

Greater Manchester Combined  
Authority

**Integrated Assessment of the  
Greater Manchester Spatial  
Framework**

IA of 2020 draft GMSF Growth  
and Spatial Options Paper

Final Issue | 30 September 2020

This report takes into account the particular  
instructions and requirements of our client.

It is not intended for and should not be relied  
upon by any third party and no responsibility  
is undertaken to any third party.

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# 1 Introduction

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## 1.1 Context

The Greater Manchester Spatial Framework (GMSF) is being prepared by the ten Greater Manchester (GM) local planning authorities. The GMSF will be a formal planning document that provides a coherent, strategic context for district local plans.

The GMSF will be a statutory planning document and will include strategic policies for Greater Manchester through to 2037. The GMSF will provide GM with an overarching plan which the ten local authorities will use to make land available to address strategic challenges and priorities.

The submission version of the GMSF will be available for consultation in autumn 2020.

Please note that the GMSF has been prepared as a joint Development Plan Document by the Greater Manchester Combined Authority, therefore where reference is made to Greater Manchester Combined Authority (GMCA), this is on behalf of the ten Greater Manchester Authorities.

## 1.2 Integrated Assessment

As part of the development of the GMSF, an Integrated Assessment (IA) is being undertaken incorporating the requirements of:

- Sustainability Appraisal (SA): mandatory under section 19 (5) of the Planning and Compulsory Purchase Act 2004.
- Strategic Environmental Assessment (SEA): mandatory under the Environmental Assessment of Plans and Programmes Regulations 2004 (which transpose the European Directive 2001/42/EC into English law).
- Equality Impact Assessment (EqIA): required to be undertaken for plans, policies and strategies by the Equality Act 2010.

- Health Impact Assessment (HIA): there is no statutory requirement to undertake HIA, its requirements have been considered to add value and depth to the assessment process.

Further detail on the Integrated Assessment components and stages can be found within Section 2 of the main IA Report, 'IA of 2020 draft GMSF Consultation Document'.

### **1.3 Scoping Report**

Consultation was originally undertaken in summer 2015 on the IA Scoping Report. The report has gone through several updates in response to comments received. It was most recently updated in July 2020, to incorporate comments received from the 2019 draft GMSF consultation, in addition to updating the evidence base. The Scoping Report:

- defined the IA methodology;
- reviewed relevant policy, plans, programmes and strategies and their relationship to the GMSF;
- conducted extensive baseline research across a range of environmental and socio-economic topics;
- identified key issues for the GMSF and the IA; and
- defined the objectives and assessment criteria to be used in the IA.

### **1.4 Habitat Regulations Assessment**

A Habitat Regulations Assessment (HRA) of the GMSF is being undertaken in parallel with this IA by the Greater Manchester Ecology Unit. Crossover with this separate workstream has been considered throughout the IA of draft policies where necessary, which is the subject of a separate report.

## **1.5 Purpose of this report**

This report is to present the IA of the growth and spatial options for the 2020 draft GMSF. The IA of these options will help to identify where there are gaps in understanding, and highlight which options will contribute the most to meeting the objectives of the IA.

## **1.6 Applying the Integrated Assessment framework**

The IA Framework is made up of a series of IA objectives and assessment criteria which have been developed specifically for the GMSF. This framework (listed in Table 1 below) is used to identify the likely social, economic and environmental effects and guide mitigation and policy development.

The IA Framework has been applied to each of the different growth and spatial options, the results of which are detailed within this report. All objectives within the Framework were reviewed during the 2020 IA update at the scoping stage and each carries an equal weighting.

Further detail on applying the IA Framework can be found in Section 2 of the main IA Report 'IA of 2020 draft GMSF Consultation Document'.

Table 1: IA Framework

Ref	Objective	Assessment criteria
1	Provide a sustainable supply of housing land including for an appropriate mix of sizes, types, tenures in locations to meet housing need, and to support economic growth	<p>Will the GMSF:</p> <p>Ensure an appropriate quantity of housing land to meet the objectively assessed need for market and affordable housing?</p> <p>Ensure an appropriate mix of types, tenures and sizes of properties in relation to the respective levels of local demand?</p> <p>Ensure housing land is well-connected with employment land, centres and green space or co-located where appropriate?</p> <p>Support improvements in the energy efficiency and resilience of the housing stock?</p>
2	Provide a sustainable supply of employment land to ensure sustainable economic growth and job creation	<p>Will the GMSF:</p> <p>Meet current and future demand for employment land across GM?</p> <p>Support education and training to provide a suitable labour force for future growth?</p> <p>Provide sufficient employment land in locations that are well-connected and well-served by infrastructure?</p>
3	Ensure that there is sufficient coverage and capacity of transport and	<p>Will the GMSF:</p> <p>Ensure that the transport network can support and enable the anticipated scale and spatial distribution of development?</p> <p>Improve transport connectivity?</p>

Ref	Objective	Assessment criteria
	utilities to support growth and development	Ensure that utilities / digital infrastructure can support and enable the anticipated scale and spatial distribution of development?
4	Reduce levels of deprivation and disparity	<p>Will the GMSF:</p> <p>Reduce the proportion of people living in deprivation?</p> <p>Support reductions in poverty (including child and fuel poverty), deprivation and disparity across the domains of the Indices of Multiple Deprivation?</p>
5	Promote equality of opportunity and the elimination of discrimination	<p>Will the GMSF:</p> <p>Foster good relations between different people?</p> <p>Ensure equality of opportunity and equal access to facilities/infrastructure for all?</p> <p>Ensure no discrimination based on 'protected characteristics', as defined in the Equality Act 2010?</p> <p>Ensure that the needs of different areas, (namely urban, suburban, urban fringe and rural) are equally addressed?</p>
6	Support improved health and wellbeing of the population and reduce health inequalities	<p>Will the GMSF:</p> <p>Support healthier lifestyles and support improvements in determinants of health?</p> <p>Reduce health inequalities within GM and with the rest of England?</p> <p>Promote access to green space?</p>
7	Ensure access to and provision of appropriate social infrastructure	<p>Will the GMSF:</p> <p>Ensure people are adequately served by key healthcare facilities, regardless of socio-economic status?</p> <p>Ensure sufficient access to educational facilities for all children?</p>

Ref	Objective	Assessment criteria
		Promote access to and provision of appropriate community social infrastructure including playgrounds and sports facilities?
8	Support improved educational attainment and skill levels for all	<p>Will the GMSF:</p> <p>Improve education levels of children in the area, regardless of their background?</p> <p>Improve educational and skill levels of the population of working age?</p>
9	Promote sustainable modes of transport	<p>Will the GMSF:</p> <p>Reduce the need to travel and promote efficient patterns of movement?</p> <p>Promote a safe and sustainable public transport network that reduces reliance on private motor vehicles?</p> <p>Support the use of sustainable and active modes of transport?</p>
10	Improve air quality	<p>Will the GMSF:</p> <p>Improve air quality within Greater Manchester, particularly in the 10 Air Quality Management Areas (AQMAs)?</p>
11	Conserve and enhance biodiversity, green infrastructure and geodiversity assets	<p>Will the GMSF:</p> <p>Provide opportunities to enhance new and existing wildlife and geological sites?</p> <p>Avoid damage to or destruction of designated wildlife sites, habitats and species and protected and unique geological features?</p> <p>Support and enhance existing multifunctional green infrastructure and / or contribute towards the creation of new multifunctional green infrastructure?</p>



Ref	Objective	Assessment criteria
		Ensure access to green infrastructure providing opportunities for recreation, amenity and tranquillity?
12	Ensure communities, developments and infrastructure are resilient to the effects of expected climate change	<p>Will the GMSF:</p> <p>Ensure that communities, existing and new developments and infrastructure systems are resilient to the predicted effects of climate change across GM?</p>
13	Reduce the risk of flooding to people and property	<p>Will the GMSF:</p> <p>Restrict the development of property in areas of flood risk?</p> <p>Ensure adequate measures are in place to manage existing flood risk?</p> <p>Ensure that development does not increase flood risk due to increased run-off rates?</p> <p>Ensure development is appropriately future proof to accommodate future levels of flood risk including from climate change?</p>
14	Protect and improve the quality and availability of water resources	<p>Will the GMSF:</p> <p>Encourage compliance with the Water Framework Directive?</p> <p>Promote management practices that will protect water features from pollution?</p> <p>Avoid consuming greater volumes of water resources than are available to maintain a healthy environment?</p>

Ref	Objective	Assessment criteria
15	Increase energy efficiency, encourage low-carbon generation and reduce greenhouse gas emissions	<p>Will the GMSF:</p> <p>Encourage reduction in energy use and increased energy efficiency?</p> <p>Encourage the development of low carbon and renewable energy facilities, including as part of conventional developments?</p> <p>Promote a proactive reduction in direct and indirect greenhouse gas emissions emitted across GM?</p>
16	Conserve and/or enhance landscape, townscape, heritage assets and their setting and the character of GM	<p>Will the GMSF:</p> <p>Improve landscape quality and the character of open spaces and the public realm?</p> <p>Conserve and enhance the historic environment, heritage assets and their setting?</p> <p>Respect, maintain and strengthen local character and distinctiveness?</p>
17	Ensure that land resources are allocated and used in an efficient and sustainable manner to meet the housing and employment needs of GM, whilst reducing land contamination	<p>Will the GMSF:</p> <p>Support the development of previously developed land and other sustainable locations?</p> <p>Protect the best and most versatile agricultural land / soil resources from inappropriate development?</p> <p>Encourage the redevelopment of derelict land, properties, buildings and infrastructure, returning them to appropriate uses?</p> <p>Support reductions in land contamination through the remediation and reuse of previously developed land?</p>

Ref	Objective	Assessment criteria
18	Promote sustainable consumption of resources and support the implementation of the waste hierarchy	Will the GMSF: Support the sustainable use of physical resources? Promote movement up the waste hierarchy? Promote reduced waste generation rates?

## **2 2020 Growth and Spatial Options**

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### **2.1 Introduction**

Sustainability Appraisal (SA) (one of the component parts of the IA) places great emphasis on the consideration of reasonable alternatives. Planning Practice Guidance states that:

“The sustainability appraisal needs to consider and compare all reasonable alternatives as the plan evolves, including the preferred approach, and assess these against the baseline environmental, economic and social characteristics of the area and the likely situation if the plan were not to be adopted”. (PPG, Paragraph: 018 Reference ID: 11-018-20140306)

Reasonable alternatives (i.e. the options) have been assessed as part of this stage of the IA. This section provides context into options development throughout previous iterations of the GMSF (from 2015 onwards) and then introduces the 2020 growth and spatial options.

The 2020 options are set out in the GMSF 2020 Growth and Spatial Options Paper (August 2020), which is the focus of this IA report.

### **2.2 Evolution of options from 2015 to 2020**

The following section is a narrative outlining the evolution of the growth and spatial options as detailed in the following two GMSF reports:

- Revised Draft GMSF Spatial Options (January 2019); and
- GMSF 2020 Growth and Spatial Options – Draft for Appraisal (August 2020).

This also includes context dating back to the 2015/6 options (taken from the 2019 report), as this sets the scene for understanding the 2019 options.

### 2.2.1 Context of the growth options

Three growth options were originally developed for the 2015 draft GMSF:

- Option 1 – Baseline Land Supply;
- Option 2 – Objectively Assessed Needs;
- Option 3 – Higher Accelerated Growth Scenario.

Following completion of the 2015 consultation and the IA of Vision, Objectives and Growth Options (October 2015), further work was undertaken to update the evidence base. It was then concluded by the AGMA Executive Board that Option 2 was preferred and necessary; this growth option was therefore used in the 2016 GMSF.

As there were not considered sufficient material changes during the preparation of 2019 GMSF, the Option 2 of the 2016 GMSF was still considered by AGMA Executive Board to be the preferred option for the 2019 GMSF. Therefore, levels of growth in the Revised 2019 draft GMSF were designed to meet objectively assessed needs and employed the same principle as Growth Option 2: Objectively Assessed Needs.

For the 2020 draft GMSF, the 2019 growth options were revisited, especially in light of COVID-19. It was concluded that there is insufficient certainty around the pandemic at this stage to produce a 4<sup>th</sup> reasonable growth alternative. However, due to consultation responses to the 2019 draft GMSF, although growth options had been previously assessed in 2015, it was considered appropriate to assess the alternative growth options again along with the 2019 preferred option (see Section 2.3.1 for the 2020 growth options).

### 2.2.2 Context of the spatial options

The **2016 draft GMSF** considered four spatial options for delivering the preferred Growth Option 2 – Objectively Assessed Needs. These four spatial options were subject to assessment through the 2016 IA of Strategic Spatial Options. The IA concluded that Option 3 (GM's Existing

Land Supply (allocations / permissions) together with strategic allocations to meet the OAN at a GM scale was strategic in nature and presented the best option for delivering sustainable growth.

During the preparation of the **2019 draft GMSF**, six spatial options were developed and considered:

- Option 1 – Business as usual;
- Option 2 – Urban max;
- Option 3 – Transit City;
- Option 4 – Boost northern competitiveness;
- Option 5 – Sustain northern competitiveness;
- Option 6 – Hybrid growth.

The 2019 IA on the spatial options was carried out by GMCA as part of their options paper. This included a detailed narrative of the assessment within the document, and the assessment matrices in an appendix. The results of this appraisal demonstrated that none of the original five options individually met the objectively assessed needs; thus, Option 6 – Hybrid Growth was developed which combined Options 3, 4 and 5. Option 6 was therefore the preferred spatial option for the 2019 draft GMSF.

During the preparation of the 2020 draft GMSF, the spatial options were revisited. Five spatial options were considered (see Section 2.3.2 for the full list of options). Three options (Business as usual, Urban max, Hybrid growth option) were carried forward from the 2019 spatial options, with two new options introduced as a result of the 2019 consultation.

## **2.3 2020 options**

### **2.3.1 Growth options**

The 2020 draft GMSF growth options are:

- Option 1: Business as Usual.

- Option 2: Meeting GM's Local Housing Need (LHN) and employment land Objectively Assessed Needs.
- Option 3: Higher Growth Scenario, going above GM's LHN and Employment Land Needs.

Further detail including the IA of these growth options can be found in Section 3.2.

### **2.3.2 Spatial options**

The 2020 draft GMSF spatial options are:

- Option 1 – Business as Usual;
- Option 2 – Urban Max;
- Option 3 – Public Transport Max;
- Option 4 – GMSF 2019 Spatial [Hybrid] Option; and
- Option 5 – Decentralisation / Sub-urbanisation.

Further detail including the IA of these spatial options can be found in Section 3.3.

## **3 The Integrated Assessment**

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### **3.1 Introduction**

This section contains a summary of the assessment of the growth and spatial options using the IA Framework.

Due to some options being carried over from 2019 and others being introduced as part of the 2020 draft GMSF preparation, there have been varying approaches to conducting these assessments, as detailed in the following sections.

### **3.2 IA of growth options**

Table 2 describes the 2020 draft GMSF growth options in further detail.

Due to these options being reintroduced for the 2020 draft GMSF, it was considered appropriate to conduct a full IA of all three growth options. A summary of these assessments is provided in Table 2. The summary follows the format below:

- Synergies with the IA Framework; and
- Enhancement and mitigation.

It should be noted that the enhancement and mitigation is provided for each option for completeness. The enhancement and mitigation is considered to be addressed primarily through the wording of strategic and thematic policies.

Appendix A contains the 2020 IA matrices associated with the growth options.



Table 2: 2020 growth options (Source: GMSF 2020 Growth and Spatial Options Paper, August 2020)

<b>2020 growth options</b>
<p><b>Growth Option 1: Business as usual – Limiting the level of growth to that capable of being delivered by the 2020 existing housing and employment land supply</b></p> <p>The business as usual growth option would see the level of growth (and distribution) being limited to what would be capable of being delivered by GM’s existing housing and employment land supply over the plan period 2020-2037, as identified at March 2020. A similar growth option has been considered previously, however, as it was proposed through consultation responses to the GMSF 2019, it has been considered appropriate to assess it again against the 2020 GMSF 2020 Vision and Strategic Objectives. This growth option would equate to:</p> <ul style="list-style-type: none"> <li>• Housing – 174,859 dwellings</li> <li>• Industrial and warehousing – 2,109,406 square metres</li> <li>• Offices – 3,179,682 square metres</li> </ul>
<p><b>Growth Option 2: Meeting GM’s Local Housing Need (LHN) and employment land Objectively Assessed Needs</b></p> <p>This growth option would see Greater Manchester meeting its overall housing and employment land needs. Over the plan period (2020-2037) this would require GM to identify sufficient land for the delivery of:</p> <ul style="list-style-type: none"> <li>• Housing – 179,078 dwellings</li> <li>• Industrial and warehousing – 4,075,000 square metres</li> <li>• Offices – 2,549,000 square metres</li> </ul> <p>Whilst this option would ensure that sufficient land was made available to meet the overall housing and employment land needs over the</p>

lifetime of the plan, there could be a slower level of growth in the early (up to first five) years of the Plan period, to take account of short-term impacts from the Covid-19 pandemic.

### **Growth Option 3: Meeting a higher level of new housing growth than GM's LHN**

As part of their response to the GMSF 2019 consultation, the Housing the Powerhouse Campaign group put forward a growth option which suggested a higher level of housing than that proposed in the GMSF 2019. The Campaign stated that instead of using GM's LHN as the housing target, the GMSF should use a 'figure that goes beyond the 227,000 homes included in the Outline of a Prospective Housing Package for Greater Manchester'. Although this option proposed "going beyond 227,000 homes", the level "beyond" was not quantified therefore this option assumes the delivery of 227,000 new homes over the lifetime of the plan, i.e. up to 2037.

Similarly, the campaign group did not suggest an overall employment land target in this scenario. However, in order to undertake an assessment of this growth option the employment land target needs to be quantified. As there is no prescribed methodology to do this, the employment land target for this option has been calculated based on an estimate of the number of jobs that 227,000 dwellings would demand in the industrial and warehousing and office sectors and equating that to a land requirement.

As this option was proposed through the GMSF 2019 consultation process, there is no specific account taken of potential short-term impacts from the Covid-19 pandemic. Over the plan period (2020-2037) this would equate to sufficient land being identified for the delivery of:

- Housing – 227,000 dwellings
- Industrial and warehousing – 4,348,000 square metres

- Offices – 2,814,000 square metres

### 3.2.1 Growth Option 1 – Business as usual

#### **Synergies with the IA Framework**

Growth Option 1 would not meet the LHN across GM and therefore does not align with IA objective 1. It would also limit sustainable growth of employment land, to existing land supply, thus impacting the ability to meet employment demand over the plan period; this option therefore shows a negative effect against IA objective 2.

With regard to reducing deprivation (IA objective 4) and the promotion of equal opportunities and eliminating discrimination (IA objective 5), this option does not meet the objectively assessed need for employment land and therefore could potentially negatively impact the ability of different areas to gain employment, dependent upon the location of sites.

In terms of health and wellbeing (IA objective 6), if both housing and employment provision does not meet the needs of an area, lifestyle quality could be impacted, thus reducing the need of an affected area.

As the existing land supply does not meet housing or employment need, there will be increased pressure and less sites available to provide necessary social facilities (IA objective 7) and green infrastructure (IA objective 11). However, a larger proportion of existing supply is brownfield or within an urban area. This option therefore has a positive impact against IA objective 17.

#### **Enhancement and mitigation**

The level of growth and distribution of sites could be increased in order to meet LHN and objectively assessed needs for employment land. However, amending this aspect would inherently alter Growth Option 1.

A strategic approach to sites would ensure land is well-connected and would adequately address the needs of different areas over the plan period.

### 3.2.2 Growth Option 2 – Objectively Assessed Needs

#### **Synergies with the IA Framework**

Option 2 performs well against IA objectives 1 and 2, as it innately meets the LHN and objectively assessed needs for employment land. Through the sustainable approach for site selection associated with this growth option, there is a positive effect against IA objective 3, as existing land supply sites are primarily located near transport hubs and GM will be able to select additional sites based on most preferred locations.

As both housing and employment land needs are met through this option, Option 2 performs well against reducing deprivation (IA objective 4), promoting equality of opportunity (IA objective 5), and supporting improvements in health and wellbeing (IA objective 6).

With regard to social facilities (IA objective 7) and green infrastructure (IA objective 11), although they are not explicitly mentioned, the strategic and sustainable selection of sites will provide flexibility for GM in identifying the most appropriate land for the varying needs of an area.

Much of the existing land supply is brownfield land or located in an urban area. This growth option will enable GM to identify additional land for development, thus providing an opportunity to focus on the redevelopment of brownfield or derelict locations (IA objective 17).

#### **Enhancement and mitigation**

As LHN and objectively assessed need is met already through this option, policy throughout the GMSF should ensure that sustainable transport and climate change adaptation is a focus for new housing and employment provision. This will further strengthen the sustainability and thus resiliency of this growth option.

Utilities and digital providers should be consulted with at the earliest stage of planning, to ensure growth can be adequately supported.

### 3.2.3 Growth Option 3 – Higher level of growth

#### **Synergies with the IA Framework**

Option 3 focuses on a higher growth scenario than what is identified to meet local need. Although this meets, and exceeds, LHN, it is likely to have a negative effect against IA objective 1 due to provision of housing potentially being underutilised. This option would have a positive effect against meeting demand for employment land (IA objective 2); however, due to the rate of growth required, land would be increasingly developed in unsustainable locations and would not be as well-served by infrastructure.

With regard to transport coverage and capacity, this option would not perform well against IA objective 3 as infrastructure would struggle to keep up with the scale of development associated with this option. Additionally, with Option 3, development would be located in unsustainable locations and therefore, less likely to be located near sustainable transport links (IA objective 9).

Although this option would provide increased employment opportunity, in the long-term there would likely be a negative impact on equality of opportunity (IA objective 5) and health and wellbeing (IA objective 6), due to sites being located in inaccessible locations across GM.

Air quality (IA objective 10), green infrastructure (IA objective 11) and climate change impacts (IA objective 12) are likely to see a negative effect over the medium to long-term. Whilst the increased amount of land options could allow more opportunity for green infrastructure and new wildlife locations, the high rate of housing development would put increased pressure on the green infrastructure network. Additionally, the dispersed nature of this growth option would increase greenhouse gas emissions (IA objective 15) and likely exacerbate transport impact on climate change and air quality.

#### **Enhancement and mitigation**

In order to reduce the climate change, air quality and green infrastructure impacts associated with this option, sites should be restricted and focused

around sustainable locations across GM. Increasing the placement of sites nearer to transport links would also increase the health and wellbeing of the population, who could be negatively impacted by the unsustainably-located growth in this option.

### **3.3 IA of spatial options**

A total of five spatial options were developed during the preparation of the 2020 draft GMSF. For ease of reference these are listed below:

- Option 1 – Business as Usual (carried forward from 2019);
- Option 2 – Urban Max (carried forward from 2019);
- Option 3 – Public Transport Max (new);
- Option 4 – GMSF 2019 Spatial Option (carried forward from 2019);  
and;
- Option 5 – Decentralisation / Sub-urbanisation (new).

As previously mentioned in Section 2.2.2, three have been carried forward from the 2019 GMSF and two have been introduced as a result of 2019 GMSF consultation.

Therefore, these will be assessed slightly differently as presented in the following Sections 3.3.1 and 3.3.2.

The assessment is based on information provided in the draft Growth and Spatial Options Report and is based on relative quanta of development relative to assessed needs, rather than absolute figures.

#### **3.3.1 Independent review of the 2020 spatial options carried forward from 2019 GMSF**

This section of the assessment serves as an independent review of three options from the 2019 GMSF IA, which was conducted by GMCA in January 2019 (as part of the Revised Draft GMSF Spatial Options 2019). In essence, GMCA's assessment matrices on the three options which have been brought forward as 2020 spatial options, have been checked as

a peer review (see Appendix B for the relevant 2019 IA matrices) and a summary has been provided within this section.

As part of the 2020 IA process, it was determined that an additional IA was not needed at this point in time on these options, as the 2019 IA utilised the IA Framework. Additionally, the options have not been amended since the GMSF 2019. However, an independent review process has been undertaken to ensure consistency between these options and the appraisal of the newly introduced 2020 spatial options (refer to Section 3.3.2).

For clarity, Table 3 contains the 2019 spatial options and their corresponding 2020 spatial options. The subsequent review summaries are set out as follows:

- Commentary on the 2019 draft GMSF IA for this option;
- Differing assessment conclusion from the 2019 draft GMSF IA for this option; and
- Enhancement and mitigation.

The 'differing assessment conclusion' section has been provided to highlight inconsistencies found, if any, between the 2019 draft GMSF IA scoring and this 2020 independent review.

Additionally, enhancement and mitigation suggested is part of the 2020 IA independent review. However, it is considered the enhancement and mitigation can be addressed primarily through the wording of strategic and thematic policies, as noted in the Growth and Spatial Options Report.

Table 3: 2019 / 2020 equivalent GMSF spatial options

<p><b>2019 spatial option</b> (Source: Revised Draft GMSF Spatial Options 2019, January 2019)</p>	<p><b>Corresponding 2020 spatial option</b> (Source: GMSF 2020 Growth and Spatial Options Paper, August 2020)</p>
<p><b>Option 1 – Business as usual</b></p> <p>This Option projects forward existing development trends. New housing and employment sites are those which are already identified in the baseline housing and employment land supply (SHLAA). The baseline supply includes sites which are allocated in an adopted district Local Plan or which have planning permission.</p> <p>The baseline housing land supply is focused in and around the urban area, including the regional centre (Manchester and Salford), town centres and other locations in and around the urban area. The employment land supply is focused on existing employment locations, with higher density development in the City Centre and the Quays as</p>	<p><b>Option 1 – Business as usual</b></p> <p>This Option projects forward existing development trends. New housing and employment sites are those which are already identified in the existing housing and employment land supply (as at March 2020) and which have been subject to an optimisation process to ensure efficient use of land. The existing supply includes sites which are allocated in an adopted district Local Plan or which have planning permission.</p> <p>The existing housing land supply is focused in and around the urban area, including the city centre (Manchester and Salford), town centres and other locations in and around the urban area. The employment land supply is focused on existing employment locations, with higher</p>



<p>well as lower density development in locations such as Trafford Park. The business as usual option includes no Green Belt release.</p> <p><b>RESIDENTIAL TOTAL – 181,500 units</b></p> <p><b>INDUSTRY AND WAREHOUSING TOTAL – 2,627,429 square metres</b></p> <p><b>OFFICE TOTAL – 2,806,705 square metres</b></p>	<p>density development in the City Centre and the Quays as well as lower density development in locations such as Trafford Park. The business as usual option includes no Green Belt release.</p>										
<p><b>Option 2 – Urban max</b></p> <p>Option 2 would maximise housing growth in and around the urban area by significantly increasing densities on sites in the baseline housing land supply in accordance with the density assumptions below. No Green Belt release would be required.</p> <table border="1" data-bbox="100 1042 665 1187"> <thead> <tr> <th>Location</th> <th>Minimum net residential density (dwellings per hectare)</th> </tr> </thead> <tbody> <tr> <td>City Centre</td> <td>200</td> </tr> <tr> <td>Town Centres</td> <td>200</td> </tr> <tr> <td>Other designated centres</td> <td>120</td> </tr> <tr> <td>Other locations</td> <td>70</td> </tr> </tbody> </table> <p><b>RESIDENTIAL TOTAL – 219,000 units</b></p>	Location	Minimum net residential density (dwellings per hectare)	City Centre	200	Town Centres	200	Other designated centres	120	Other locations	70	<p><b>Option 2 – Urban max</b></p> <p>Option 2 would maximise housing growth in and around the urban area by significantly increasing densities on sites in the existing housing land supply in accordance with the density assumptions below. Close to a centre is defined as being within 800m of a defined centre boundary. It would use the existing land supply for employment growth. This Option does not anticipate Green Belt release.</p>
Location	Minimum net residential density (dwellings per hectare)										
City Centre	200										
Town Centres	200										
Other designated centres	120										
Other locations	70										

<p><b>INDUSTRY AND WAREHOUSING TOTAL – 2,731,000 square metres</b></p> <p><b>OFFICE TOTAL - 2,807,000 square metres</b></p>	<table border="1"> <thead> <tr> <th>Location</th> <th>Minimum net residential density (dwellings per hectare)</th> </tr> </thead> <tbody> <tr> <td>City Centre</td> <td>200</td> </tr> <tr> <td>Town Centres</td> <td>200</td> </tr> <tr> <td>Other designated centres</td> <td>120</td> </tr> <tr> <td>Other locations</td> <td>70</td> </tr> </tbody> </table>	Location	Minimum net residential density (dwellings per hectare)	City Centre	200	Town Centres	200	Other designated centres	120	Other locations	70
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City Centre	200										
Town Centres	200										
Other designated centres	120										
Other locations	70										
<p><b>N/A</b></p>	<p><b>Option 3 – Public Transport Max – new option for 2020 responding to 2019 consultation</b></p>										
<p><b>Option 6 – Hybrid Growth</b></p> <p>The hybrid option is a combination of Option 3, Option 4 and Option 5.</p> <p>It includes (as set out in Option 3) the optimised baseline housing land supply, as well as sites which are currently outside of the urban area but which are within 800m of a town centre or sustainable public transport hub. This option therefore takes advantage of the most sustainable locations in Greater Manchester.</p> <p>The option also includes sites which take advantage of existing and planned global assets (Option 5), as well as strategically important</p>	<p><b>Option 4 – GMSF 2019 Spatial Option</b></p> <p>Following the assessment of the spatial options for the 2019 GMSF, this option was chosen as the preferred approach to deliver the distribution of growth across GM because none of the alternative options assessed in 2019 were considered, on their own, to fully deliver the GMSF Vision and Objectives. Also, this option had the least negative impact on economic, social, environmental and health objectives in the 2019 Integrated Assessment appraisal framework. In the 2019 Spatial Options Report this option was identified as a ‘Hybrid Growth Option’ as it combined the ‘Transit City Option’ with the</p>										

locations which have the potential to deliver transformational change (Option 4).

As well as sites which are close to an area of deprivation where it is considered they could have a regenerative effect on an adjacent area of deprivation. This is similar to the proposal in Option 4, but applies to sites across Greater Manchester, not just those in the north.

This option requires some Green Belt release.

**RESIDENTIAL TOTAL – 201,000 units**

**INDUSTRY AND WAREHOUSING TOTAL – 4,220,000 square metres**

**OFFICE TOTAL - 2,460,000 square metres**

‘Boosting Northern Competitiveness’ and ‘Sustaining Southern Competitiveness’ spatial options.

In light of the outcome of the assessment in 2019, the fact that this spatial option was the preferred option in 2019 and that no evidence has been put forward to suggest that this is no longer a reasonable alternative, it is proposed to assess the 2019 draft GMSF spatial option as a reasonable alternative for the 2020 draft GMSF, rather than its individual component parts.

For the 2020 draft GMSF, this option uses the existing housing land supply at March 2020, which has been subject to an optimisation process, as well as sites which are currently outside of the urban area but which are within 800m of a town centre or sustainable public transport hub. This option therefore takes advantage of the most sustainable locations in Greater Manchester. It does also include sites which take advantage of existing and planned global assets, as well as strategically important locations which have the potential to deliver transformational change. Whilst this option includes areas where new

	sites could have a regenerative effect on an adjacent area of derivation it does require limited Green Belt release.
<b>N/A</b>	<b>Option 5 – Decentralisation/sub-urbanisation – new option for 2020 responding to 2019 consultation</b>

### 3.3.2 2020 Spatial Option 1 – Business as Usual

#### **Commentary on the 2019 draft GMSF IA for this option**

This option utilises existing development trends and land supply; sites are those indicated in the land supply as of March 2020. Although this option would positively support development of brownfield land (IA objective 17), this option would not meet the LHN over the plan period and therefore would have a negative effect on ensuring an appropriate quantity of housing to meet the objectively assessed need as covered by IA objective 1. As such, the effect of the housing shortfall would become increasingly detrimental in the long-term. It is agreed that this effect would be permanent given the assumption that there would be no interventions with this 'business as usual' approach.

In terms of employment land, there would be an undersupply with this spatial option and therefore, a negative effect on employment land as covered by IA objective 2. Similar to the housing criteria, this effect would intensify in the long-term, especially as much of the land in the current land supply already has planning permission.

It is uncertain how this undersupply of housing would affect the mix of types, tenures and size of properties or if this option would ensure land is well-served by physical and social infrastructure. However, Option 1 includes sites which are allocated in adopted district Local Plans so it is considered that these sites should be situated in sustainable locations.

It is agreed that there will be an uncertain effect on promoting equality of opportunity and eliminating discrimination as covered by IA objective 5. As development comes forward, this could link communities together, but further details would need to be considered by each district.

#### **Differing assessment conclusion from the 2019 draft GMSF IA for this option**

With regard to health and wellbeing, it is considered that this option could have a positive effect in the medium-term as houses and employment land are developed and providing communities with high-quality housing.

However, it is considered that the long-term effect may be uncertain or negative as seen under IA objective 6, which differs from the 2019 IA, due to the fact that if housing and employment land is not meeting demand, that health and wellbeing of communities could be impacted negatively.

### **Enhancement and mitigation**

Mitigation for any housing and employment land undersupply would require a strategic approach to determine where shortfall could be accommodated throughout the 10 GM districts. However, going above and beyond the existing land supply would alter this spatial option significantly.

A strategic transport, social infrastructure, green infrastructure, and educational/training approach could also mitigate any additional pressure on these systems brought about by 'business as usual' seen in Spatial Option 1. Ensuring a strategic approach is taken will allow needs to be assessed across varying areas, to consider where demand is highest, rather than allow the existing land supply to solely determine location of necessary infrastructure.

### **3.3.3 2020 Spatial Option 2 – Urban Max**

#### **Commentary on the 2019 draft GMSF IA for this option**

This option was determined to meet the LHN through increasing housing density on existing land supply in urban areas. It would therefore have a positive effect on meeting the objectively assessed need but a negative effect on meeting the appropriate level of housing types/tenures due to the high-density approach required (IA objective 1). It would also use existing urban land supply for employment growth and would therefore have a detrimental impact on meeting future demand for employment land, covered by IA objective 2, as only certain types of sites could be accommodated in the urban environment.

Due to the concentration of development in urban areas, this option will have well-connected sites which link to the existing network, thereby

having a positive effect for ensuring transport coverage (IA objective 3). It would also likely reduce deprivation in those urban areas experiencing growth, and therefore have a positive effect on reducing levels of deprivation (IA objective 4); however, this approach may overlook certain deprived areas and potentially increase deprivation elsewhere.

With regard to equality of opportunity and eliminating discrimination (IA objective 5), a focus on urban densification may be likely to increase access to facilities and infrastructure for those moving into urban areas. However, this densification will have a strong negative effect on access to green space (IA objective 6) as the existing green infrastructure will see a higher number of users from new development.

Option 2 will see a predominantly positive effect on IA objective 9 as this focuses on sustainable modes of transport. Increasing urban density will ensure residents and users of the sites are close to amenities and transport links.

With regard to resilience to climate change (IA objective 12) and flood risk (IA objective 13), this option would demonstrate an uncertain and potentially negative effect in the long-term as increasing urban development will exacerbate the urban heat island effect and could increase flooding. Densification could also have an uncertain or potentially negative long-term effect on conservation of heritage assets in the affected urban areas (IA objective 16). However, densification will ensure land is utilised efficiently and sustainability as many urban sites are previously developed land; Option 2 will therefore have a positive impact on IA objective 17.

**Differing assessment conclusion from the 2019 draft GMSF IA for this option**

There have been no identified assessment scores varying from the 2019 IA.

### **Enhancement and mitigation**

Mitigation for lack of housing mix and employment land undersupply would require a strategic approach to determine where shortfall could be accommodated throughout the 10 GM districts. However, going above the existing land supply or developing larger housing options (i.e. needing to develop outside of the urban area) would alter this spatial option significantly.

A strategic transport, utilities, and green infrastructure approach could enhance Option 2 to prevent these networks becoming stressed in the long-term. Ensuring a strategic approach is taken will allow needs to be assessed across varying areas, to consider where demand is highest, rather than allow the existing land supply to determine location of necessary infrastructure. Policy will also need to ensure climate change mitigation, such as for potential urban heat island effects and flood risk associated with this spatial option.

### **3.3.4 2020 Spatial Option 4 – 2019 draft GMSF Spatial Option**

#### **Commentary on the 2019 draft GMSF IA for this option**

This option was created as an additional 6<sup>th</sup> option for the 2019 GMSF following the 2019 IA of spatial options. For the 2020 version of this option, the existing land supply is taken at March 2020.

This 2020 Option 4 strongly aligns with IA objective 1, as it meets the LHN as well as supports delivery of a mix of types, tenures and sizes of dwellings throughout GM. The range of employment locations will also strongly align with meeting future demand (IA objective 2). As the focus is on sites within 800m of a town centre or sustainable transport hub, there is also a positive effect for transport coverage and capacity, as seen in IA objective 3. This option also strongly aligns with IA objective 9 since it innately promotes sustainable modes of transport.

As this option seeks to provide homes and jobs in urban areas and close to town centres or transport hubs, it performs well against reducing



deprivation and promoting equality of opportunities (IA objective 5), through connecting deprived areas and people to facilities and infrastructure. It therefore aligns with supporting healthier lifestyles as covered by IA objective 6.

Increased development in areas needing growth would equate to increased developer contributions. Social infrastructure and educational facilities could therefore see a positive effect from such development (IA objective 7). However, as development would be focused on certain sustainable locations, facilities in these areas could experience stress and may struggle to meet demand.

In terms of green infrastructure and biodiversity, Option 4 is likely to have a positive effect on conservation (IA objective 11). However, there could be uncertain biodiversity outcomes in regard to Green Belt release. As with Option 2, Option 4 could exacerbate the urban heat island effect with focusing development in already developed areas, thus increasing energy demand in such areas.

This option aligns strongly with IA objective 17 as it will focus development on brownfield land and sustainable locations.

### **Differing assessment conclusion from the 2019 GMSF IA for this option**

There have been no identified assessment scores varying from the 2019 IA.

### **Enhancement and mitigation**

Mitigation for potential stress on social infrastructure and educational facilities associated with this option could include limited Green Belt release, where new sites would have an overall regenerative effect on a community. To ensure Green Belt release is undertaken sustainably, release should focus on sustainable transport use, discouraging personal car journeys, and conserving the natural environment through creation of new green space elsewhere.

This option could also be enhanced by protecting key townscape and heritage assets through carefully considered design. Protection should also be afforded to versatile agricultural land.

### 3.3.5 Additional 2020 spatial options

As previously mentioned, as a result of the 2019 draft GMSF consultation, two alternative spatial options were developed for the 2020 draft GMSF. These options are contained in Table 4, followed by the summaries of the assessments. Appendix C contains the 2020 IA matrices associated with these two spatial options.

These summaries are set out as follows:

- Synergies with the IA Framework; and
- Enhancement and mitigation.

It is considered that the enhancement and mitigation recommended can be addressed primarily through the wording of strategic and thematic policies.

Table 4: New spatial options introduced in 2020 draft GMSF (Source: GMSF 2020 Growth and Spatial Options Paper, August 2020)

2020 spatial option
<p><b>Option 3 – Public Transport Max</b></p> <p>This option uses the increased density ratios set out in Option 2, however the highest densities would also be applied close to sustainable transport nodes whether within a defined centre or not, with the highest densities being applied close to multi modal sustainable public transport hubs.</p> <p>Close to a sustainable transport node or multi modal hub is defined as being within 800m of that facility. Public transport hubs included in this option are Metrolink stops, Bus Rapid Transit stops and Railway Stations with at least 2 trains per hour. These are considered to be the</p>

most sustainable existing locations and development in these areas will take advantage of existing assets close to these transport nodes. This option does not anticipate Green Belt release.

### **Option 5 – Decentralisation/sub-urbanisation**

The overall trend of this option would be that growth in the Core Growth Area, in particular the City Centre, would be reduced and redistributed to the edges of the urban area, due to a number of factors, including:

- Increased levels of homeworking and the City Centre becoming less of a focus for: work; a place to do business; shopping; retail; leisure; and eating.
- Increased role for smaller town centres, local and neighbourhood centres.
- Reduced confidence in high density apartment living in the City Centre and trend for people to seek to live on the outskirts of Greater Manchester in low density developments.
- New and existing offices downsize and/or relocate to the edge of the urban area in locations accessible predominantly by car.
- Increased demand for low density out-of-town retail outlets and leisure destinations that are accessible by car become more popular.
- Online retail increases, which in turn creates a greater demand for industry and warehousing floorspace on the outskirts of GM.

This option assumes that the anticipated shift away from future growth in the City Centre and the main town centres would see 30% less residential and employment land becoming available in these locations, compared to the March 2020 existing land supply and that growth being redistributed to edge of and beyond the urban area.

### 3.3.6 2020 Spatial Option 3 – Public Transport Max

#### **Synergies with the IA Framework**

This option seeks to concentrate development in sustainable locations close to transport nodes, whether within a defined centre or not. Although it meets LHN and therefore aligns with IA objective 1, there is some uncertainty whether an appropriate mix of housing will be delivered or whether sites will be well-connected to opportunities. In regard to location of employment land (IA objective 2), this option would limit the size of larger clusters and could have a negative effect on meeting future demand.

As the development trend associated with this option is focused on transport hubs, this option mostly aligns with IA objective 3 in regard to ensuring there is sufficient transport coverage. However, it is uncertain whether utilities and digital infrastructure would be equipped to meet this growth.

IA objective 5 concerns equality of opportunity and eliminating discrimination. Development for Option 3 will be high-density and will have an uncertain effect on fostering good relations between people, as these developments tend to breed antisocial behaviour.

Being situated near transport links will have a positive effect on accessing facilities. However, due to these concentrated areas potentially becoming overdeveloped, this could increase pressure on existing infrastructure, including green spaces, and have a potentially negative effect on health (IA objective 6).

Option 3 performs well against IA objective 9 as it innately promotes sustainable modes of transport due to densifying development near public transport. It also promotes development on previously developed land and in sustainable locations, thus aligning with IA objective 17. However, it is uncertain how this option will affect landscape quality and character of open spaces (IA objective 16).

### **Enhancement and mitigation**

Mitigation for employment undersupply could include considering where these larger, clustered employment sites could be located across GM. However, locating sites away from transport hubs would alter the main premise of this option.

Digital and utilities infrastructure providers should be consulted at the earliest stage of development for this option, to ensure existing networks do not reach capacity with the densification approach.

Policy should emphasise the importance and value of multifunctional green space and should seek to reduce climate impacts (e.g. urban heat island effects) caused by high-density building around existing hubs.

### **3.3.7 2020 Spatial Option 5 – Decentralisation / Sub-urbanisation**

#### **Synergies with the IA Framework**

Option 5 seeks to redistribute growth away from the urban Core Growth Area to the edge of the urban area and beyond. Housing and employment land would not be well-connected with this dispersed option. Therefore, a mostly negative effect would be seen against IA objectives 1 and 2.

With regard to transport coverage and capacity, this option would provide scattered settlements, putting increased pressure on the transport network and reducing transport connectivity of sites coming forward (IA objective 3). Social infrastructure (IA objective 7) would also be negatively impacted as a result of this option, as the sprawl of sites would exacerbate the impact in areas already disconnected from such infrastructure.

This development approach would also negatively impact those seeking employment and would be likely to increase disparity and deprivation (IA objective 4) in already deprived wards, further cutting them off from surrounding opportunities. Health and wellbeing (IA objective 6) would see a negative impact through increasing levels of disparity; however, as

sites would be located away from urban areas, access to green space would likely see an improvement for new development.

With regard to IA objective 9, Spatial Option 5 would have an increasingly negative impact on the promotion of sustainable transport modes due to the dispersed nature of this option. Private car journeys would likely increase as a result, which would negatively impact emissions (IA objective 15), air quality (IA objective 10) and resilience to climate change effects (IA objective 12).

Previously developed land would be significantly underutilised with this option and therefore, there would be an increasingly detrimental impact over time against IA objective 17.

### **Enhancement and mitigation**

Additional land supply would need to be identified to meet the housing need. A strategic approach should be taken to both housing and employment locations, to ensure sites are well-served by sustainable physical and social infrastructure. Ensuring a strategic approach is taken will allow needs to be assessed across varying areas, to consider where demand is highest, rather than allow the notion of decentralisation to determine location of necessary infrastructure. However, such an approach would amend this spatial option significantly.

Air quality, emissions, and climate change impacts should be mitigated through discussions with TfGM regarding the emerging GM Clean Air Plan.

## 4 Conclusion

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### 4.1 Summary of options appraisal

Section 3 of this report summarises the IA of both the growth and the spatial options for the 2020 draft GMSF. It also outlines proposed enhancement and mitigation, in order to further strengthen the implementation of the policy.

It is considered that enhancement and mitigation on the preferred options can be taken forward primarily through the implementation of GMSF policies. For completeness, enhancement and mitigation have been included within this report for every option as presented in the 'GMSF 2020 Growth and Spatial Options – Draft for Appraisal' (August 2020).

The key findings from the assessment of the growth and spatial options are summarised below.

#### 4.1.1 Growth options

Option 1 represents business as usual and limits growth to the 2020 existing land supply. This option would prevent GM from meeting both its LHN and its objectively assessed needs for employment land, which would have a negative effect on numerous IA objectives and would prevent sustainable growth across GM.

Option 2 allows identification of sufficient land to meet local needs, thus affording the flexibility to ensure housing and employment land needs are met sustainably across GM throughout the GMSF plan period.

Option 3 involves an increased amount of land in order to provide additional housing and employment opportunity. However, benefit from these aspects could be offset by the decrease in connectivity and increase in detrimental climate change effects associated with this option.

### **4.1.2 Spatial options**

Option 1 represents business as usual and does not meet the LHN or employment land need. It does not anticipate Green Belt release.

Although Option 2 does achieve the LHN through a significant focus on densification in the urban area, this would likely increase pressure on nearby services including green infrastructure. It also does not anticipate Green Belt release.

Option 3, a new option introduced for the 2020 draft GMSF, aims to concentrate development in sustainable locations close to transport nodes, whether within a defined centre or not. Although it does not anticipate Green Belt release and would meet numerical need, similar to Option 2 it would cause increased pressure on the urban area as well as increased pressure in locations surrounding transport hubs.

Option 4 is the hybrid option carried forward from the GMSF 2019. This option would deliver a full range of housing in sustainable locations. Opportunities would generally be maximised, including access to urban green space and employment opportunities.

Option 5, another new option for the 2020 draft GMSF, focuses on moving development away from the Core Growth Area and to the urban fringe, and beyond. This would have a detrimental effect on accessibility and inclusivity, and would also significantly increase private car journeys.

## **4.2 Mitigation and enhancement**

This 2020 Growth and Spatial Options IA Report is an independent IA of the options described above. The following summarises the mitigation and enhancement recommended for the 2020 draft GMSF preferred growth and spatial options.

As explained above, the enhancement and mitigation can be addressed primarily through the wording of strategic and thematic policies. The following therefore provides a commentary on how the 2020 draft GMSF



thematic policies address the growth and spatial options recommended mitigation and enhancement.

#### **4.2.1 Growth Option 2: Meeting GM's Local Housing Need (LHN) and employment land Objectively Assessed Needs.**

As LHN and objectively assessed need is met already through this option, policy throughout the GMSF should ensure that sustainable transport and climate change adaptation is a focus for new housing and employment provision. This will further strengthen the sustainability and thus resiliency of this growth option.

Utilities and digital providers should be consulted with at the earliest stage of planning, to ensure growth can be adequately supported.

As explained above, it is considered that the mitigation can primarily be delivered through the implementation of the relevant thematic policy.

GM-Strat 14 (A Sustainable and Integrated Transport Network) acknowledges the new development will have in delivering GM's future sustainable and integrated transport network. Whilst it does not explicitly mention housing or employment, it does include all development. Policies GM-N 3 (Public Transport) and GM-N 5 (Walking and Cycling) also reinforce accessibility by non-car modes. Policy GM-N 7 also sets out what is expected of all development in GM with regard to movement.

As noted in the updated 2020 IA Scoping Report, there has been an increase in emphasis on climate change, with all ten GM authorities declaring a climate emergency. It is considered that this issue is covered by policies within the Sustainable and Resilient Greater Manchester chapter, and with further recommendations made in the 2020 IA, this can be strengthened further.

With regard to the recommendations around working with utility and digital providers, it is considered that this will be primarily achieved through the implementation of GM-N 2 (Digital Connectivity) and GM-D 1

(Infrastructure Implementation). GM authorities at the local level will be able to encourage and facilitate this collaboration.

#### **4.2.2 Spatial Option 4: GMSF 2019 Spatial [Hybrid] Option**

Mitigation for potential stress on social infrastructure and educational facilities associated with this option could include limited Green Belt release, where new sites would have an overall regenerative effect on a community. To ensure Green Belt release is undertaken sustainably, release should focus on sustainable transport use, discouraging personal car journeys, and conserving the natural environment through creation of new green space elsewhere.

This option could also be enhanced by protecting key townscape and heritage assets through carefully considered design. Protection should also be afforded to versatile agricultural land.

As explained above, it is considered that the mitigation can primarily be delivered through the implementation of the relevant thematic policy.

Ensuring that Green Belt release focuses on sustainable transport and creation of green space elsewhere is outlined in the relevant thematic policies such as GM-Strat 6, Sustainable transport policies within the Our Network Chapter and A Greener Greater Manchester. Policies within the GMSF additionally seek to ensure land is released in sustainable locations.

Policies throughout the GMSF address design quality and responding to local context, and also heritage conservation and enhancement, in particular Policy GM-E 1 and GM-E 2. Policy GM-G 9 additionally seeks to ensure biodiversity enhancement and to safeguard 'best and most versatile' agricultural land.

### **4.2.3 Conclusion**

A series of mitigation and enhancement recommendations have been made for each option. Those relating to the preferred options can primarily be implemented through the appropriate thematic policies.

## Appendix A – 2020 IA matrices on growth options (Arup, August 2020)

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**See accompanying assessment tables.**

## Appendix B – 2019 IA matrices (January 2019) on 3 spatial options brought forward from 2019 GMSF

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**See accompanying assessment tables.**

## **Appendix C – 2020 IA matrices (Arup, August 2020) on 2 additional spatial options developed for 2020 draft GMSF**

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**See accompanying assessment tables.**