 **[See reference** 40**]**) and the same is true for Melton borough. In the Borough, 24% of GHG emissions are estimated to come from transportation (106 KtCO2e) and the vast majority of this is from use of petrol and diesel vehicles on local roads **[See reference** 41**] [See reference** 42**]**. Moving away from private vehicle use and towards more sustainable transport is a key way to reduce GHG emissions, while providing additional benefits for air quality, health and wellbeing (including tackling social isolation and health inequalities) and helping to create more attractive and liveable places.

2.3 The chapter begins by outlining the sustainable travel and transport policy context (not an exhaustive list) and then considers the current baseline of transport provision and use in Melton borough; this is important as transport is an inherently spatial issue. The chapter identifies opportunities for improving sustainable transport provision through planning policy and concludes with a summary of recommendations.

Policy context

National policy

2.4 The National Planning Policy Framework (NPPF) highlights that transport issues should be considered from the earliest stages of plan-making and development proposals (paragraph 108). This includes considering opportunities to:

- Focus significant development in locations supported by existing or proposed transport infrastructure (thus limiting the need to travel by private vehicle and offering a choice of transport modes), taking into account changing transport technology and usage, for example the roll out of electric vehicles and more people working from home.
- Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities
- Promote walking, cycling and public transport use, both through managing patterns of growth and through the design of places for pedestrians and cyclists, including attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking (drawing on Local Cycling and Walking Infrastructure Plans)

2.5 The NPPF also acknowledges that opportunities to maximise sustainable transport solutions will vary between urban and rural areas.

2.6 There are a range of national guidance documents that are also important aids to planning for sustainable travel and transport. These include:

- **Manual for Streets 1** **[See reference** 43**]** demonstrates the benefits that flow from good street design and prioritises pedestrians and cyclists in the user hierarchy. It refocuses on the place function of residential streets, giving clear guidance on how to achieve well-designed streets and spaces that serve the needs of people of all ages and abilities. This could include developing street

character types on a location-specific basis with reference to both the place and movement functions for each street or designing to keep vehicle speeds at or below 20 mph on residential streets.

- **Manual for Streets 2** **[See reference** 44**]** builds on the principles and guidance contained in Manual for Streets 1, exploring in greater detail how and where its key principles can be applied to busier streets and non-trunk roads. It includes specific sections on different contexts relevant to Melton borough, including town and city centres, village centres and rural areas.
- **Building for a Healthy Life** **[See reference** 45**]** is a Design Code to help people improve the design of new and growing neighbourhoods. Organised across three headings, 12 considerations are presented to help those involved in new developments to think about the qualities of successful places and how these can be best applied to a specific site and its wider context (from pre-application stage onwards). A number of the considerations are relevant to sustainable travel e.g. walking, cycling and public transport; healthy streets; cycle and car parking.
- **Active Design:** Creating Active Environments through Planning and Design **[See reference** 46**]** sets out how the design of our environments can help people to lead more physically active and healthy lives. It includes ten active design principles including ‘walkable communities’ and ‘connected active travel routes’.
- **The National Design Guide** **[See reference** 47**]** illustrates how well-designed places that are enduring and successful can be achieved in practice. It includes ‘movement’ as one of the ten characteristics of well-designed places and covers guidance on connected networks of routes for all modes of transport and active travel. It argues that the patterns of movement of people are integral to well-designed places

2.7 There are many overlaps between the sustainable transport principles and design guidelines promoted in these documents, not least the prioritisation of pedestrians and cyclists over private vehicles on residential streets.

2.8 Please note at the time of writing the new Labour government is developing various planning policy reforms, details of which are awaited. This creates some

uncertainty for local plan making. For example, it is not clear at this point whether the proposed new National Development Management Policies (NDMPs) will address parking requirements, including cycle parking requirements, directly or whether there will remain scope for local authorities to set their own requirements and design standards.

2.9 Regarding the wider links between climate change mitigation and transport policy, the UK Government recognises that tackling emissions from the transport sector is a key part of making progress towards net zero by 2050. Decarbonising Transport **[See reference** 48**]** sets out how GHG emissions will be reduced across all forms of transport to help achieve net zero, including decarbonising both private vehicles and buses and trains. The current path towards the decarbonisation of new cars and vans is further detailed in the Government's zero-emission vehicle (ZEV) mandate. This requires that 80% of new cars and 70% of new vans sold in Great Britain have zero tailpipe emissions by 2030, increasing to 100% by 2035 **[See reference** 49**]**.

2.10 Transitioning away from vehicles powered by internal combustion engines to electric vehicles is dependent on sufficient investment in EV charge points. The Government has set out the need nationally for around 300,000 public charge points by 2030, so there is need for sustained growth in provision to meet this demand given there are currently only around 60,000 public charge points **[See reference** 50**]**. The Public Charge Point Regulations 2023 seek to ensure that the experience of consumers using public EV charge points across the UK is consistent and positive to support EV uptake. They introduce requirements to improve access, reliability, and transparency (including re pricing and availability) across EV charging infrastructure, including straightforward, contactless payment options.

2.11 Other examples of relevant policy targets include the Cycling and Walking Investment Strategy's (CWIS **[See reference** 51**]**) aim to double the number of cycle trips in England by 2025 and achieve a 50% increase in the number of trips taken by walking by 2025. The second Cycling and Walking Investment Strategy (CWIS2) **[See reference** 52**]** seeks to make walking and cycling the natural choices for shorter journeys, or as part of a longer journey by 2040. It includes a range of targets for increasing walking and cycling by 2025.

Regional policy

2.12 Melton Borough is a two-tier authority. Leicestershire County Council (LCC) is the Local Highways Authority with responsibility for local transport planning, including developing local transport plans (see below), making planning decisions on planning proposals with a highway's element (including travel plans) and adopting roads.

2.13 Key LCC transport plans and policy documents applying to Leicestershire include:

- Leicestershire Local Transport Plan - sets out a vision for the county's transport network to 2050, outlining how LCC will work with stakeholders and transport infrastructure providers to tackle inequalities and challenges across the county. It includes a focus on reducing car dependency and promoting environmentally friendly and active travel options.
- Leicestershire Highways Design Guide – provides detailed design guidance related to highways and transportation infrastructure for new developments (e.g. road layouts, public transport, provision for pedestrians and cyclists) and information required to support development proposals (e.g. transport statements, assessments and travel plans). It seeks development layouts that create an environment that is safe for all road users and in which people are encouraged to walk, cycle and use public transport. Manual for Streets is cross-referenced.
- Leicestershire Cycling and Walking Strategy and Action Plan – focused on realising the vision of the county becoming a place where walking and cycling are safe, accessible and obvious choices for short journeys, and a natural part of longer journeys. It includes attention to infrastructure improvements; integration with public transport; behavioural change initiatives and ensuring new developments support active travel options.
- Emerging Local Cycling and Walking Infrastructure Plans (LCWIPs) – these will set out the vision and priorities for cycling and walking improvements in selected areas (including 'Melton Mowbray Area') to create convenient and

practical cycling and walking networks to help and encourage people to travel more sustainably.

- Interim Melton Mowbray Transport Strategy – seeks to address the town's traffic problems, support the growth of the town and to achieve wider objectives, including environmental improvements. A key element is the proposed Melton Mowbray Distributor Road (MMDR; further details below) alongside wider plans to improve walking and cycling networks, public transport services and EV charging infrastructure.
- EV Infrastructure Charging Strategy - seeks to ensure there are sufficient EV charging facilities, of the right kind and in the right places. Its focus is on the delivery of public on-street charge points in residential areas, which will be available to all.

2.14 Ongoing partnership working between MBC and LCC's transport planners (as well as infrastructure providers) will clearly be important to influence updates to these plans, strategies and guidance and ensure that the new local plan aligns with wider transport objectives and plans.

Local policy

2.15 MBC's adopted Local Plan identifies the impact of road traffic and congestion in Melton Mowbray town centre as one of the key strategic issues facing the Borough. Strategic objectives including 'Reduce the need to travel by car and improve access to public transport' and 'Reduce traffic congestion in Melton Mowbray'.

2.16 The Local Plan includes a range of policies relating to sustainable transport and travel including policies defining settlement roles and allocating development sites; policies relating to strategic development locations around Melton Mowbray (including supporting transport infrastructure requirements); policies EN9 and IN2 on low carbon development and transport, accessibility and parking; and a commitment to work with partners to deliver a transport strategy for Melton Mowbray (see reference to interim strategy above). Policy D1 (raising the standard

of design) part j requires development to perform well 'against Building for Life 12 (or any subsequent guidance) and seeks to develop the principles of 'Active Design' for housing developments. The documents, outlined above, both have a strong active and sustainable travel ethos. In addition, Policy C9 (Healthy Communities) promotes active travel for health and Policy IN4 (Broadband) explicitly recognises the role of broadband to help reduce the need to travel. Some of these policies are considered in greater detail below.

Sustainable transport baseline

2.17 This section provides a brief summary of existing transport provision and challenges in Melton Borough.

2.18 Melton Borough is a rural area with a dispersed population spread across Melton Mowbray (the largest settlement and only town) and some 70 settlements of varying size, including many villages and the larger settlements of Asfordby, Bottesford, Long Clawson and Waltham on the Wolds. A number of busy A roads run through the Borough and the M1 motorway is approximately 25 minutes' drive west of Melton Mowbray. The A1, a key north-south trunk road, is about 25 minutes to the east.

2.19 As in other rural areas of England there are bus services serving some settlements, but these services are often limited in frequency. Nationally, bus usage remains below pre-pandemic levels; across Leicestershire, 7.6 million public transport passenger journeys were undertaken across the county, which is low when compared to levels across the region **[See reference** 53**]**.

2.20 Melton Mowbray has a railway station on the Birmingham to Stansted Airport line, providing regular access to Leicester. The Borough also has Bottesford station on the Nottingham to Skegness line, with a good connection to Grantham, but other settlements lack easy access to rail services. Further information on public transport is provided below.

2.21 The area has many attractive cycling, walking and horse riding routes that local people enjoy for leisure, largely within the areas' quieter rural roads and lanes. The Borough is also the location for the popular annual CiCLE Classic cycle race.

2.22 The percentage of adults in Melton borough who cycle for everyday travel and/or leisure at least one day per week was 10.4% in 2023; and the percentage of adults who walk for everyday travel and/or leisure at least one day per week was 70.6% in 2023 **[See reference** 54**]**. However, there is a widespread view in relevant strategies that people do not tend to cycle to get to destinations, including work. According to the 2021 census **[See reference** 55**]**, only 1.6% of people in Melton cycled to work (lower than the national average of 2.1%). However, note this data was collected during Covid when travel patterns were severely impacted so this should be treated with caution.

2.23 The Melton Climate Change Strategy **[See reference** 56**]** highlights that local people say they cannot walk and cycle as much as they would like to because of a lack of safe and attractive footpaths and cycle paths, especially into and around Melton Mowbray town centre.

2.24 Air travel generates higher levels of emissions than other transport modes and thus needs to be reduced where possible to help achieve net zero **[See reference** 57**]**. There is a local recreational airfield in Melton borough but no commercial airports in the area; the closest airport is East Midlands in North West Leicestershire. For these reasons air travel has not been considered further here, although improvements to public transport access to airports outside the area would clearly help to reduce these linked transport emissions.

Melton Mowbray

2.25 Around half of the population live in Melton Mowbray, the focal point for services and facilities in the Borough. Its transport network suffers from longstanding congestions issues and although there is a bus service to meet essential travel needs, on its own it is unlikely to encourage people to change from

using cars for most journeys **[See reference** 58**]**. Further growth is likely to exacerbate this congestion if mitigating action is not taken (but a Melton Mowbray Distributor Road, MMDR, is being developed as discussed further below).

2.26 Despite Melton Mowbray's relatively compact geography, the town is not achieving its full potential for people cycling, walking and making other use of footways (pavements), such as use of mobility scooters **[See reference** 59**]**. The low quality and intermittent provision of cycling and walking infrastructure likely contribute to this.

Rural areas

2.27 The rural context presents very different challenges for reducing the need to travel by car and supporting uptake of sustainable travel modes (e.g. walking and cycling, public transport). Country roads connecting settlements are often fast, narrow and with poor visibility, creating safety issues for walking and cycling. Many villages also have very limited bus services and limited shops and other services/facilities to meet local needs.

2.28 Much of the population in rural areas is therefore dependent on car use to access work, facilities and services. This is reflected in car ownership statistics indicating 42.5% of households have access to one vehicle, 30.7% of households have access to two vehicles and 10.2% have access to three or more vehicles; only 16.6% of households reported having no car or van **[See reference** 60**]**. In rural areas of the borough at least 90% of households have at least one van or car, compared to around 80% in Melton Mowbray South and West **[See reference** 61**]**. More than half (54.4%) of people aged 16 years and over in employment in Melton borough travel to work driving a car or van (higher than the national value of 44.5%) **[See reference** 62**]**. Cycling and walking levels in Leicestershire are also lower than the national average **[See reference** 63**]**.

2.29 The area's demography is also a relevant consideration. Melton borough's aged and aging population, which is more marked in rural areas **[See reference**

64**]**, means that active travel options many not appropriate for many (beyond shorter distances).

Public transport provision and access

Rail

2.30 According to the 2021 census, 0.5% of people aged 16 years and over in employment in Melton borough travelled to work via train travel; this is lower than the national average of 2.0% **[See reference** 65**]** and likely reflects the fact that much of the population do not live within easy reach of railway stations, as well as limitations to the services themselves.

2.31 Melton Mowbray railway station is the main train station in Melton borough and is located on Burton Road, a short walk from Melton Mowbray town centre. Located on the Birmingham to Stansted Airport line, it provides regular access to Leicester. It is possible to catch direct train services throughout the day to national and regional destinations (including Birmingham, Peterborough, Cambridge, London-Stansted Airport) and other local destinations (such as Hinckley, Narborough and Oakham).

2.32 As with the town centre more generally, the railway station is easily accessible by car (traffic permitting; good parking provision) and from many parts of the wider town by walking. However, it is challenging to access by bike due to a lack of cycle infrastructure and a junction which is difficult to navigate by bike. Bus services are limited and infrequent and run to the town centre rather than direct to the station.

2.33 The Borough also has Bottesford station on the Nottingham to Skegness line, with a good connection to Grantham. However, this is too far away to be attractive to people in Melton Mowbray or the immediately surrounding area.

2.34 Given the wide geographic spread of the Borough, some local residents access train services from surrounding towns including Grantham and Market Harborough. These stations offer greater frequency and more direct routes to cities including London (and sometimes cheaper tickets); and these stations can be quicker to access because of distance/route from a person's home. For example, Grantham Station can be easily accessed via road and has substantial car parking.

Buses

2.35 According to the 2021 census, 0.8% of people aged 16 years and over in employment in Melton borough travelled to work using a bus, minibus or coach; this is significantly lower than the national value of 4.3% **[See reference** 66**]**. Note however that around half of local people do not work so they would only be using buses to meet wider needs.

2.36 These low rates reflect the limited bus coverage in the Borough, especially in rural areas. As in other parts of the country local bus services, subsidised by the county council, are under threat where they are not well used. Bus services across Leicestershire have been cut in recent years by around 50%; this reduction, measured by the distance buses travel since 2016, is the second largest in England, where the average drop was 14% **[See reference** 67**]**. For example, Centrebus's service between Melton Mowbray and Nottingham, the only direct connection to the city, was cut in 2022, albeit it has recently been reinstated with four daily round trips from Monday to Friday (though no weekend service at this time).

2.37 Cuts to rural routes have left some villages with limited or no regular service. To help fill the gaps in bus coverage, some community transport schemes exist in Melton borough as well as some demand-responsive services (based on bookings rather than fixed routes and timetables) serving a small number of villages. Funding has been secured in partnership with Rutland, through Levelling Up Funding, to deliver a new demand-responsive transport project. However, limited overall bus provision at present means there are often few or no alternatives available to car travel in rural areas.

2.38 A total of fourteen bus routes serve Melton Mowbray and provide connections to surrounding villages. The frequency of most of these services is hourly at best, requiring users to plan their journeys in advance rather than “turning up” to travel. The hours of operation of the network are also limited to Monday to Saturday daytime, with no late evening, Sunday and bank holiday services. The main “town services” (bus number 14 and 15) operate on an hourly daytime frequency and follow one-way looping routes from the town centre to the main estates to the north and south of the town. In general, this service does not offer competitive journey times compared to car travel and often also active modes (due to the relatively compact nature of the town). The town’s bus routes are further impacted by very slow journey speeds, resulting from traffic congestion and a lack of bus lanes on the town’s main road. As a result, the town services primarily cater for concessionary pass holders, especially those with limited ability to access alternative modes of travel.

2.39 In recent years the town’s bus network has contracted significantly, including the withdrawal or combination of some of the town’s former suburban routes, as users have decreased and public funding available to cover loss-making services has reduced. The trends driving this contraction look set to continue, especially as passenger transport services were placed under severe strain by the Covid-19 pandemic.

2.40 Inter-urban bus routes provide connections to key surrounding destinations not directly linked to Melton Mowbray via rail, including Nottingham, Loughborough, and Grantham, as well as providing supplementary connections to Leicester and Oakham. Most of these services operate at hourly or lower frequencies on Monday to Saturday daytimes only. They are aimed at those without access to a car rather than offering a competitive alternative to car use. A partial exception to this is Arriva service 5A, which provides a half-hourly or more frequent connection to Leicester via Asfordby, Brooksby (College), Syston and Thurmaston.

Melton Mowbray Distributor Road (MMDR)

2.41 The Melton Mowbray Distributor Road (MMDR) project is a key initiative, currently under development, to tackle transport issues in and around Melton Mowbray and support growth. A summary of this project is provided below, drawing on the following key sources **[See reference** 68**]** **[See reference** 69**]**.

2.42 The MMDR is a major infrastructure project designed to ease congestion, reduce heavy goods vehicle (HGV) traffic and journey times and foster local economic growth. It will also support new housing developments, particularly in the Melton North and Melton South Sustainable Neighbourhoods; and improve town centre air quality, benefiting residents and local businesses.

2.43 Construction began on the North and East section in May 2023, and the project aims to open by early 2026. This £115 million scheme is being funded by the UK Government, Leicestershire County Council, the Leicester & Leicestershire Local Enterprise Partnership, and developer contributions.

2.44 North and East Melton Mowbray Distributor Road (NEMMDR) component will connect the A606 Nottingham Road to the north with the A606 Burton Road to the south, passing around the town's eastern edge.

2.45 Key aims of the scheme are to:

- improve access to future residential areas and job opportunities
- alleviate traffic congestion within Melton Mowbray
- improve connectivity to Melton town centre
- minimise the number of HGVs travelling through Melton town centre
- reduce pollution levels in the town centre

2.46 The project will incorporate 7.1 kilometres of walking and cycling paths to improve accessibility and support active travel.

2.47 Environmental enhancements are also central to the project, with efforts to restore local ecosystems along the River Eye by re-routing the river to its original course and preserving the old river section as a wildlife habitat. The scheme will also feature extensive planting to enrich local biodiversity.

Private and electric vehicles

2.48 As of 2024 Q2, of vehicles licenced in Melton 47.8% (19,400) are petrol vehicles, 45.8% (18,600) are diesel vehicles, 3.2% (1,300) are hybrid electric (petrol) vehicles and 3.2% (1,300) are vehicles which use other fuels **[See reference** 70**]**. In addition, as of 2024 Q2, of licenced plug-in vehicles in Melton 60.2% (619) are battery electric, 38.5% (396) are plug-in hybrid electric (petrol), 0.9% (9) are plug-in hybrid electric (diesel) and 0.4% (4) are range extended electric (ibid).

2.49 EVs have an increasingly important role to play in rural areas, where a larger proportion of emissions (77%) come from longer trip distances over ten miles **[See reference** 71**]**. These journeys are unlikely to be easily transferred to active travel modes such as cycling and walking and therefore substantial reliance on car is likely to remain. However, this is dependent on the roll out of charging infrastructure.

2.50 There are approximately 22.9 charging devices per 100,000 population in Melton borough; in comparison to the rest of the UK, the Borough is significantly below the UK average of 95.6 charging devices per 100,000 population **[See reference** 72**]**; and also well below the mean figure for all local authority districts in East Midlands of 61.2 **[See reference** 73**]**. Melton borough also has low uptake of the Electric Vehicle Homecharge (89 charging devices installed in 2022) and the Workplace Charging Schemes (35 sockets installed to June 2024) (ibid).

Policy options

2.51 Reducing GHG emissions from transport in Melton borough will require a modal shift from private petrol and diesel vehicles. This will require investment in infrastructure to support alternative transport modes such as, walking, cycling and public transport, where it is feasible to make these options more convenient and appealing; and consideration of ongoing changes in travel patterns such as increased working from home and the potential future introduction of autonomous vehicles. It also requires planning where best to focus new development to support use of sustainable transport modes, and how to design it to support more sustainable transport choices and healthy lifestyles, both for occupiers of the new development and the wider population.

2.52 The Climate Change Committee advises that local development plans or transport plans should deliver a 33%-35% shift from cars to walking/ cycling/public transport for shorter trips to meet net-zero targets, and cities should be more ambitious than this **[See reference** 74**]**.

2.53 Different solutions are likely to be needed in different areas, depending on the size of settlement, its services and facilities and its remoteness from nearby settlements. This will include the need to work with neighbouring LPAs to consider transport links to settlements in other districts. For example, the rural north of the Borough, including the largest village Bottesford, is a significant distance from Melton Mowbray and relatively poorly connected to it. Bottesford's train and bus connections and the A52 provide stronger connections to Grantham and Nottingham (outside the borough).

2.54 Given that in many parts of the Borough private vehicles will still be needed for some trips, there is also a need to support switching from internal combustion powered private vehicles to electric vehicles (including car club electric vehicles) or other vehicles with zero tailpipe emissions.

2.55 Planning must also consider the ongoing technological transformations, including the roll out of electric vehicles, the potential future introduction of

autonomous vehicles, and big changes in working patterns post Covid such as more home working. There is a lack of high-speed broadband and mobile network connectivity in some parts of Melton borough which strongly impacts the latter. Whilst not a sustainable transport policy as such, ensuring that this is improved as part of new development is important for enabling working from home (which would reduce the need to commute to work every day and thus reduce associated GHG emissions) as well as providing wider benefits such as access to digital health services and online shopping which could further reduce trip generation. It might also help contribute to climate change resilience of organisations and households such as ensuring staff can still work if roads are flooded. Therefore, it is recommended that MBC work with infrastructure providers to improve coverage and that the Local Plan includes a strong local plan policy on improving broadband and wider digital connectivity.

2.56 Key sustainable transport planning policy options for MBC are discussed further below.

Allocate large scale development to sustainable locations

2.57 A development's location has significant implications for its sustainable transport potential, particularly for designing out dependence on use of private vehicles for shorter trips. Significant scale 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, such as near to existing town centres and public transport hubs. Development patterns should also be shaped by planned sustainable transport infrastructure; for example, MMDR will support the Sustainable Neighbourhoods.

2.58 Whilst directing new development to the most sustainable locations should maximise opportunities to reduce car dependency, there is also a need for development in rural areas to support long term sustainability (if no new homes were built in some rural settlements, then a declining population could undermine the viability of existing local services and facilities, such as primary schools). Thus,

a balance needs to be struck in distributing growth across the Borough and this is reflected in the existing Local Plan. Policy SS2 of the Local Plan targets 65% of housing growth to Melton Mowbray and the remaining 35% to rural areas, directed mostly to the largest well-connected villages which have local services and facilities such as local shops and a primary school. Policy SS3 also provides provision for limited new homes in other rural settlements where this contributes to overall sustainability of the settlement. This approach is supported from the point of view of increasing access to services and facilities, enabling combined trips and generally reducing the need to use private vehicles.

Create 20-minute neighbourhoods

2.59 The NPPF states that planning policies should “support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities” (paragraph 106). Reducing the need to travel in this way, including the frequency and distance of car travel, is a key first step to reducing the carbon emissions associated with travel and transportation.

2.60 20 minute neighbourhoods is another way of describing a complete, compact and connected neighbourhood. The concept of '20-minute neighbourhoods' – creating places in which most people’s daily needs can be met within a short walk, cycle, wheel or bus journey from home by providing a range of local services and facilities, such as health services, retail and entertainment, is a useful tool for informing the design of schemes and the assessment of planning applications. However, it is important to be clear that this is in no way about preventing people’s movement, it is about providing choice and enabling people to meet more of their needs within their neighbourhood area. It should also be noted that some people will be more able to benefit from these opportunities than others, for example people who cannot walk far will still likely be reliant on vehicles.

2.61 There will be different design solutions to achieve a 20-minute neighbourhood depending on the specific context. This approach is likely to be most relevant to larger development sites, such as urban extensions to Melton Mowbray, where

mixed use development could be sought, taking into account what services are not already easily accessible. Locating key services and facilities close together can also promoted combined trips to meet multiple needs, further reducing the number and distance of car journeys. The design guidance highlighted in the policy context section above (including Sports England's Active Design guidance) provides a range of prompts and principles for creating 'walkable', 20-minute neighbourhoods that could be cross referenced in the Local Plan, design codes or site briefs.

2.62 Lessons could also be learnt from elsewhere. For example, the Trumpington Meadows development in Cambridge of 1200 homes includes a 60-ha country park on the periphery whilst the new homes are built around public transport access and cycle paths with a compact urban form, creating a walkable neighbourhood that encourages public transport use and active travel to reduce car dependency. However, the scheme has struggled to establish local shops, cafes and businesses; a lesson learned was the need to get retail in early.

2.63 In rural areas with limited cycling and walking infrastructure and public transport connectivity and remoteness from some services, facilities and employment opportunities creating 20-minute neighbourhoods may not be feasible outside larger settlements. However the Local Plan could consider opportunities to create safe walking and cycling connections between villages (ideally where each settlement offers different services and facilities) so that together they can increase local accessibility to services and facilities (e.g. see VeloCity concept **[See reference** 75**]**.

Secure better conditions for walking and cycling

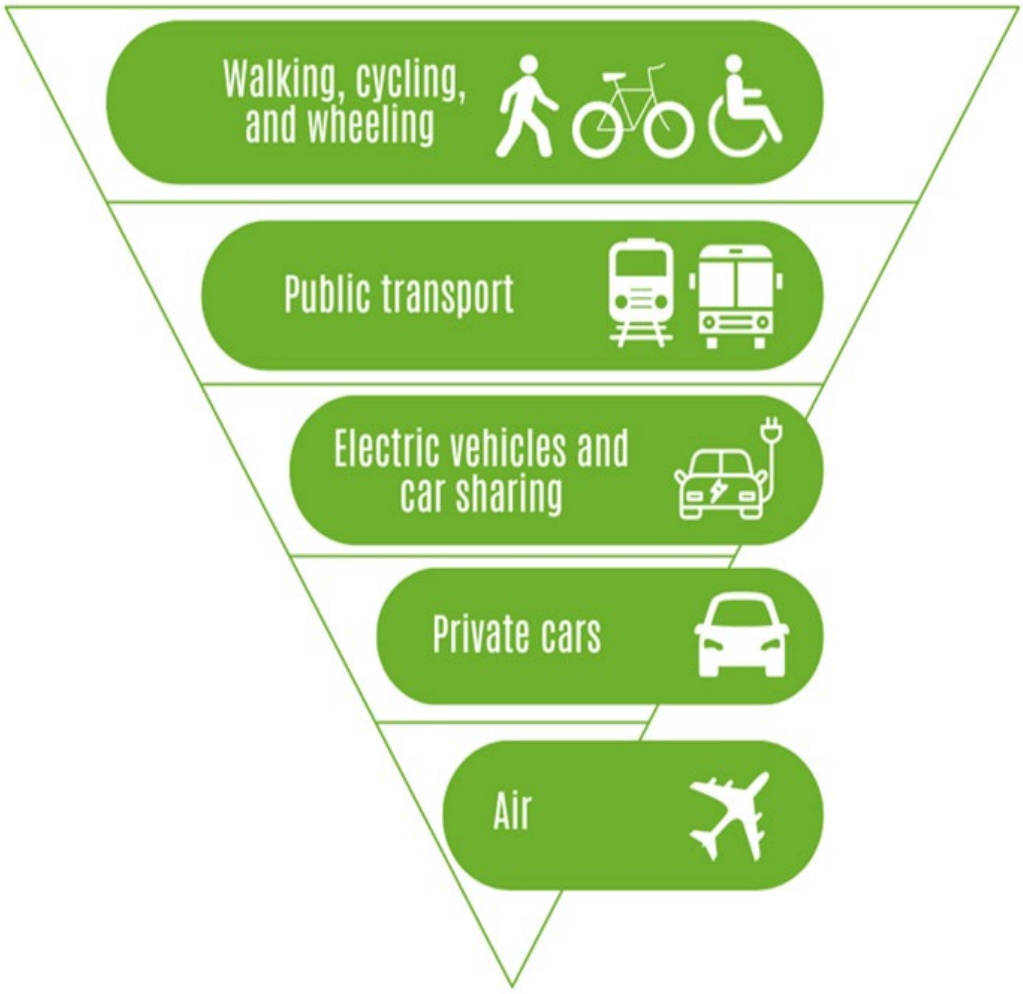
2.64 The NPPF states that planning policies should: 'provide for attractive and well-designed walking and cycling networks with supporting facilities such as secure cycle parking' (paragraph 110). The National Design Guide **[See reference** 76**]** notes that the patterns of movement of people are integral to well-designed places. A well-designed movement network should limit the impacts of car use (including carbon emissions) by prioritising and encouraging walking, cycling and public transport. The Local Plan has a key role to play in promoting the creation of

active travel links across the Borough and within new developments which are easy and appealing to use. The MMDR, which aims to create over 7km of walking and cycling paths, is a good example of what can be achieved. Emerging Local Cycling and Walking Infrastructure Plans will be a key source of evidence as they aim to identify cycling and walking improvements required at the local level and priorities for investment.

2.65 The national guidance documents outlined in the policy section (such as Sport England's Active Design guidance) provide lots of excellent advice on designing new developments to create better conditions for walking and cycling, particularly for shorter trips. For example, by lowering speed limits to 20mph; specifying narrower roads with traffic calming measures; developing direct, attractive and well-designed walking and cycling networks with clear signage; and making any routes for sustainable modes within a development quicker and easier than the alternative by private vehicle. One key principle running through these is some form of prioritisation of pedestrians and cyclists over vehicle users in residential street design.

2.66 The sustainable travel hierarchy ranks different modes of transportation based on their preferability for sustainability, environmental impact, and efficiency. Produced by the Energy Savings Trust, the hierarchy ranks travel modes from most sustainable, environmentally friendly and efficient to the least **[See reference** 77**]**. Walking, cycling and wheeling are at the top of the hierarchy being the most sustainable travel modes, with private cars and air travel at the bottom.

Figure 2.1: Sustainable travel hierarchy



2.67 The purpose of the travel hierarchy is to encourage policy makers and individuals to prioritise greener, more sustainable transport methods, thereby reducing the environmental impact of journeys. The hierarchy can be used to inform street design and the prioritisation of users, with pedestrians and cyclists considered first in the design process and vehicle access considered last. Many cities have adopted policies that reflect this hierarchy, such as creating pedestrian zones, expanding cycling infrastructure, and improving public transport systems.

2.68 As summarised in the policy section, much national and county level policy and guidance - including Manual for Streets and Leicestershire's Highways Design Guide - already refer to some form of sustainable transport or hierarchy. However

Local Plan polices such as IN2 (Transport, Accessibility and Parking) and D1 (Raising the Standard of Design) could make explicit reference to this so that developers are clear they need to prioritise sustainable and active modes of travel and define a clear street hierarchy.

2.69 These policies - and/or design codes and site briefs for larger development sites - could also embed national design guidance. For example, Policy D1 already requires that new development “Performs well against Building for Life 12 or any subsequent guidance and seeks to develop the principles of 'Active Design' for housing developments”. This could be updated to refer to the Building for a Healthy Life scheme.

2.70 MBC could also highlight the importance of incorporating green infrastructure along active travel routes in the updated Local Plan to help create attractive routes which encourage use. This is likely to be particularly important as the climate continues to change to help to provide shade from summer sun (such as from street trees) or shelter from winter storms.

2.71 Given the aged and ageing population consideration of inclusive design will be important too (such as the provision of benches and other stopping places and consideration of dementia friendly design, such as using key landmarks to navigate).

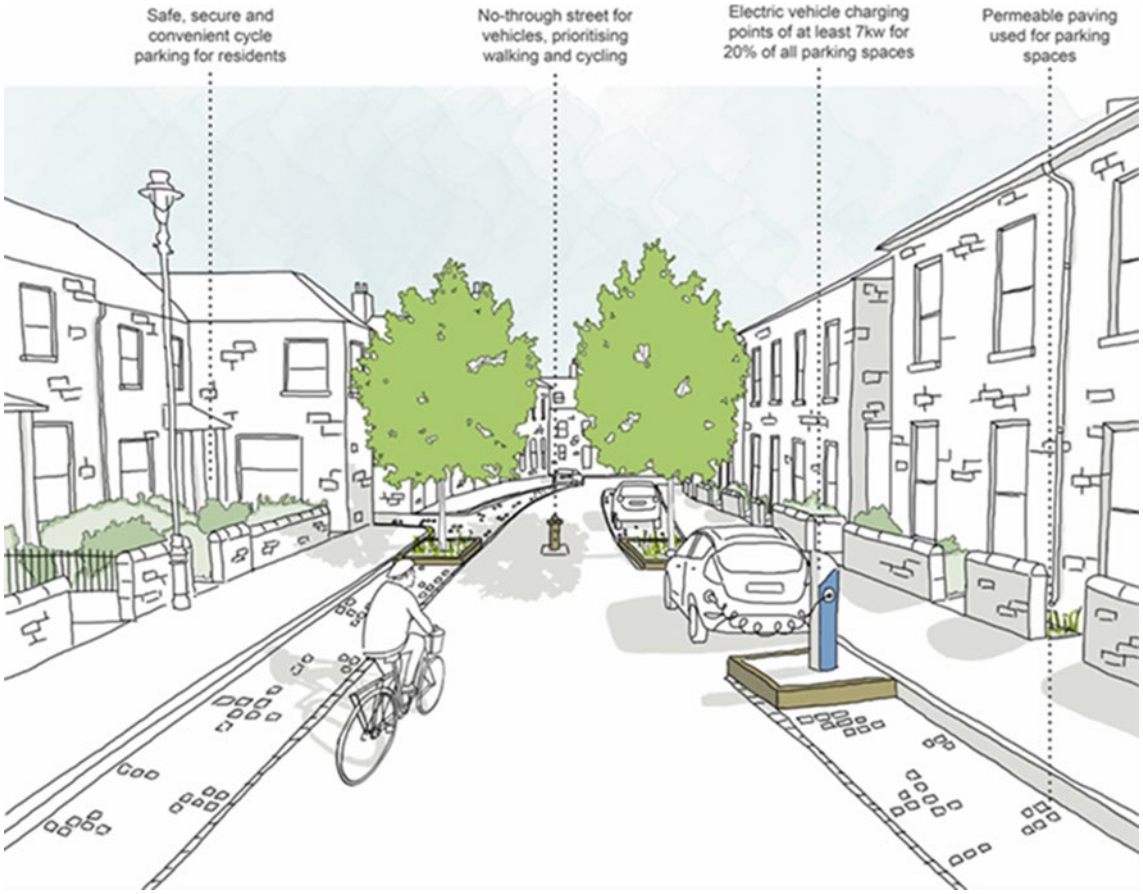
2.72 In theory the school journey provides a good opportunity to build physical activity into a necessary everyday trip and thus help to reduce obesity and embed longer term behavioural change alongside reduced emissions from travel. In a rural areas travelling to/from school by bike is often not feasible as many children have to travel over three miles to/from school and thus make the journey via school bus or car. This is especially the case for secondary schools as there are only three across the area (in Melton Mowbray and Bottesford) so children are bussed in from the villages. Moreover, even those living within Melton Mowbray may not choose to cycle given the congestion and safety issues highlighted previously. Supporting more walking to school for those who live in settlements with schools arguably provides the best opportunity and as such could be identified as a key opportunity in the Local Plan. MBC could consider seeking

contributions from new development in such settlements (alongside other funding sources) to enhance the safety, convenience and attractiveness of key routes to schools to encourage more people to walk. This could include incorporating 'play on the way' features into routes to primary schools and focusing urban greening measures such as street tree planting along routes to make them more attractive and provide shelter from summer sun and shelter from winds. Sport England's Active Design guide provides advice on designing active travel routes **[See reference** 78**]**.

2.73 Melton Mowbray and the largest villages are probably the best places to focus on actions to increase modal shift to active travel. In contrast in rural areas securing better conditions for walking and cycling can be challenging, given the baseline conditions such as fast, narrow roads (see baseline section above). However, there should still be scope for MBC to identify opportunities to support shorter journeys by walking and cycling to key destinations within larger settlements and seek developer contributions (along other sources of funding) to implement these; and as noted above, there may also be opportunities to improve such connections between clusters of towns and villages. Working with neighbourhood planning groups might be one means of drilling down into these site-specific opportunities and developing policy to match.

2.74 Some local planning authorities restrict car parking provision to further reduce car use. However, in Melton borough it is anticipated that reductions in parking provision are unlikely to be supported by the general public in many locations (given the high dependence on cars); and could have negative knock-on impacts (increasing inappropriate and illegal parking elsewhere). One exception may be new developments close to town centres that have good access to facilities and services including public transport hubs; here MBC could consider limiting parking provision as part of these developments, especially if complementary measures such as car clubs (see below) were delivered in tandem.

Figure 2.2: Example of a street that incorporates sustainable travel features such as electric vehicle infrastructure



2.75 The illustrative street scene above shows a streetscape which prioritises active travel, incorporates green features and includes traffic calming measures. The reduced number of parking spaces have EV charging points.

2.76 Such measures could be pursued alongside other actions which support active travel, such as engaging local businesses and organisations to foster partnerships that support sustainable travel initiatives (such as incentive programs for employees to use active transport).

Seek high quality cycle storage

2.77 Delivering secure, high quality cycle storage/parking is a key part of providing infrastructure to encourage more people to travel by bike. For example, incorporating secure bike storage and facilities close to key infrastructure and services such as public transport interchanges can help to make travelling by bike a more attractive and viable option. A lack of such facilities can deter cycling due to a fear or vandalism or theft; for example, the Leicestershire Cycling and Walking Strategy identifies a lack of cycle storage as a barrier to more people cycling. Also, some households may lack space for convenient bike storage at home, so addressing storage at both homes and key destinations is important. The Local Plans should ensure this is a key consideration from an early stage of planning and addressed in design guidance. The Local Transport Note on cycle infrastructure design should be a key reference point **[See reference** 79**]** and MBC is advised to work with LCC on any forthcoming update to cycle parking standards in the Leicestershire Highway Design Guide.

2.78 Good practice guidance suggests that cycle parking should be addressed in line with car parking and form an integral part of travel plans. Looking ahead, needs for charging points for electric bikes (useful for opening up cycling to a wider range of users) and storage that is adapted to the changing climate should also be considered.

Improve public transport provision and access

2.79 Public transport is another key sustainable transport mode. If more people could be encouraged to use public transport (both buses and trains) rather than cars then this would help to reduce emissions as well as provide wider benefits, for example contributing to reduced congestion and air pollution.

2.80 Improved public transport services, designed to be convenient and accessible for all users (noting the Borough's aged and aging population and also the need to support other segments of the population including enabling young people to

better access education, employment and entertainment), could help to reduce the need for private car usage and also reduce social isolation and exclusion in rural areas. This would be particularly effective if combined with improvements to walking and cycling routes within larger settlements so that people can more easily access where they want to go after leaving public transport. Essentially it is important to consider the conditions of the whole journey, which may include working with adjoining authorities.

2.81 As set out in the baseline section above, train and bus services in Melton borough are relatively limited (especially in rural areas) and are not used by many. Even Melton Mowbray's passenger transport network is unlikely to contribute towards encouraging modal shift away from the private car without significant investment. Bus services are also vulnerable to future changes in the commercial bus market and public sector financial pressures.

2.82 The need to try to improve public transport services and infrastructure is well recognised. For example, Leicestershire's Local Transport Plan 3 (LTP3) **[See reference** 80**]** emphasises improving bus and rail services, including park-and-ride schemes, to make public transport more attractive and accessible. And the Interim Melton Mowbray Transport Strategy **[See reference** 81**]** includes plans to improve the infrastructure for passenger transport, including a 'bus hub', bus stop upgrades and improving access to the town's railway station. The Melton Mowbray Transport Strategy Bus Network Report **[See reference** 82**]** sets out proposals for phased enhancements in Melton Mowbray, supported by new development.

2.83 MBC should seek to work in partnership with LCC, as the local highways authority, and local transport providers (bus/train operators and community transport) to identify within the Local Plan the strategic and local transport network improvements needed to serve the area throughout the plan period; support the delivery of the associated infrastructure and services; and establish how development will be coordinated with these changes.

2.84 MBC should require new development to contribute towards improved public transport services (LCC's highways design guide already recommends seeking such contributions via section 106 agreements), including new demand-responsive

and community transport, as well as improved access by walking/cycling and improved integration between existing services at transport interchanges (to support multi-modal trips such as bike to train). This should be informed by the relevant LCC strategies, plans and initiatives (not least the MMDR) and the joint working highlighted above.

2.85 Policy IN2 of the adopted Local Plan already indicates that new developments should support the enhancement of existing or proposed transport interchanges such as the railway stations at Melton Mowbray and Bottesford. MBC could seek to expand on this by providing clarity to developers about the level of contributions that are likely to be required in different parts of the Borough (or the sources they need to refer to in order to understand this) so that the costs can be factored into the price paid for land.

2.86 If MBC prioritised the intensification of development in locations that benefit from good public transport accessibility, in particular around public transport hubs such as train stations and bus interchanges (potentially combined with reduced car parking provision), then this could also encourage increased use of these services (whilst reducing car use) and help to support their financial viability.

2.87 MBC may also wish to consider working with LCC to consider the feasibility of wider policies that could help to support increased use of public transport services (assuming upgrades are delivered), such as congestion charging or a workplace parking levy. The latter has been implemented since 2011 in Nottingham and involves a charge being applied to employers who provide 11 or more parking spaces **[See reference** 83**]**. The revenue has been invested in public transport improvements in the city.

Support the roll out of electric vehicles

2.88 As noted in earlier sections due to the rural nature of the Borough and limited public transport services there is a high degree of car dependency in many areas of the Borough. Whilst improvements to public transport or active travel routes could help to encourage modal shift (if funding can be secured), smaller, more

remote and isolated rural settlements are likely to remain somewhat car dependent.

2.89 To reduce GHG emissions (and air quality impacts) of this ongoing need for private vehicle use, it will be important for MBC to support the roll out of electric vehicles (EVs). As MBC's Climate Change Strategy states, "electric vehicles are currently the quickest and most practical alternative for most road users". However, it is important to note that whilst roll out of EVs will reduce tailpipe emissions (particularly as the national grid continues to be decarbonised) they will still have other environmental impacts. For example, the environmental impacts associated with battery production (particularly extraction and processing of critical raw materials) are an issue and tire and brake wear (exacerbated by the higher weight of electric cars) can still contribute to air pollution **[See reference** 84**]**. EVs also do nothing to tackle congestion. Thus, encouraging modal shift remains the preference (and will also benefit non-drivers).

2.90 Increased provision of EV charge points is critical to supporting the wider uptake of EVs across the Borough. As the baseline section highlighted the existing provision of charge points across the Borough is limited. LCC has developed and initial EV Infrastructure Charging Strategy **[See reference** 85**]**, which focuses on the delivery of public on-street charge points in residential areas, which will be available to all.

2.91 Within Melton borough there appear to be 12 public electric vehicle charging devices, two of these are rapid charging devices **[See reference** 86**]**. These are mostly concentrated in Melton Mowbray (with no public charge points serving the Borough's largest villages, Asfordby and Bottesford) and most are provided in customer car parks, including at some local supermarkets and local hospitality venues **[See reference** 87**]**. This means they may only be available during certain hours and only for customers.

2.92 There are no on-street charge points and a quarter of homes across Leicestershire have limited or no access to off-street parking **[See reference** 88**]**. This limited provision of charging infrastructure along with the upfront costs both of buying EVs and installing charging infrastructure are key barriers to EV rollout.

Nevertheless, demand for EVs is expected to grow significantly to a projected 415,800 EVs across Leicestershire in 2040, generating a demand for 11,400 charging points **[See reference** 89**]**.

2.93 The NPPF states that local parking standards for residential and non-residential development policies should take into account the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles (para 107e) and that applications for development should be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations (para 112e).

2.94 Existing Local Plan policy EN9 (Ensuring Energy Efficient and Low Carbon Development) covers EV charging. It states that, “Development proposals, including refurbishment, will be supported where they demonstrate the following, subject to viability: …Charging points for electric cars.” This policy refers to the potential to create ‘hook-up’ facilities for EVs but is limited to major developments only. Also, it does not detail any specific requirements for charging points (such as numbers, types and locations), unlike some other local plans, notably the London Plan.

2.95 The Melton Borough Design of Development SPD provides high level guidance for EV infrastructure relating to charging points for EVs. Strengthening MBC’s current policies on EV infrastructure and promoting guidance on good practice design will help support residents to make the switch to electric vehicles, especially as the ongoing growth of the second-hand EV market helps to reduce the upfront costs of EVs.

2.96 Providing charge points within new homes with parking provision will benefit residents because recharging an EV at home is often cheaper and more convenient than using public charge points. Ensuring charge points are available at new non-residential developments, especially workplaces and popular destinations, will build confidence that longer journeys can be comfortably completed in EVs and will help to meet demand for charging as EV numbers rise.

2.97 Part S of the Building Regulations, which came into force in June 2022 (after the adoption of the existing Local Plan), establishes minimum requirements for provision of EV charging infrastructure as part of new development (summarised below). These are a big step forward (especially given Local Plan policy EN9 did not include any such standards), however given the critical need to expand the provision of this infrastructure MBC could review these and consider the need to: i) set more ambitious standards for provision of charging infrastructure (to set a higher limit for the number of charge points to be provided for new non-residential development with 10 or more parking spaces); and/or ii) develop policy to address gaps in Part S (to address the minority of development types not covered by the regulations, such as residential or non-residential buildings undergoing major renovation with less than 10 parking spaces; or new non-residential buildings with less than 10 parking spaces).

2.98 This could form part of existing policies on parking such as Policy IN2 (many local plans deal with EV charge point provision within their policies for car parking requirements and design, rather than within a standalone policy) and design policy D1 and should also ensure consideration of strategic needs including for public rapid charging points set out in any relevant local strategic plans.

2.99 The costs of installing additional charging points are considered to be relatively low (around £500 to £1000 for a domestic charger and £10k for a standard public charger **[See reference** 90**]**) and these prices are likely to decline over time has EV infrastructure is rolled out at scale.

2.100 MBC is also advised to keep a watching brief on the emerging National Development Management Policies (NDMPs) to see to what extent these address this issue, for example in terms of guidance on types or design required in different circumstances which is not covered in part S.

Summary of charging requirements in Part S

New Residential Buildings

- Charging points: For new residential buildings with parking spaces, at least one EV charging point is required per dwelling with an associated parking space.
- If associated parking spaces are provided, the number of spaces with access to an EV charging point must be at least:
  - The total number of parking spaces, or
  - The number of dwellings served by the car park (whichever is lower).
- Conditions for Installation:
  - The parking space is not within a covered car park.
  - The average connection cost per charging point is under £3600 (refer to guidance for details on cost calculation).
- Multi-Dwelling Buildings with multiple parking spaces, one EV charging point is required for each parking space.
- If no associated parking spaces are provided, there is no requirement to install an EV charging point.
- Cable routes:
  - If some parking spaces are exempt from requiring EV charging points due to high connection costs (over £3600) or because they are within a covered car park, cable routes may need to be installed for future connection.
  - If the number of parking spaces is more than 10 and exceeds the number of dwellings, cable routes must be installed for all parking spaces without an EV charging point.

Residential buildings undergoing major renovation work:

- Threshold: This applies if the renovation involves more than 10 parking spaces.
- Charging Points: At least one EV charging point is required for each dwelling with a parking space, or one per ten spaces (whichever is greater).
- Cable Routes: Additional cable routes must be installed for any remaining parking spaces to allow for future charging infrastructure.

New Non-Residential Buildings

- Charging Points: For new non-residential buildings with more than 10 parking spaces, at least one EV charging point must be installed.
- Cable Routes: Additional cable routes must be installed to at least 20% of the total parking spaces to accommodate future charging points.

Non-Residential Buildings Undergoing Major Renovation

- Threshold: Applies to major renovations with more than 10 parking spaces.
- Charging Points: At least one EV charging point is required.
- Cable Routes: Cable routes must be installed to at least 20% of the remaining parking spaces.

Mixed-Use Buildings

- For buildings that have both residential and non-residential uses (such as retail spaces within apartment complexes), the requirements for each use apply separately. For example, the residential section would follow residential requirements, while non-residential sections would follow non-residential requirements.

- For mixed-use buildings which have parking spaces within a covered car park, any requirements to install electric vehicle charge points or cable routes must first be applied to those parking spaces outside the covered car park

Exemptions and Flexibility

- Technical and Financial Feasibility: Some flexibility is provided where it may not be technically feasible (e.g., if power supply constraints exist) or financially viable to meet these requirements.
- Historic and Protected Buildings: There are exemptions for buildings that are officially protected (e.g., listed buildings) where EV charging infrastructure could impact the building's appearance or historical value.

Support car clubs

2.101 Reducing emissions can also be supported by commercial car clubs or peer to peer car clubs. Research has found that car club membership is associated with a reduction in private vehicle ownership **[See reference** 91**]**.

2.102 Car clubs (where members typically pay to have access to cars but do not own them) can have a range of wider benefits including helping to: reduce the number of vehicles required to meet people's needs (and the associated embodied emissions and need for private parking **[See reference** 92**]**), reduce emissions per person (where vehicle journeys are shared), reduce costs for users; and encourage a shift towards walking, cycling and public transport while allowing for occasional car travel.

2.103 No local data is available on existing car clubs or car sharing practices in Melton borough, but car clubs are generally understood to be most viable in larger settlements where there is more likely to be sufficient demand. Leicestershire's first car club however is a rural electric car club scheme, set up in 2023 and just south of Melton Borough in the village of Tilton on the Hill (Harborough District Council) **[See reference** 93**]**. This scheme was set up as part of a national pilot

scheme, the outcomes of which may prove helpful for understanding the potential for similar schemes within Melton borough. Car clubs require a designated and signed parking bay that is in close proximity to where members live or work. On-street parking bays usually offer the most appropriate locations for car club bays. The Tilton on the Hill scheme set out above provides parking and EV charging from the village hall. Many car clubs now operate electric or hybrid vehicles capable of operating with zero emissions. Such clubs may offer a means of residents accessing EVs in areas where many homes lack off-street parking.

2.104 Given the benefits summarised above, MBC could use planning policy to seek to encourage the use of car clubs providing EVs. As an example of this, see the wording of Policy T3 in Islington's Local Plan below.

> "The Council will support the provision of car clubs, including the provision of accessible car club parking spaces and/or contributions towards the provision of car clubs in the vicinity of the development, where appropriate. Car club vehicles must be 'clean', [as in] it must be powered by alternative fuels to minimise harmful impacts on the environment."

Summary of recommendations

2.105 There are multiple opportunities to increase sustainable transport and travel in Melton borough in order to reduce GHG emissions as well as deliver wider benefits for air quality, health and wellbeing and placemaking. Ideally development would help to create more sustainable transport choices for residents and empower them to choose a travel option that fits their circumstances and needs. Ensuring that people can reduce their need to travel by car whilst still having affordable access to employment, goods and services will be key to achieving this outcome without having a detrimental effect on quality of life and equality.

2.106 The planning system has a key role to play in supporting this transition and there are opportunities to strengthen Local Plan policies to deliver this. This

chapter has outlined a series of policy options to consider for the new Local Plan Partial Update focused on the following interlinked themes/objectives:

- Continue to allocate most large-scale development to sustainable locations – the existing spatial strategy ensures that future housing development is focused primarily around Melton Mowbray and the most sustainable rural settlements, with accessible and walkable distances to services, facilities and employment.
- Seek to create complete, compact and connected '20-minute' neighbourhoods, particularly as part of large-scale new developments, where people can meet many of their needs within a short distance from home and maximise combined trips.
- Secure better conditions for walking and cycling within new developments and beyond, including by embedding the sustainable travel hierarchy in policy and setting clear design requirements to create convenient, attractive, safe and green routes (taking climate changes projections into account) combined with high quality cycle storage. Inclusive design and walking routes to schools should be prioritised.
- Ensure new development contributes to improvements to public transport provision and access (buses and trains, potentially including more demand-responsive buses), including frequency, accessibility, convenience and interchange facilities. The latter could include provision of cycle storage (where this is lacking) to support multi-model journeys (including bike-bus or bike-rail).
- Support the roll out of electric vehicles through ramping up the provision of EV charging infrastructure (noting the existing low level of such provision) as part of most types of new development and major renovation. This could include setting requirements that go beyond those in Building Regulation Part S, or fill gaps in those requirements.
- Ensure new development supports car clubs, particularly EV car clubs, where there is sufficient demand.

2.107 It is important to recognise that implementing many of these policy options would be about getting the design of developments right from an early stage; they

should not necessarily materially increase costs and arguably should contribute to better designed schemes that can secure higher sales values and faster sales rates.

2.108 Interconnections with wider policies have been highlighted, such as the need to support improvements to broadband connectivity in rural areas to, amongst other things, enable more home working - and reduce the need to commute by private vehicle. Clearly wider planning of investment in new and enhanced services such as hospitals, GPs and schools will also impact travel patterns, as might behavioural change initiatives aimed at encouraging cycling and walking through public awareness campaigns or cycle confidence training.

2.109 As noted above it will be important to design policies to be relevant to both large scale urban development in Melton Mowbray and small-scale development in rural villages. These locations will present very different issues and options for enhancing sustainable travel and transport.

2.110 Large urban extensions to Melton Mowbray present opportunities – via both planning policy and wider investment - to deliver against many, if not all, of the themes above; especially where this can be coordinated with major transport infrastructure enhancements such as MMDR. When complete the MMDR may also create opportunities to reimagine the inner main roads that service the town to make improvements to active travel routes. The Local Plan needs to work with LCC to help them bring forward the local cycling and walking infrastructure plan for Melton Mowbray and ensure that its local plan polices work well with the emerging LCWIP and transport plan. Improving walking, cycling and bus links to the railway station would appear to be a priority.

2.111 In contrast in smaller rural settlements where many people are dependent on using private vehicles and the population is older and ageing, realistic sustainable transport opportunities may be more limited. Here, recommended priorities for planning would be securing developer investment in targeted enhancements to walking/cycling infrastructure (such as routes to schools including ‘play on the way’ features), where appropriate, and EV charging infrastructure. Where the distribution of settlements supports it, MBC could also

assess the feasibility of strategically planning clusters of villages that have improved walking and cycling connections and together offer a range of facilities and services to local people, thus reducing car dependency. These sorts of ambitions could be supported by engagement with neighbourhood planning groups. Again, it will be important for MBC to work with LCC (and receptive parish councils) on this, which could extend to producing LCWIP's for some of the Borough's larger settlements (beyond Melton Mowbray) to support rural active travel where there are the greatest opportunities.

2.112 Progress on tackling GHG emissions from the transport sector will ultimately be dependent on action that goes much wider than the Local Plan. Ongoing close working with LCC will be critical given that they are the local highways authority responsible for leading on a range of transport plans and strategies across the county (not least LCWIPs) that heavily influence what happens in Melton borough. Collaborative working with wider partners and stakeholders across the region - including transport infrastructure providers and operators and neighbouring councils - will also be important to support coordinated delivery of wider connectivity and seamless sustainable travel opportunities beyond the Borough and county (transport users do not consider travel in terms of administrative boundaries).

Monitoring and Evaluation

2.113 Given ongoing planning reform, technological innovation (including EVs, progress on autonomous vehicles) and lifestyle and service change (including home working, emerging demand-responsive bus services) it is clear that policies will need to be designed to be flexible and kept under review.

2.114 Where practicable, ongoing monitoring of the impacts of policy should be undertaken to inform reviews of their effectiveness and updates to the Local Plan. However, given budget constraints the challenge is to find cost effective ways of doing this.

2.115 Collating data on key outcomes indicators such as car ownership, car use, public transport use and travel to work data would be a good start and could be linked to national and regional trends and targets. This could also be supplemented with more qualitative data from public transport user surveys or wider public engagement activities undertaken by LCC or other organisations. Conducting surveys of occupants of major new developments with sustainable transport measures designed it would be particularly valuable, where funding allowed. Links could also be made to wider issues and outcomes such as through reference to air quality monitoring data and public health data (e.g. on levels of activity and obesity rates).

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