November 2020

Transport Locality Assessments

Introductory Note and Assessments – Manchester allocations

GMSF 2020

GREATER MANCHESTER
DOING THINGS DIFFERENTLY

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1. Background

1.1 Greater Manchester Spatial Framework (GMSF)

1.1.1 The GMSF is a joint plan of all ten local authorities in Greater Manchester, providing a spatial interpretation of the Greater Manchester Strategy which will set out how Greater Manchester should develop over the next two decades up to the year 2037. It will:

- identify the amount of new development that will come forward across the 10 Local Authorities, in terms of housing, offices, and industry and warehousing, and the main areas in which this will be focused;
- ensure we have an appropriate supply of land to meet this need;
- protect the important environmental assets across the conurbation;
- allocate sites for employment and housing outside of the urban area;
- support the delivery of key infrastructure, such as transport and utilities;
- define a new Green Belt boundary for Greater Manchester.

1.1.2 The Plan focuses on making the most of Greater Manchester's brownfield sites, prioritising redevelopment of town centres and other sustainable locations. The Plan is required to demonstrate that Greater Manchester has enough land to deliver the homes and jobs people require up until 2037, and whilst there is an expectation that the focus of development will be on brownfield sites in the early years, it is recognised that some land will need to be released from the green belt to fully meet Greater Manchester's housing and employment requirement.

1.1.3 The comments from the Draft GMSF 2019, together with local and national policy, have helped to inform the Locality Assessments methodology for the Draft GMSF 2020. More information on the consultation comments can be found in the Consultation Statement and within each of the Allocation Locality Assessments.

1.1.4 This document has been prepared as evidence for the GMSF and is part of a suite of documents that examine the implications of the GMSF on transport in Greater Manchester. The other documents are:

- Greater Manchester Transport Strategy 2040 and supporting Five Year Transport Delivery Plan. These documents together set out our strategic aspirations for transport in Greater Manchester and articulate our plan for delivery.
- Greater Manchester Transport Strategy 2040 'Right Mix' Technical Note. This note describes the 'Right Mix' transport vision and sets out a pathway to achieving this vision.
- GMSF Existing Land Supply and Transport Technical Note. This describes the distribution and quantity of the Existing Land Supply, identified key growth areas, and considers the relationship of these growth areas to the transport schemes proposed within the Greater Manchester Transport Strategy Delivery Plan.
- GMSF Allocations Strategic Modelling Technical Note. This provides analysis of the potential strategic impact of growth on our transport network in a "policy-off" scenario.

1.2 Policy Context – The National Planning Policy Framework

1.2.1 The National Planning Policy Framework sets out the Government's planning policies for England and Wales and how these are to be applied. It provides a framework for which locally prepared plans for housing and development, such as the GMSF, can be produced.

1.2.2 The NPPF makes it clear that transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- the potential impacts of development on transport networks can be addressed;
- opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- opportunities to promote walking, cycling and public transport use are identified and pursued;
- the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

1.2.3 The NPPF makes clear that when assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users; and
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

1.2.4 Importantly, NPPF states that: 'development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'. (NPPF, Chapter 9, Para 109).

1.2.5 In order to ensure that the requirements of the NPPF were fully met and that that these allocations can be brought forward and operate sustainably within the context of the wider transport network, Transport for Greater Manchester (TfGM), on behalf of the ten Greater Manchester Local Planning Authorities, appointed SYSTRA Ltd to oversee the development of Locality Assessments for each site.

1.2.6 These Locality Assessments forecast the likely level and distribution of traffic generated by each Allocation and assess its impact on the transport network. Where that impact is considered significant, possible schemes to mitigate that impact and reduce it back to the reference level of operation have been developed, tested and costed. Potential mitigations could include the introduction of new public transport schemes, cycling and walking routes, as well as highway engineering solutions. Where suitable mitigations could not be identified, a decision to either reduce the level of development at the Allocation such that it had a lesser impact on the transport network, or to remove the site from the GMSF completely were considered.

1.2.7 It is important to note that the mitigation schemes developed are intended to demonstrate only that significant transport impacts of the Allocation can be appropriately ameliorated. As such they are indicative only, and are not intended to

act as a definitive proposal for the mitigation of any Allocation, which would be developed as part of a Transport Assessment submitted as part of a planning application at a later date.

1.2.8 The Locality Assessments are one of a number of pieces of evidence developed in order to assess and evaluate the impact of the GMSF proposals on the transport network and focus only on the sites being allocated in the Plan. The majority of sites proposed for development are actually contained within the existing land supply (ELS) and have been split into three subcategories; Homes (both houses and apartments), Offices, and Industry and Warehousing. A separate "Existing Land Supply and Transport Technical Note" describes the quantity and distribution of the ELS, the key growth areas and the relationship between areas and the transport schemes proposed to serve them.

1.2.9 Transport for Greater Manchester has also worked closely with Highways England to understand the impact that the Allocations may have on the Strategic Road Network (SRN). SYSTRA Ltd was asked to carry out an exercise to assign the 'with GMSF' traffic flows to an representation of an empty SRN network and to produce network stress maps which identified areas of significant delay on the network, as well as providing detailed breakdowns of GMSF Allocation traffic for key sections of the SRN. This exercise has enabled all parties to move towards a common understanding of where the most significant traffic impacts are likely to occur, and provides a common basis to enable Highways England to make investment decisions as part of future Road Investment Strategy (RIS) planning discussions.

1.3 Policy Context – Greater Manchester Transport Strategy 2040

1.3.1 It is important to recognise that the GMSF has been developed with the benefit of an adopted Local Transport Plan – the Greater Manchester Transport Strategy 2040 (hereafter referred to as the 2040 Transport Strategy). The 2040 Transport Strategy has an established long-term vision for transport, of providing *world class connections that support long-term, sustainable economic growth and access to opportunity for all*. The four key elements of this vision are:

- Supporting sustainable economic growth;
- Protecting the environment;
- Improving quality of life for all; and,
- Developing an innovative city region.

1.3.2 The 2040 Transport Strategy was first published in February 2017. The Strategy has undergone a 'light touch' refresh to reflect work undertaken and the changed context, since 2017. As well as refreshing the 2040 Transport Strategy, to support the GMSF an updated Five Year Transport Delivery Plan has also been prepared. It sets out the practical actions planned to deliver the 2040 Transport Strategy and achieve the ambitions of the GMCA and the Mayor, providing a coordinated approach to transport investment. It is also intended to inform the development of the Greater Manchester Infrastructure Programme (GMIP).

1.3.3 Covid-19 has had a massive health and economic impact on our city region, affecting every person and every business in our city-region. The impact from the pandemic has not been equal or fair, highlighting inequalities across Greater Manchester. Travel demand remains well below levels prior to the pandemic and, although it is increasing, it is clear that Greater Manchester's plans for transport and other policy areas will need to be adaptive as the recovery continues.

1.3.4 The aim will be to "lock in" some of the benefits our neighbourhoods, communities, towns and cities have experienced from lower vehicle traffic levels and embracing the opportunities to be more productive through flexible working and accessing services through high quality digital systems. The vision is for a future where walking and cycling are the obvious choice for shorter journeys and where the past dependency on the car is superseded by a reliable and responsive public transport system. Our Five Year Transport Delivery Plan sets out those first steps, from a transport and place making perspective to support leading the recovery and creating a stronger, sustainable and resilient Greater Manchester.

1.3.5 The Our Network policies in the GMSF and in Our Five Year Transport Delivery Plan support the implementation of "Our Network", a ten-year plan to create an integrated, modern and accessible transport network for Greater Manchester. The Delivery Plan brings together different modes of public transport –- bus, tram, rail,

tram-train and cycling and walking in an integrated, easy-to-use system with seamless connections, and simplified ticketing and fares.

1.3.6 The Five Year Delivery Plan has been prepared to respond to the transport opportunities and challenges facing Greater Manchester, in parallel with the development of the Greater Manchester Spatial Framework (GMSF). Together, these documents provide an integrated approach to transport and land use planning by identifying the strategic transport interventions required to deliver the scale of growth set out in the GMSF. It also supports the priorities of the Greater Manchester Strategy (2018).

1.3.7 A key ambition is to improve our transport system so that, by 2040, 50% of all journeys in Greater Manchester are made by public transport or active travel, supporting a reduction in car use to no more than 50% of daily trips. This will mean one million more sustainable journeys every day in Greater Manchester by 2040, enabling us to deliver a healthier, greener and more productive city-region – this is known as the "Right Mix". Achieving the Right Mix is expected to lead to zero net growth in motor vehicle traffic in Greater Manchester between 2017 and 2040.

1.3.8 Fundamental to delivering the Right Mix will be the adoption of a "Streets for All" framework – to enable more people to walk, cycle and use public transport, and improve reliability for, in particular, buses and freight vehicles on the key route network serving our towns and Regional Centre.

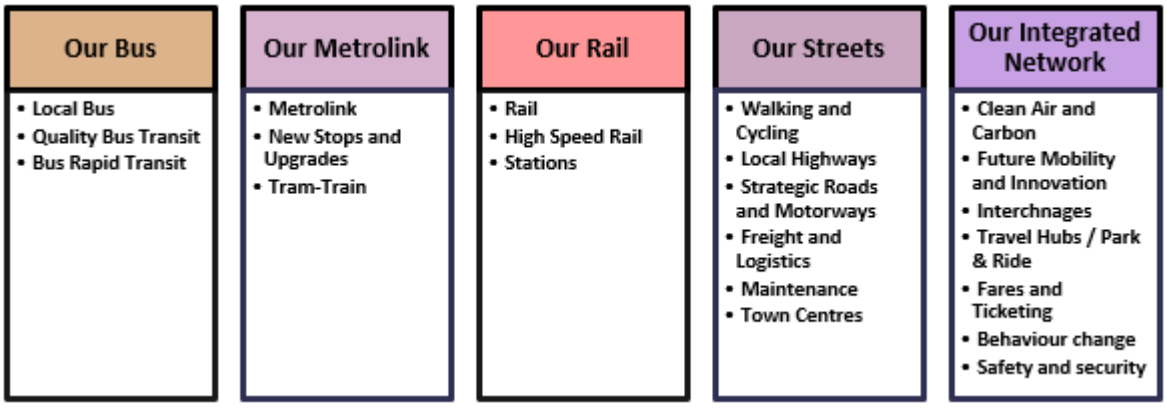
1.3.9 This will be one of the mechanisms used to grow bus patronage alongside:

- Bus Reform
- Integrated Ticketing
- Quality Bus Transit and Bus Corridor Upgrades
- Bus Rapid Transit

1.3.10 Following the introduction of the Bus Services Act (2017), the GMCA asked TfGM to carry out an assessment of a bus franchising scheme, have that assessment reviewed by an independent audit organisation, and carry out a consultation on a proposed franchising scheme which ran from 14 October 2019 to 8 January 2020. The Covid-19 pandemic has had a significant impact on Greater Manchester's bus market, including timetables, revenues, passenger numbers and the public's attitudes to public transport. Due to this, further work will be undertaken to assess the impact of coronavirus on the bus reform process.

1.3.11 Greater Manchester is also delivering the Bee Network - the UK's largest cycling and walking network as a key element in delivering the Right Mix vision. The Combined Authority has allocated £160m between 2018-2022 to fund the first phase of the Bee Network. The network has at its core a programme of new and upgraded pedestrian and cycling crossing points of major roads and other sources of severance, connected by a network of signed cycling and walking routes – known as Beeways – on existing quiet streets. These will be complemented by a number of routes on busier roads where Dutch style cycle lanes protected from motor traffic will be constructed.

1.3.12 Our Five Year Transport Delivery Plan sets out a comprehensive programme of work across all modes and in all Local Authorities which are focused on ensuring the realisation of the 'Right Mix' vision. It contains explanatory text and a summary of the interventions and their stage in the development and delivery process. These include committed, unfunded priorities for the next five years and our longer-term development priorities. The Delivery Plan sections are:



1.3.13 Many of these interventions support the GMSF Allocations directly, whilst others are intended to provide alternatives to private car travel more generally. The schemes demonstrate a clear plan for delivering strategic transport interventions for the first five years of the GMSF plan period, whilst also laying the foundations for longer term investment in sustainable transport across the length of the plan period.

1.3.14 Where relevant, each of the individual Locality Assessments will highlight elements of the Delivery Plan that are particularly relevant to each Allocation or the local area.

1.3.15 Our Five Year Transport Delivery Plan is supported by ten Local Implementation Plans (LIPs) covering the period 2020 to 2025. Each of the ten councils that make up Greater Manchester has its own LIP. The LIPs are designed to ensure local priorities are articulated in the Delivery Plan. The LIPs are included as an appendix to the Delivery Plan. They will be 'live' documents for a period of time and will be updated as councils develop and publish transport plans and strategies, or as new schemes are developed or delivered.

1.3.16 For more detail on the Greater Manchester Transport Strategy 2040 and Our Five Year Transport Delivery Plan visit the TfGM website.

1.4 Structure of this Note

1.4.1 This note sets out the process that was implemented to identify the sites considered as suitable for inclusion in the draft GMSF. It also sets out a summary of the Greater Manchester Accessibility Level (GMAL) model which is TfGM's tool for

assessing the accessibly of sites in public transport terms and which was used in assessing the transport requirements of the Allocations.

1.4.2 An associated exercise was carried out to assess the potential to introduce or extend bus services to the Allocations, and this note sets out the process implemented to assess the likely demand and revenue implications of these new services.

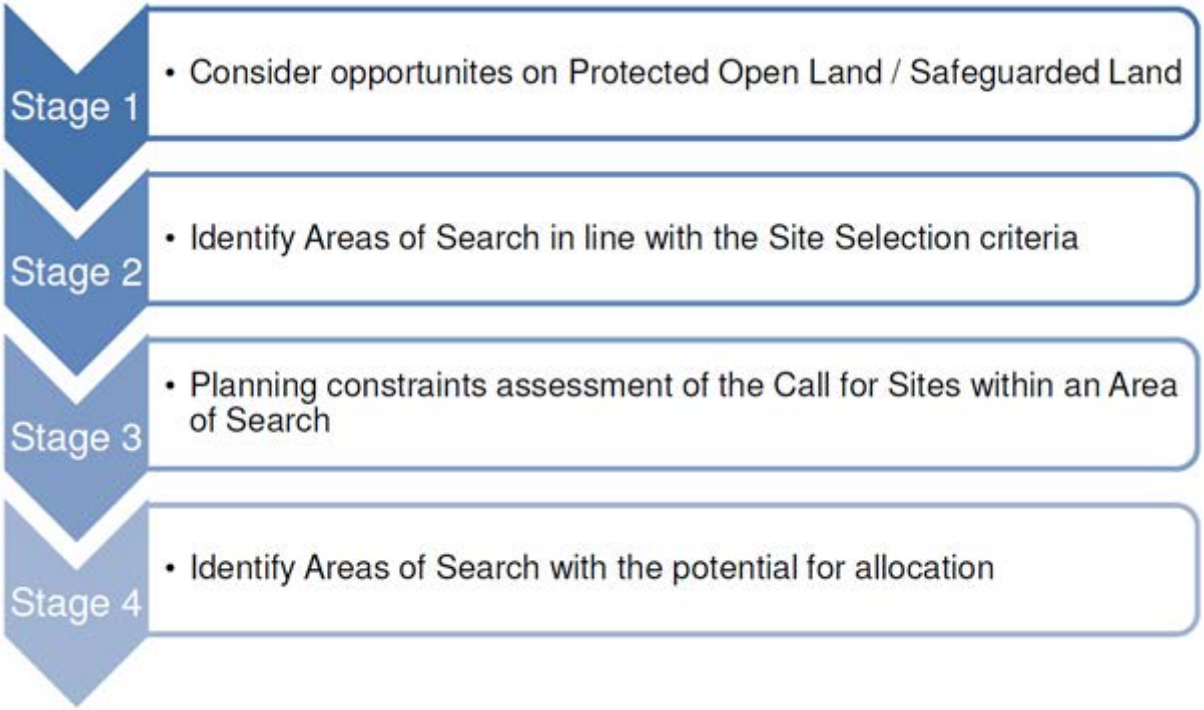
1.4.3 It then explains the approach to strategic modelling which was used to highlight the transport impacts of the Allocations on the transport network, and the process to identify, develop and categorise suggested mitigation schemes.

2. Site Selection

2.1 The Process

1.1.1 The process of identifying and selecting site allocations for the draft GMSF was led by the 10 Greater Manchester Authorities and provided the starting point for further investigation of the preferred sites through the Locality Assessments. It should be noted at the outset that a wide range of planning issues are considered when identifying sites for release, and transport is just one important aspect of this. A Site Selection methodology was developed that included seven criteria informed by the Vision, Objectives and Spatial Strategy in the GMSF 2019, and was used to guide the selection of sites for development within the green belt. A key objective for the process was to demonstrate a clear, consistent and transparent approach to the selection of sites in the GMSF.

1.1.2 The following stages set out the process used to identify the proposed allocations in the GMSF:



1.1.3 Stage One relates to land which is outside of the existing urban area but which is not in the green belt. This includes land which has been identified in Local Authority Local Plans as safeguarded land and/or protected open land (POL). This land is considered to be sequentially preferable to green belt. If stage one does not identify sufficient land to meet the need then it will be necessary to consider sites which are currently in the green belt as part of Stage two.

1.1.4 Stage Two is the identification of broad "Areas of Search" based on the Site Selection Criteria within which call for sites could be assessed. The Site Selection criteria reflect the priorities of the GMSF Spatial Strategy and objectives. The broad Areas of Search approach was chosen because of the volume of call for sites submitted and therefore it was necessary to undertake an initial high level sift to identify only those sites with the potential to meet the GMSF strategy. Sites which did not fall within an Area of Search were not considered to meet the strategy and were therefore excluded from the Site Selection process and not subject to any further assessment.

1.1.5 Based on the GMSF Spatial Strategy, plan objectives and guidance in the NPPF on green belt release, seven Site Selection Criteria were developed to identify the most sustainable sites in the green belt.

- Criterion 1 – Land which has been previously developed and/or land which is well served by public transport.
- Criterion 2 – Land that is able to take advantage of the key assets and opportunities that genuinely distinguish Greater Manchester from its competitors.
- Criterion 3 – Land that can maximise existing economic opportunities which have significant capacity to deliver transformational change and / or boost the competitiveness and connectivity of Greater Manchester and genuinely deliver inclusive growth.
- Criterion 4 – Land within 800 metres of a main town centre boundary or 800m from the other town centres' centroids.
- Criterion 5 – Land which would have a direct significant impact on delivering urban regeneration.
- Criterion 6 – Land where transport investment (by the developer) and the creation of significant new demand (through appropriate development densities), would support the delivery of long-term viable sustainable travel options and deliver significant wider community benefits.
- Criterion 7 – Land that would deliver significant local benefits by addressing a major local problem/issue.

1.1.6 Stage Three is an assessment of the sites within the identified Areas of Search to determine whether development in the Areas of Search would be appropriate, weighing the likely benefits against key planning constraints.

1.1.7 Stage four of the assessment identified proposed allocations within the Areas of Search. These Areas of Search were those which were considered to have no other significant constraints precluding development. Because the Areas of Search were derived from the Site Selection Criteria, it is considered that allocations within them represent the best fit for delivering the GMSF Spatial Strategy.

1.1.8 The Locality Assessments are not proposed to take the place of Transport Assessments (TA) which are a required part of individual Planning Applications. The Locality Assessments are intended to give a high-level assessment of how the site may impact on the surrounding transport network, in the absence of any detailed proposals for the configuration and phasing of a site. As such, they are intended to

highlight any significant 'show stoppers' that would suggest the site was not suitable for further consideration.

2.2 Greater Manchester Accessibility Levels

1.2.1 In order to support analysis of public transport accessibility and to assist in service development, TfGM has developed the Greater Manchester Accessibility Levels (GMAL) model, which provides a detailed and accurate measure of accessibility for any given location in the City Region for public transport (bus, rail and Metrolink), as well as flexible transport services such as Local Link.

1.2.2 GMAL provides a score of a location of between 1 to 8, where 1 represents the lowest level of accessibility and 8 represents the highest.

1.2.3 The GMAL measure reflects:

- Walking time from the point-of interest to the public transport access points;
- The number of services (bus, Metrolink and Rail) available within the catchment;
- The level of service at the public transport access points - i.e. average waiting time; and
- The operating areas of Local Link (flexible transport) services.

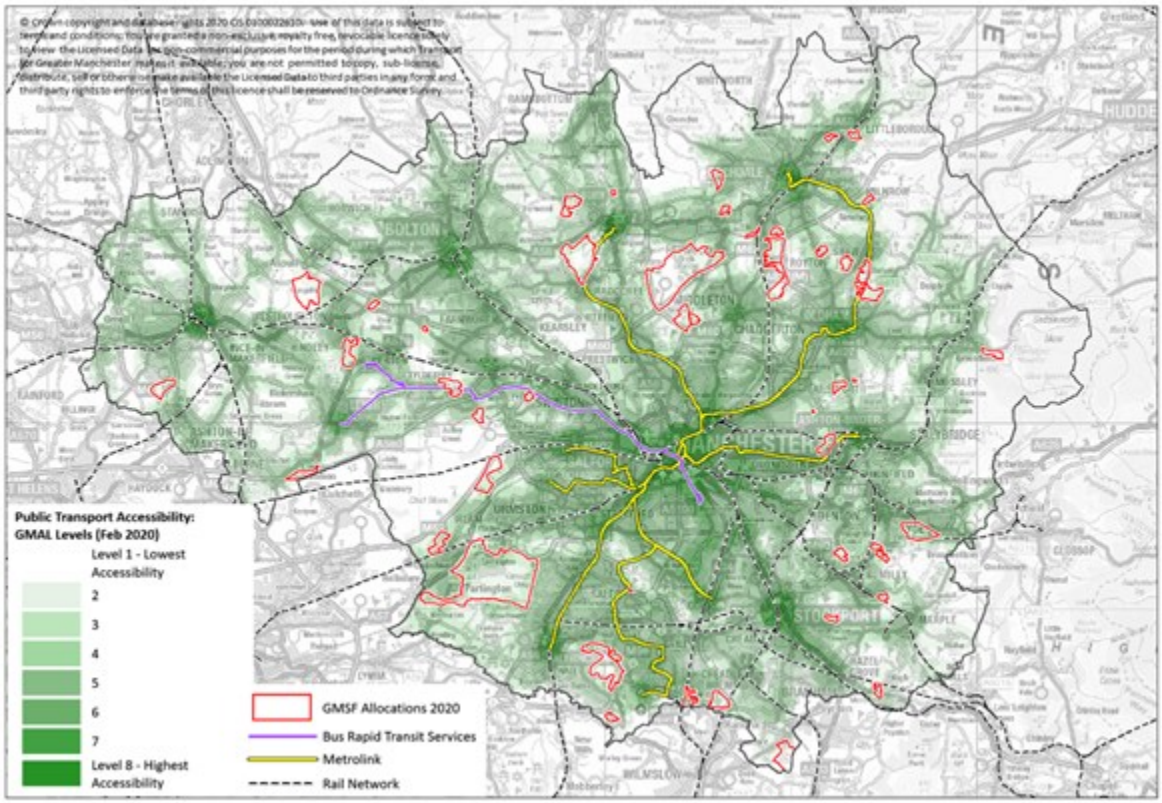
1.2.4 It does not consider:

- The speed or utility of accessible services;
- Crowding, including the ability to board services; or,
- Ease of interchange.

1.2.5 The map below displays the public transport accessibility of allocations within the Greater Manchester Spatial Framework. A representation of the Rail, Metrolink (including the Trafford Park Line completed in March 2020) and Bus Rapid Transit (Vantage bus services) corridors are provided for reference, as well as an indication of public transport accessibility through GMAL.

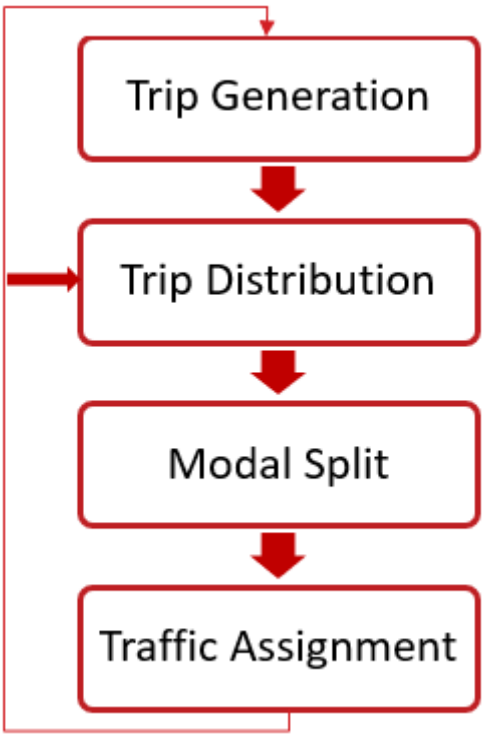
1.2.6 This accessibility data should be considered correct as of February 2020, providing a stable representation of the public transport network before changes in services associated with Covid-19. Since March 2020, public transport services have been under continuous review subject to the requirements of demand, social distancing

and funding. There have been a range of changes made regarding service frequencies across public transport networks, and while there was an initial reduction in services, much of this has now been restored, and this would still represent the areas best served by public transport within a stable service pattern.



3. Approach to Strategic Modelling

2.1 The GMSF Locality Assessments have been produced using data provided from TfGM's Variable Demand Model (GMVDM). This model is a mathematical representation of the transport network, which works by determining all of the origins and destinations of trips within a given area, matching these two together in order to generate a set of journeys, assigning these journeys to a mode (for example, car, bus, or cycling) and then assigning these trips to a route. The model runs numerous 'loops' in order to identify the best path (by generalised cost). This approach is summarised in the diagram below.



2.2 For this project, SYSTRA updated the model in order to produce a number of different scenarios to permit comparison and evaluation.

2.3 TfGM provided the Base Model to SYSTRA representing how the transport network operates at present (in 2017). SYSTRA made some refinements to the Base Model to add detail in the vicinity of some allocations. GMVDM is a strategic model and, as such, does have limitations in terms of investigating localised transport issues.

2.4 SYSTRA then produced a Reference Scenario, including the Existing Land Supply and committed transport infrastructure for two assessment years – 2025 and 2040. This facilitated an understanding of how the transport network was likely to operate in

the future, with the existing land supply identified in the GMSF, but without the introduction of the Allocations proposed in the plan.

2.5 Future trip generation to/from the site (i.e. how many people and vehicles will enter or leave the site) was estimated by applying a set of Greater Manchester-wide trip rates derived from an industry database known as TRICS (Trip Rate Information Computer System) to the agreed development quantum for each site. TRICS is a national system for trip generation analysis which allows users to establish potential levels of trip generation for a wide range of development types and scenarios. Trip rates were based on the Trafford Park Metrolink business case and were given for three periods, AM(0700-1000), Inter-Peak (1000-1600) and PM (1600-1900), different rates were also used for town centre and out-of-centre areas. Where Office or Industry and Warehouse was a part of the land use mix, floorspace was converted into a number of jobs, using densities derived from the Homes and Community Agency Employment Density Guide.

2.6 The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model.

2.7 In order to assess the cumulative impact of Greater Manchester allocations on the network, two test model scenarios were undertaken, a 'constrained' and 'high side' assessment. The constrained forecasts could reduce the number of future highway trips due to congestion on the highway network. This constraining process is undertaken by the GMVDM.

2.8 In simple terms, the GMVDM takes the unconstrained input demand and adjusts it to reflect changes in the costs of travel over time, due to:

- increased congestion due to the underlying increase in car trips forecast by the National Trip End Model (NTEM) a UK wide forecast of population, employment, car ownership and trip rates, produced by the Department for Transport
- the inclusion of significant new developments causing additional local congestion
- changes in values of time and vehicle operating costs
- changes in public transport fares

- introduction of new public transport services or changes to journeys times / headways for existing services
- introduction of new road infrastructure

2.9 The model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be:

- travel via a different route
- travel via a different mode, e.g. walk/cycle, bus, Metrolink
- travel to some different shops
- travel at a different time of day
- some combination of the above

2.10 The 'standard' development planning approach would generally not assume that future highway trips are constrained by congestion on the highway network. Discussions between SYSTRA and TfGM pointed towards a need to also look at such a 'high-side' scenario with the GMSF development scenario which does not take account of future congestion on the road network.

2.11 The outputs of these four Test Cases ("GMSF Constrained" and "GMSF High Side", for both 2025 and 2040) were used to assess and mitigate the impact of the GMSF Allocations on the Greater Manchester transport network.

2.12 Further iterations of the above process were necessary in the case of some sites. When the process was completed, a comparison was made of the input TRICS trip rates and the output GMVDM development traffic flows, to confirm that both were broadly comparable.

4. Approach to Technical Analysis

4.1 Background

3.1.1 For each of the Site Allocations originally examined, SYSTRA worked with representatives of the ten Greater Manchester Local Authorities, TfGM and site promoters to identify key parts of the transport network (e.g. key road links and

junctions) likely to be impacted by the site. This was achieved by a combination of both professional judgement and local knowledge.

3.1.2 In almost all cases the junctions in a road network reach capacity before the road links. Hence, much of the analysis focused on the identified critical junctions. For each of these, a local junction model was built which replicated the current operation of the junction. Signalised junctions were assessed in detail using industry-standard modelling software 'LINSIG Version 3'. Where possible, traffic signal information (i.e. signal phasing and timings) and lane geometry (alignment, profile and lane position) were provided by TfGM to ensure that the local junction models reflected (as far as possible), the operation of the junctions on the ground. 'Junctions 9' software was used to assess priority and roundabout junctions.

3.1.3 Junction performance was tested for the "Reference", "GMSF Constrained" and "GMSF High Side" scenarios for both 2025 and 2040. Site traffic impacts were measured relative to the Reference scenario. Where these impacts were considered to be significant, transport mitigation schemes were developed to address these. Through discussions with TfGM and the Combined Authority, it was agreed that where mitigation was required, it should mitigate the impacts back to the Reference Case scenario – i.e. the allocations should mitigate their own cumulative impact rather than seek to mitigate the impact of general traffic growth arising from the Existing Land Supply. It should be noted that mitigating back to this level of operation may not mean that the junction operates within capacity by 2040.

4.2 Approach to identifying Public Transport schemes

3.2.1 Public transport interventions have been identified which could support non-car trips to and from the draft Allocation. In some instances sites have been proposed close to current or planned Metrolink stops or current rail stations, and for a majority of sites the introduction of new or extended bus services have been proposed and outline costs developed.

3.2.2 In order to develop these proposals, SYSTRA Ltd's bus service experts and TfGM's Operational Planning team held a workshop to identify potential new and improved services for each site, including any existing proposals identified during the early stages of the planning process. The identified services were then defined in more

detail to understand the likely catchments and patronage levels. Patronage was based on TRICS outputs moderated in line with the actual levels of services proposed (e.g. slow and/or low frequency services are unlikely to achieve the patronage implied by the raw TRICS outputs). The patronage forecasts were used to estimate the likely revenue levels to be generated by the new or improved bus service associated with each site.

3.2.3 Services were also costed using detailed costing information available to TfGM through its specification of current socially necessary bus services, to establish whether they could operate without subsidy, and, where subsidy was likely to be necessary, to understand the likely cost per passenger. Services with an unacceptably high cost per passenger subsidy were reviewed in order to understand if any changes could be made that would reduce the subsidy, which led to a reduction in the specification of some services.

3.2.4 Services which, following review, still had an unacceptably high cost per passenger subsidy were deemed to be unviable and were not included in the Locality Assessments.

3.2.5 It should be noted that the working environment for buses is likely to be substantially different in the future, and this exercise was intended to be indicative of the type of bus service that may be possible when an Allocation is developed. The opportunity for bus service improvements will need to be reviewed at the time of submission of the planning application (within the Transport Assessment) as circumstances and opportunities for service improvement may have changed.

4.3 Mitigations and Scheme Development

3.3.1 A number of the site allocations have a body of pre-existing planning information associated with them. This body of work includes consideration of how they could best be linked into the transport network. Therefore, for some sites, there were pre-existing proposals for interventions in the form of link roads, new rail or Metrolink stations, or extensions to existing or proposed bus, cycle and walking routes. Where these schemes had a base level of detail (which would allow them to be coded into the model), they could be examined to consider the level of relief they provided to the traffic impacts. In other instances, it was for the Locality

Assessment technical teams to identify possible interventions and off-site mitigations. Typical local mitigations that were considered included:

- priority junctions (both new priority junctions and modification of existing junctions)
- signalised junctions (both new signalised junctions, modification of existing signalised junctions and conversion of priority junctions to signalised arrangement)
- roundabouts (both mini and standard, modification of existing roundabouts and signalisation of standard roundabouts)
- carriageway construction (single and dual carriageway)
- installation of pedestrian / cycle crossings (pelican, toucan, puffin and zebra).

3.3.2 In addition, the team considered the introduction of new bus services, extensions to or increases in frequency for existing bus services, and the possible introduction of Demand Responsive Transport.

3.3.3 In parallel to the identification and costing of local mitigations, a costing exercise was undertaken to identify broad costs for each intervention to understand how these could be delivered and the extent to which they offered value for money. SYSTRA and other third-party consultants have pro-actively engaged with the Local Authorities and other stakeholders such as TfGM and Highways England throughout the assessment process and based on their inputs the list of transport interventions has been refined and consolidated.

3.3.4 In the case of certain allocations, it was necessary to undertake the process described above more than once. In the case of some larger and/or more complex sites, it was necessary to test the effectiveness of the identified mitigations via the GMVDM and to further check that traffic reassignment did not generate additional problems.

3.3.5 Each of the Locality Assessments has considered the full range of mitigations and interventions, from public transport, to highway schemes, to sustainable modes. Some of the sites allocated for development have proven to be more complex than others; due either to their size and composition, their proximity to other sites or their interaction with congested sections of the Strategic Road Network. In these instances, is has been necessary to complete several iterations of the process set out above. For example, mitigations developed for a site may not fully address the

issues identified, and further mitigations and/or reductions in development quantum have been considered in order to identify the correct level of scale. This has in some cases necessitated several rounds of strategic modelling.

3.3.6 In some instances, it was not possible to full identify interventions which could suitably mitigate the impact of the site on the network. Where this is the case, this became a contributing factor in decisions to either reduce the scale or remove the site completely from the GMSF (Appendix 1 gives a full list of the final GMSF Allocations). In other instances, the proposed intervention made a contribution to mitigating the site, but could not fully ameliorate the impact. In these instances, care has been taken to ensure that the Allocation is not proposed for delivery in the early part of the Plan period, in order to allow further work to be done to improve the transport network, and ensure that the Allocation can be brought forward safely and sustainably.

3.3.7 Mitigations have been grouped in one of four categories depending on their size and significance:

Necessary strategic interventions

3.3.8 These comprise significant interventions that have potential to have strategic benefits – i.e. benefits to the wider network not just the local network. There is a consensus that the intervention is required to support the implementation of a specific site and that the site could not come forward without it

Supporting strategic interventions

3.3.9 These comprise significant interventions; similar in magnitude to those defined in the previous category. These interventions are considered highly desirable and may be required in order to deliver the GMSF at a Plan level but are not necessarily linked to the delivery of any one Allocation.

Necessary local interventions

3.3.10 These are essential for a site to come forward, but do not have a wider strategic impact on the transport network. They are comprised of three main types:

- Site Access – Direct connections between the external road network and the site.

- Local Mitigation – Local transport mitigation measures proposed to address direct impacts of the site. These might comprise road network improvements, localised public transport improvements and measures to support the use of active modes.
- SRN Mitigation – Highway mitigation measures specifically intended to address identified issues on the Strategic Road Network arising from an Allocation.

Supporting local interventions

3.3.11 Site Access, Local Mitigation and SRN mitigation which are considered highly desirable but are not essential to the delivery of any one Allocation.

3.3.12 It is important to note that the interventions developed are intended to demonstrate only that significant transport impacts of the Allocation can be appropriately ameliorated. As such they are indicative only and are not intended to act as a definitive proposal for the mitigation of any Allocation, which would be developed as part of a Transport Assessment submitted as part of a planning application at a later date.

3.3.13 All of the interventions set out in the Locality Assessments are included in Greater Manchester's Five Year Transport Delivery Plan (or are covered within the associated Local Implementation Plans (LIP) for each local authority). This sets out those transport schemes which will be implemented or developed further across the next five-years in order to deliver on Greater Manchester's wider economic, social and environmental objectives for transport as set out in 2040 Transport Strategy.

3.3.14 The focus of the main Transport Delivery Plan is on those GMSF schemes that have strategic benefits, while the LIP documents enable the local interventions to be incorporated into the local sustainable transport and highway programmes.

3.3.15 In all cases, we would expect significant developer funding to enable the delivery of both the strategic and local schemes, and where appropriate other sources of public funding will be sought to help ensure delivery over the plan period. Funding and delivery priorities of the Delivery Plan, over the next 3-5 years, will be reflected in the Greater Manchester Infrastructure Programme (GMIP).

3.3.16 Further iterations of the Delivery Plan will be published at regular intervals, and as sites come forward for development, we would expect to see interventions necessary to ensure new Allocations can be delivered sustainably to be reflected in those iterations. TfGM, the Local Authorities, Highway England and site promoters will work together to ensure that schemes which are brought forward support the City Region's commitment to the Right Mix vision and the ambition to enable more people to walk, cycle and use public transport.

5. Conclusion

4.2 The completion of Locality Assessments on the proposed GMSF Allocations has ensured that each site has been subject to a thorough, robust and consistent evaluation of its likely contribution to transport impacts in Greater Manchester. The sites that have been selected for inclusion in the latest version of the GMSF have been found to be suitable from a transport perspective, and satisfy the requirements of National Planning Policy Framework in that they do not place an unacceptable impact on highway safety or severe impact on the road network. Where necessary, illustrative mitigation schemes have been developed, and their effectiveness in reducing traffic impacts has been demonstrated. Those schemes which have a strategic benefit and are likely to be needed in the next five-year period have been referenced in Our Five Year Transport Delivery Plan and form part of GMIP.

4.3 Nonetheless, it is clear that for some Allocations there is further work to be done in order to develop a solution that fully mitigates the site's impact on the transport network. In these instances care has been taken to ensure that the Allocation is not identified for delivery in the first five years of the Plan, to enable more work to be undertaken to ensure that the site can be delivered in a safe and sustainable matter at a later point in time.

6. GMSF Allocations List

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Cross Boundary	GMA01.1	Northern Gateway Heywood Pilsworth	GMA1.1	Northern Gateway Heywood Pilsworth
Cross Boundary	GMA01.2	Northern Gateway Simister and Bowlee	GMA1.2	Northern Gateway Simister and Bowlee
Cross Boundary	GMA01.3	Whitefield	Withdrawn	Withdrawn
Cross Boundary	GMA02	Stakehill	GMA2	Stakehill
Cross Boundary	GMA03	Kingsway South	Withdrawn	Withdrawn
Bolton	GMA04	Bewshill Farm	GMA4	Bewshill Farm
Bolton	GMA05	Chequerbent North	GMA5	Chequerbent North
Bolton	GMA06	West of Wingates	GMA6	West of Wingates
Bury	GMA07	Elton Reservoir	GMA7	Elton Reservoir
Bury	GMA08	Seedfield	GMA8	Seedfield
Bury	GMA09	Walshaw	GMA9	Walshaw
Manchester	GMA10	Global Logistics	GMA10	Global Logistics
Manchester	GMA11	Roundthorn MediPark Extension	GMA3.1	Roundthorn MediPark Extension
Manchester	GMA12	Southwick Park	GMA11	Southwick Park
Oldham	GMA13	Ashton Road Corridor	GMA18	Land south of Coal Pit Lane (Ashton Road)
Oldham	GMA14	Beal Valley	GMA12	Beal Valley

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Oldham	GMA15	Broadbent Moss	GMA14	Broadbent Moss
Oldham	GMA16	Cowlishaw	GMA16	Cowlishaw
Oldham	GMA17	Hanging Chadder	GMA17	Hanging Chadder
Oldham	GMA18	Robert Fletchers	GMA15	Chew Brook Vale (Robert Fletchers)
Oldham	GMA19	South of Rosary Road	GMA19	South of Rosary Road
Oldham	GMA20	Spinners Way	Withdrawn	Withdrawn
Oldham	GMA21	Thornham Old Road	Withdrawn	Withdrawn
Oldham	GMA22	Woodhouses	GMA13	Bottom Field Farm (Woodhouses)
Rochdale	GMA23	Bamford and Norden	GMA20	Bamford and Norden
Rochdale	GMA24	Castleton Sidings	GMA21	Castleton Sidings
Rochdale	GMA25	Crimble Mill	GMA22	Crimble Mill
Rochdale	GMA26	Land north of Smithy Bridge	GMA23	Land north of Smithy Bridge
Rochdale	GMA27	Newhey Quarry	GMA24	Newhey Quarry
Rochdale	GMA28	Roch Valley	GMA25	Roch Valley
Rochdale	GMA29	Trows Farm	GMA26	Trows Farm
Salford	GMA30	Land at Hazelhurst Farm	GMA27	Land at Hazelhurst Farm

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Salford	GMA31	East of Boothstown	GMA28	East of Boothstown
Salford	GMA32	North of Irlam Station	GMA29	North of Irlam Station
Salford	GMA33	Port Salford Extension	GMA30	Port Salford Extension
Stockport	GMA34	Bredbury Park Extension	GMA31	Bredbury Park Extension
Stockport	GMA35	Former Offerton High School	GMA32	Former Offerton High School
Stockport	GMA36	Gravel Bank Road/Unity Mill	Withdrawn	Withdrawn
Stockport	GMA37	Heald Green	GMA33	Heald Green 1 (West)
Stockport	GMA38	High Lane	GMA35	High Lane
Stockport	GMA39	Hyde Bank Meadows	GMA36	Hyde Bank Meadows
Stockport	GMA40	Griffen Farm/Stanley Green	GMA34	Heald Green 2 (East)
Stockport	GMA41	Woodford Aerodrome	GMA37	Woodford Aerodrome
Tameside	GMA42	Ashton Moss West	GMA38	Ashton Moss West
Tameside	GMA43	Godley Green Garden Village	GMA39	Godley Green Garden Village
Tameside	GMA44	South of Hyde	GMA40	South of Hyde

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Trafford	GMA45	New Carrington	GMA41	New Carrington
Trafford	GMA46	Timperley Wedge	GMA3.2	Timperley Wedge
Wigan	GMA47	Land South of Pennington	Withdrawn	Withdrawn
Wigan	GMA48	M6 Jctn 25	GMA42	M6 Junction 25
Wigan	GMA49	North of Mosley Common	GMA43	North of Mosley Common
Wigan	GMA50	Pocket Nook	GMA44	Pocket Nook
Wigan	GMA51	West of Gibfield	GMA45	West of Gibfield

Greater Manchester Spatial Framework

Locality Assessment:

Global Logistics (GMA 10)

Publication Version 2: November 2020

Identification Table	
Client	Manchester City Council / TfGM
Allocation	Global Logistics
File name	GMA10 Manchester - Global Logistics Locality Assessment 021020
Reference number	GMA10 (2020 GMSF)

Approval					
Version	**Role**	**Name**	**Position**	**Date**	**Modifications**
0	Author	AS	AD	27/08/20	Base report
	Checked by	DK	A	27/08/20	
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1	Author	J Cookson	TfGM	25/09/20	Consistency edits
	Checked by	D McCorquodale	Manchester City Council	30/09/20	
	Approved by	D McCorquodale	Manchester City Council	30/09/20	

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Allocation Data	
Allocation Reference No.	GMA 10
Allocation Name	Global Logistics
Authority	Manchester
Ward	Woodhouse Park
Allocation Proposal	25,000 square metres of B2 (Industrial) and B8 (Warehousing) floorspace.
Allocation Timescale	0-5 years ☐ 6-15 years ✓ 16 + years ☐

Glossary

"2025 GMSF Constrained" - is the 2025 forecast case in which the model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be travel via a different route, mode, location or time of day.

"2040 GMSF Constrained" - as above, but for a 2040 forecast year

"2025 GMSF High-Side"- is the 2025 forecast case in which the model does not adjust the input demand based on how the cost of travel changes. In this scenario congestion does not lead to a reassignment of traffic, and therefore road traffic flow will generally be higher.

"2040 GMSF High-Side" - as above, but for a 2040 forecast year

"2025 Reference Case" - is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2025

"2040 Reference Case"- is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2040

AADT - Annual average daily traffic, is a measure used in transportation planning to quantify how busy the road is

Bee Network - is a proposal for Greater Manchester to become the very first city-region in the UK to have a fully joined-up cycling and walking network: the most comprehensive in Britain covering 1,800 miles.

Bus Rapid Transit - is a bus-based public transport system designed to improve capacity and reliability relative to a conventional bus system. Typically, a BRT system includes roadways that are dedicated to buses, and gives priority to buses at junctions where buses may interact with other traffic

Existing Land Supply - these are sites across the conurbation that have been identified by each local planning authority in Greater Manchester and are available for development

Greater Manchester Variable Demand Model (GMVDM) - the multi-modal transport model for Greater Manchester. This transport model provides estimates of future year transport demand as well as the estimates of travel behaviour changes and new patterns that the Plan is likely to produce. These include

changes in choices of routes, travel mode, time of travel and changes in journey destinations for some activities such as work and shopping.

“LRN” (Local Road Network) All other roads not classified as Strategic Road Network (see below) comprise the Local Road Network. The LRN is managed by the local highways authorities

National Trip End Model (NTEM) - is a Department for Transport forecast that ensures that measures of population, jobs and trips made by various mode are consistent across the whole of Great Britain.

Rapid transit services - refers to high frequency, high capacity metro style transport services including Metrolink and Bus Rapid Transit.

“SRN” (Strategic Road Network) The Strategic Road Network comprises motorways and trunk roads, the most significant ‘A’ roads. The SRN is managed by Highways England.

“TfGM” - Transport for Greater Manchester, the Passenger Transport Executive for Greater Manchester

Urban Traffic Control (UTC) - is a specialist form of traffic management that, by coordinating traffic signals in a centralised location, minimises the impact of stop times on the road user.

1. Allocation Location & Overview

1.1.1 This Locality Assessment provides an assessment for the Greater Manchester Allocation 10 (GMA 10) Global Logistics; its purpose is to identify the likely transport and highways impacts of the allocation and formulate appropriate mitigation strategies to support the inclusion of the allocation in to the GMSF.

1.1.2 The Global Logistics allocation is situated immediately to the south of the existing Global Logistics Hub, lying to the west of Manchester Airport.

1.1.3 The allocation is bounded by Sunbank Wood to the west with Sunbank Lane and the M56 to the North and the existing Global Logistics Hub to the North East. The east of the allocation is bound by the A538 Wilmslow Road, with the World Freight Terminal and Manchester Airport beyond that. The southern and western boundaries of the allocation border areas of natural woodland and farmland, including Sunbank Wood. The allocation is located to the south of junction 6 of the M56.

1.1.4 The Global Logistics Allocation comprises 25,000 square metres of B2 (Industrial) and B8 (Warehousing) floorspace.

1.1.5 The allocation forms part of the Airport City at Manchester Airport. This is an expansion of Manchester Airport following an airport city model creating on site logistics, manufacturing, office and leisure facilities. The airport city has two main zones Airport City North which is adjacent to the Airport rail station and Global Logistics adjacent to Junction 6 of the M56. GMA 10 Global Logistics forms part of Global Logistics. The zone is partially developed and is home to a number of significant international logistics operators such as Amazon and DHL, a second phase of the zone has planning permission but has not yet been built out.

1.1.6 The main access to the allocation will be via internal estate roads of the second phase of the Global Logistics zone onto the existing access route of Sunbank Lane, which adjoins to the A538 Wilmslow Road to the east of the allocation.

1.1.7 A major improvement was recently completed on the A538 Wilmslow Road increasing capacity between the Sunbank Lane and M56 junction 6 from single lane to dual carriage way and upgrading the junction at A538 Wilmslow Road and Sunbank Lane from a priority to a signalised

junction. This provided significantly more capacity in this location. The improvement was completed in Spring 2018.

1.1.8 Manchester Airport Group (MAG) has a number of obligations in relation to the future local highway network as a result of previous planning applications. These improvements known as the rainbow works include:

- Upgrading of Runger Lane and Thorley Lane to provide an extra west bound lane to the existing single carriageway road and an improved west bound on slip to M56 at J6. (Terminal 2 Phase 2 Planning condition).
- Blue works improvements at M56 junction 6 including the removal of the roundabouts, the installation of traffic signals and changes to the slip roads
- Yellow works – a new dual carriageway between Terminal 2 and M56 junction 6 replacing the existing Thorley Lane and Runger Lane, along with further work to the slip road improvements to the junction of Runger Lane and Avro Way.
- Red works – additional mainline capacity on the M56 J5-J6

1.1.9 The Global Logistics allocation forms part of the large number of development plans and aspirations in this part of Greater Manchester with a view to creating a diverse neighbourhood with homes, offices and hotels. Plans include:

- Completing the development of Airport City immediately around the airport, which will provide a total of around 500,000 sqm of office, logistics, hotel and advanced manufacturing space.
- Continuing to develop MediPark, including a proposed extension to the site (GMA11 – Medipark Extension) and Roundthorn Industrial Estate as a health and biotech cluster, taking advantage of the research strengths of the adjacent Wythenshawe Hospital and the wider Manchester University NHS Foundation Trust.
- Delivering approximately 60,000 sq m of office floorspace around the new HS2 station.
- Providing around 2,400 new homes to the west of the M56 at Timperley Wedge (GMA46 – Timperley Wedge).
- Providing sufficient development opportunities to take full advantage of the introduction of HS2 and NPR into this location and to account for the growth of Manchester Airport.

1.1.10 For the purposes of the testing the impact of the allocation through the strategic model, a total of 25,000 sqm of employment floorspace have been assumed to be built out by 2040. The GM transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

1.1.11 All phasing plans information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

High Speed 2

1.1.12 Phase 2b of High Speed Rail 2 is proposed to have a station at Manchester Airport. The station location is to the west of the M56 to the north of Global Logistics. It is anticipated that phase 2 of HS2 will begin operating trains around 2040 as part of the integrated HS2 network and with the rest of the UK rail network. The hybrid Bill from government on this has not yet been before parliament. The government recently completed an independent review into whether and how to proceed with the High Speed 2 project. This review gave the go ahead to both phase 1 and 2 of High Speed 2, however there will be another review into phase 2 because it is at such an early stage . Therefore for the purposes of this Locality Assessment HS2 has not been included within the analysis. It is anticipated that further work will be undertaken in relation to this allocation and its interaction with HS2 in due course.

1.1.13 A HS2 station at this location would have a significant impact on the local and strategic road network in this location. A detailed piece of work is required to look at the combined impact of this development allocation and others within the vicinity such as GMA46 Timperley Wedge and GMA11 Roundthorn Medipark Extension alongside the HS2 development.

1.1.14 A study is currently underway which aims to develop a strategic approach to mitigate the significant impacts of HS2, NPR and other major development including GMSF and Airport City in the vicinity of Manchester Airport. This multi modal Highway and Transport Study is required to manage access to the Manchester Airport area and develop an approach to mitigating the impact

on the M56 which can be implemented in phases over a period of time as developments are realised but which provides a holistic solution.

2. Key Issues from Consultation

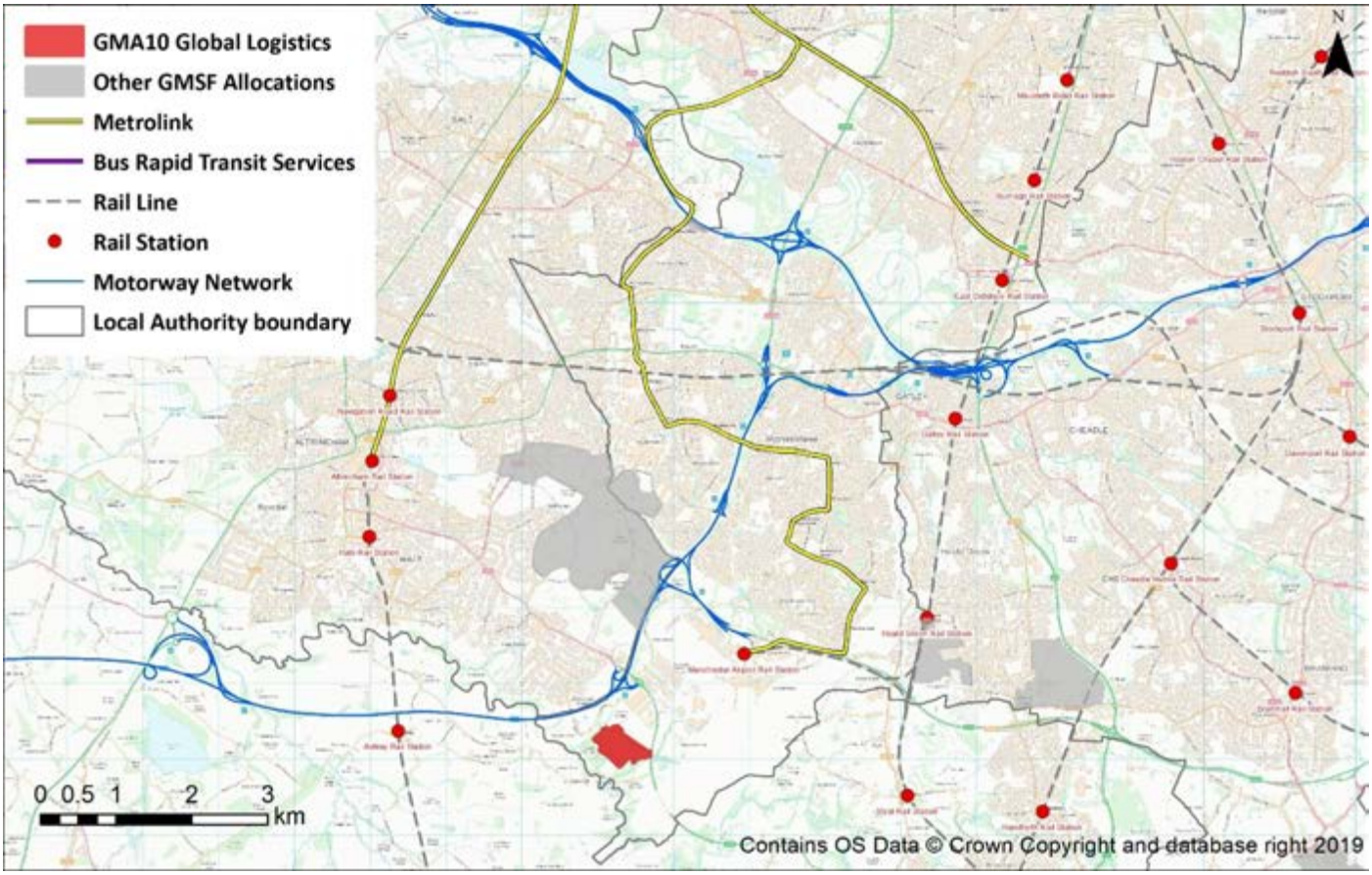
2.1.1 The Greater Manchester Plan for Homes, Jobs and Environment (Spatial Framework) consultation ran from 14th January to 18th March 2019. The comments made during the 2019 GMSF consultation relate to the following key transport themes; roads, public transport, and the impact of the airport and related development.

2.1.2 With regards roads the comments related to the infrastructure already being at capacity in many locations within the vicinity of the allocation and concern about the level of traffic congestion. Comments were also made in relation to inadequate public transport provision. Concerns were raised about the size of the airport and associated development including parking and the impact of this on nearby residents.

3. Existing Network Conditions and Allocation Access

3.1.1 This section summarises the existing access to the allocation acknowledging that a dedicated access may not currently be available. Figure 1 shows the transport context of the allocation. Note that all boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps.

Figure 1. Allocation Location: Global Logistics



3.1.2 The Global Logistics allocation is located in Ringway, south Manchester as indicated in figure 1. It is 1.5km south of Manchester Airport and is situated adjacent to the M56.

3.2 Current Access

3.2.1 Junction 6 of the M56 lies to the north of the allocation, it is connected to the allocation via the A538 Wilmslow Road. There is a recently constructed signalised junction connecting Sunbank Lane and the access roads to the south east of the allocation. Roads within the allocation are subject to a 30mph speed limit. A538 Wilmslow Road connects to the east of the allocation with Wilmslow and the A34.

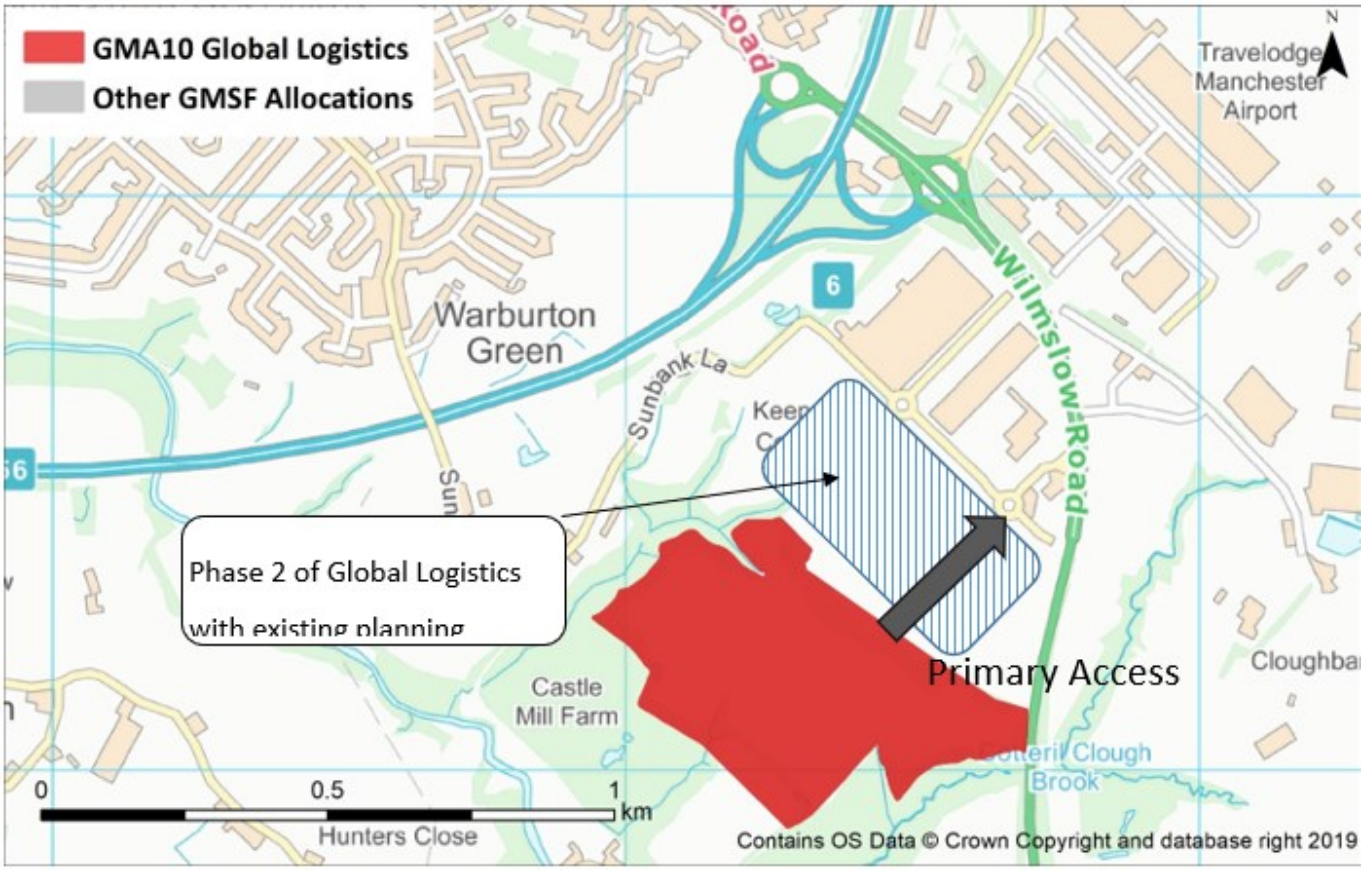
3.2.2 The allocation can be accessed from the west via Sunbank Lane, however from this direction the road is much more rural in nature, with narrow road widths of approximately 5.5m.

3.2.3 Sunbank Lane has a bridge over the M56 providing access to the large residential area of Hale Barns. There is a perceived rat running issues on this route (particularly by large vehicles) by local residents.

3.3 Proposed Access to the Allocation

3.3.1 Vehicular access to the allocation would be via internal estate roads onto the existing access route of Sunbank Lane to A538 Wilmslow Road. The internal estate roads would connect to the network via an arm on the existing roundabout on Sunbank Lane. The phase 2 of the Global Logistics development has not yet been constructed although it has planning permission, so the internal estate roads GMA10 Global Logistics will connect to have not yet been built.

Figure 2. Global Logistics: Allocation Access Arrangements



Note: All boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps.

4. Multi-modal accessibility

4.1 Overview

4.1.1 The Global Logistics allocation is served by buses travelling along the A538 Wilmslow Road. This road is served by an hourly service between Altrincham and Macclesfield and a second hourly service between Manchester Airport and East Didsbury. No bus services are provided along Sunbank Lane, however bus stop facilities have recently been constructed in anticipation that a commercial bus service can be attracted to serve this area.

4.1.2 Greater Manchester Accessibility Levels (GMAL) are a detailed and accurate measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region. The accessibility index score is categorized into eight levels, 1 to 8, where level 8 represents a high level of accessibility and level 1 a low level of accessibility. The Global Logistics allocation has a GMAL of 3, which is mid – low level accessibility compared to all locations.

4.2 Public transport

4.2.1 The proposed development is approximately 500m from a bus stop on A538 Wilmslow Road. From this stop 2 services operate in the east/west direction both with an hourly frequency, the 88 and the 288, between Altrincham and Macclesfield and Manchester Airport and East Didsbury respectively. Many bus services serving a large network of routes connect with the Manchester Airport bus station.

4.2.2 No bus services are provided along Sunbank Lane, however bus stop facilities have recently been constructed in anticipation that a commercial bus service can be attracted to serve this area.

4.2.3 Amazon (based within the global logistics hub site) have to provide a free onward bus transfer for their employees from the Airport Ground Transport Interchange as part of their planning consent, due to their due to their 24 hour operation and shift changeover pattern. The buses turnaround within the Amazon site.

4.2.4 The area is covered by the Wythenshawe Local Link service. Local Link offers a flexible transport service for local journeys, passengers book their journey between 1 hour and 7 days before they want to travel. This service runs 24 hours a day 7 days a week. The service also runs between Timperley and the following Manchester Enterprise Zone areas: Manchester Airport, World Freight Centre, Wythenshawe Hospital and Atlas Business park.

4.2.5 The nearest rail station - Manchester Airport - is located around 2 kilometres from the allocation by road. This station is served by 10 trains an hour with a mixture of local and long distance services including Transpennine Express services to Glasgow, Edinburgh, Newcastle and Cleethorpes, northern services to Barrow in Furness, Blackpool, Liverpool Lime Street and Crewe and Transport for Wales services to Llandudno via Manchester City Centre and locations in suburban southern Greater Manchester.

4.2.6 Metrolink services are also available at this location, with services every 12 minutes.

4.3 Walking and Cycling

4.3.1 The walk catchment for this allocation is fairly limited with some areas of Hale Barns falling within 2km of the allocation. Walking access to the bus stops on A538 Wilmslow Road will be key to providing sustainable access to the allocation.

4.3.2 Despite the presence of a shared cycle path / footpath on the western side of the A538 Wilmslow Road, it is noted that the public transport hub located on the passenger terminal side of Manchester Airport is not within realistic walking distance of the allocation. However the Wythenshawe Local Link service operates bus services in this area and serves key destinations, including the transport hub and key employment destinations.

4.3.3 There are no pedestrian casualties recorded in the immediate vicinity of the allocation in the last 5 years.

4.3.4 National Cycle Route 85 passes along Wilmslow Road adjacent to the allocation, forming part of the Manchester Airport Orbital Cycleway.

4.4 Road Safety

4.4.1 In terms of road safety there have been very few road traffic collisions in the vicinity of the allocation. Table 1 shows there have been 4 serious collision between 2016 and 2018 within a kilometre area surrounding GMA10 Global Logistics. There have been no fatal incidents in this period.

Table 1. Collision data review (within 1km) Global Logistics

Fatal	Serious	Slight	Total
0	4	-	4

4.5 Proposed

Bus

4.5.1 No further proposal beyond extending the Local Links service to cover this allocation.

Rail

4.5.2 As part of proposals outline by Government in 2013, High Speed 2 (HS2) is due to reach Birmingham by 2026 (Phase 1) and Manchester and Leeds by 2040 (Phase 2). Phase 2 includes a proposed new station immediately to the West of Manchester Airport Terminal 2, alongside the M56 Motorway between junctions 5 and 6 on the route into Manchester.

4.5.3 The Metrolink Western Leg is an extension of the Manchester Airport line linking to Manchester Airport Terminal 2 with proposed new stops in the Wythenshawe Hospital area, in the Newall Green area and in the Davenport Green area. TfGM have an established legal right to build and operate the extension through the powers granted by The Greater Manchester (Light Rapid Transit System) (Airport Extension) Order 1997. While GMA10 is not located along the route of the new extension, the extension will provide an additional access route to Manchester Ground Transport Interchange from where onward movement can be made to GMA10.

Walking and Cycling

4.5.4 A number of public footpaths currently cross the allocation. To accommodate the proposed development it is likely that these footpaths will require diversion at some time in the future.

4.5.5 There is a proposed Beeway along Sunbank Lane as part of the TfGM network.

4.5.6 The following cycle and walking route improvements are proposed as part of this locality assessment:

- Segregated walking and cycling access points connecting to the shared use cycleway along Sunbank Lane to the west and north of the allocation, with safe crossings of Sunbank Lane where required.
- Segregated cycling and walking access connecting to the existing Manchester Airport Orbital Cycleway (NCN 85) on the west side of Wilmslow Road. This route provides safe cycling access to local bus stops, the airport, public transport interchange and connects to onward routes serving local developments sites and Wythenshawe 4km away.
- Measures along Sunbank Lane between the allocation and Hale Barns which meet Beeway design standards. This narrow, unlit country lane is a proposed Beeway in the TfGM Network and offers direct access to the residential area of Hale Barns, just 1km away, and onward routes to Hale and Altrincham. The volume of development and parking provision at Global Logistics may require the introduction of a physical barrier at Sunbank Lane west of the development to prevent through vehicles and still allow sustainable modes, creating a sustainable access route to the development and preventing a rat run through Hale Barns.
- Safe cycling and walking routes within the allocation.

4.5.7 The travel plan for the allocation could include public transport incentives and provides the opportunity to promote a Bike Hire scheme operating across the airport and its facilities, South Manchester University Hospital, and proposed development allocations at Timperley Wedge (GMA46) and Roundthorn Medipark Extension (GMA11). This could be a multi modal transport hub for the wider area providing interchange opportunities between traditional rail, Metrolink, bus e-bike, EV car clubs and bikes to make this a super connected regional hub outside of the city centre.

5. Parking

5.1.1 The following parking standards for industrial development are set out in Manchester City Council's Core Strategy Development Plan Document (Appendix B). These standards are the starting point for discussions with developers.

5.1.2 With regards to maximum number of spaces for car parking:

- General Industry: 1 space per 45 sq. metres.
- Storage and Distribution: 1 space per 100 sq. metres.

5.1.3 With regards to minimum number of spaces for cycle parking:

- General Industry: 1 space per 450 sq. metres.
- Storage and Distribution: 1 space per 850 sq. metres.

6. Allocation Trip Generation and Distribution

6.1.1 The strategic modelling component of the GMSF Locality Assessments have been produced using data provided from TfGM's Variable Demand Model (GMVDM).

6.1.2 Future trip generation to/from the allocation (i.e. how many people and vehicles will enter or leave the allocation) was estimated by applying a set of GM-wide trip rates to the agreed development quantum for each allocation. The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model.

6.1.3 Four Test Cases ("GMSF Constrained" and "GMSF High Side", for both 2025 and 2040) were used to assess and mitigate the impact of the GMSF Allocations on the Greater Manchester transport network.

6.1.4 The development quantum for the GMA10 Global Logistics allocation is shown in Table 2, and the estimated traffic generation for both the constrained and high scenarios is shown in Table 3. No development is anticipated at this allocation ahead of 2025 therefore no trips are generated at this allocation in 2025.

Table 2. Development Quantum: Global Logistics

Residential	Houses	0	0
Residential	Apartments	0	0
Employment	B2 / B8	0	25,000 sqm
Total		**0**	**25,000 sqm**

Table 3. Allocation Traffic Generation: Global Logistics

Year	AM Peak Hour Departures	AM Peak Hour Arrivals	PM Peak Hour Departures	PM Peak Hour Arrivals
2025 GMSF Constrained	0	0	0	0
2025 GMSF High-Side	0	0	0	0
2040 GMSF Constrained	51	90	79	30
2040 GMSF High-Side	58	97	79	31

Units are in PCU (passenger car units/hr)

6.1.5 Table 4 and Figure 3 indicate the distribution of traffic on the network to and from the allocation. The primary movements in the AM and PM are from M56. In table 4 the percentage figures in the AM indicate the origin/destination allocation trips. 81% of trips use the M56 33% south of junction 6 and 48% north of junction 6 towards Manchester centre. The other movement of note is the 11% of trips using A538 Wilmslow Road to the east of the site.

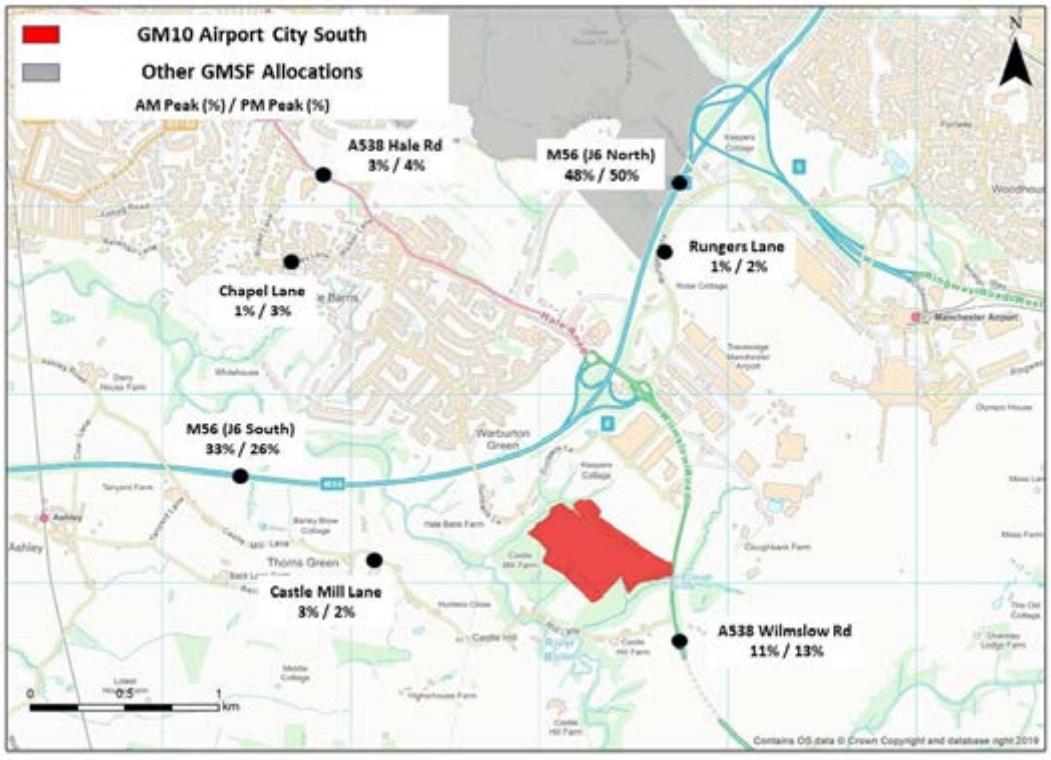
6.1.6 In the PM 76% of trips use the M56 with 26% using the M56 south of junction 6 and 50% using the M56 North of the junction 6. Again a significant proportion of trips use A538 Wilmslow Road.

6.1.7 It is worth noting that a proportion of trips accessing the site via the M56 use Sunbank Lane rather than A538 Wilmslow Road.

Table 4. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)

Route	AM Peak Hour	PM Peak Hour
A538 Wilmslow Road	11%	13%
Castle Mill Lane	3%	2%
M56 (J6 South)	33%	26%
Chapel Lane	1%	3%
A538 Hale Road	3%	4%
M56 (J6 North)	48%	50%
Runger Lane	1%	2%

Figure 3. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)



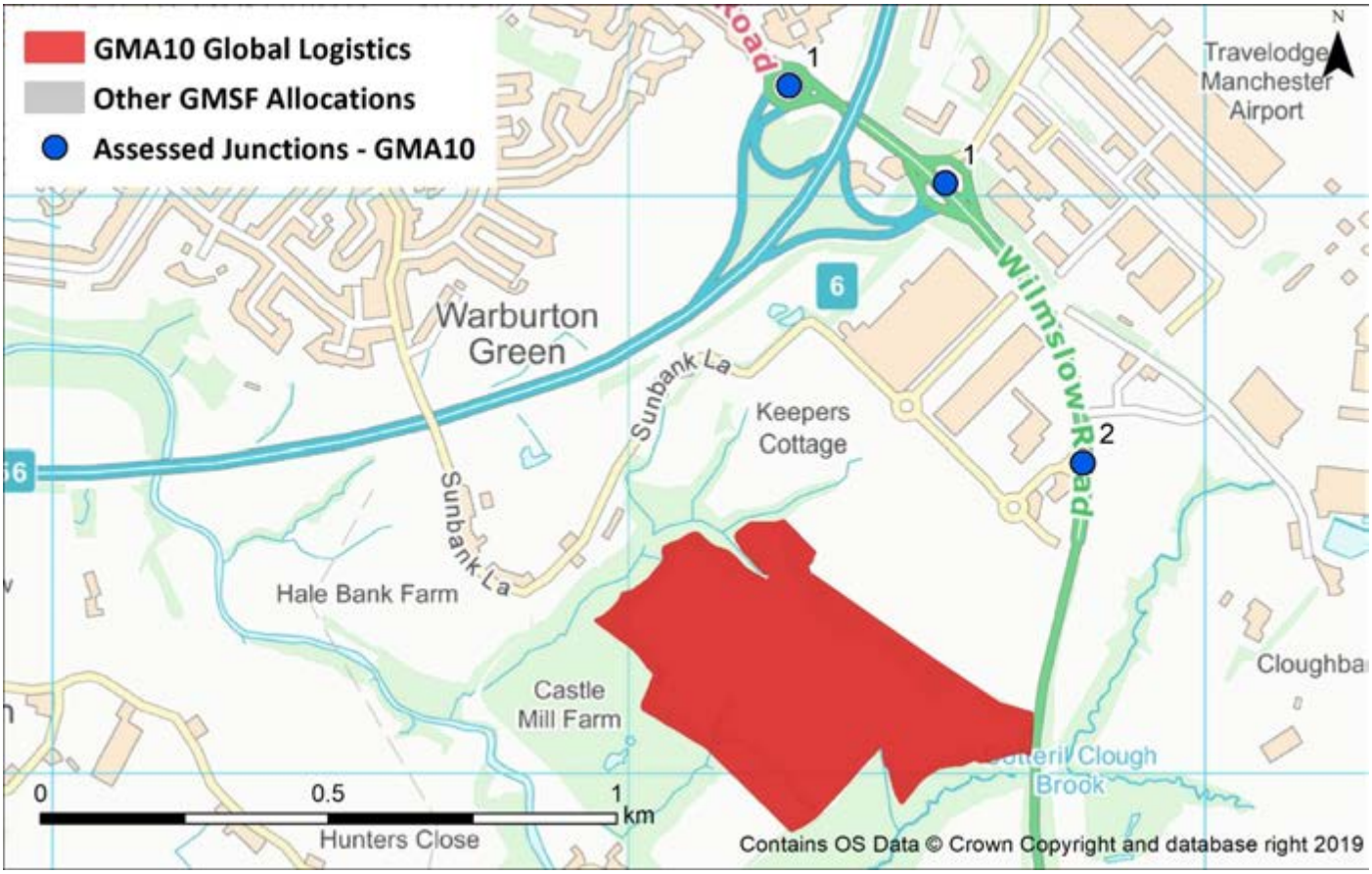
Note: All boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps

7. Current Highway Capacity Review

7.1 Existing Network

7.1.1 Based on the configuration of the of the existing highway network and the planned access strategy, two junctions have been identified for assessment. These are identified in Figure 4.

Figure 4. Assessed Junctions: Global Logistics



Note: All boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps

7.1.2 During the AM and PM peaks, the access roads into the allocation via Sunbank Lane experience minor congestion. Sections of the A538 Wilmslow Road that lead to and from the allocation also experience congestion during the PM peak.

7.1.3 The ingress / egress routes to the allocation would pass through the A538 / Sunbank Lane signalised junction. This junction is in close proximity to the larger M56 Junction 6 signalised junction.

7.1.4 Junction 6 of the M56 experiences congestion in both the AM and PM peak. In the AM the congestion is primarily around the east slip road roundabout where the M56 slip roads meet Runger Lane and A538 Wilmslow Road. This congestion is on both Wilmslow Road and the M56 southbound off slip. In the PM the congestion around junction 6 of the M56 is more severe with congestion being focused around the M56 southbound on slip (Chester-bound) and through the junction on the M56 this congestion extends back up the M56 beyond junction 4. Additionally there is congestion on Wilmslow Road and Runger Lane.

8. Treatment of Cumulative Impacts

8.1.1 In order to assess the cumulative impact of GM allocations on the network, two model runs were undertaken, a 'constrained' and 'high side' assessment. The constrained forecasts could reduce the number of future highway trips due to congestion on the highway network. This constraining process is undertaken by the Greater Manchester Variable Demand Model (GMVDM).

8.1.2 The constrained and high side model runs take account of traffic associated with all GMSF allocations. GMA3.2 Timperley Wedge and GMA3.1 Roundthorn Medipark extension are both within the vicinity of the allocation and would contribute traffic and congestion along the M56. The outputs for GMA10 Global Logistics have therefore been considered in conjunction with Allocations GMA3.2 Timperley Wedge and GMA3.1 Roundthorn Medipark.

9. Allocation Access Assessment

9.1.1 Vehicular access to the GMA 10 allocation as a whole would be as per the access strategy set out in Chapter 4.

9.1.2 As part of future masterplanning work allocation access arrangements should produce a detailed design consistent with Greater Manchester's best practice Streets for All highway design principles. This will be required at the more detailed planning application stage.

10. Impact of Allocation Before Mitigation on the Local Road Network

10.1.1 In order to understand a worst case impact of the GMSF, the 'high side' runs from the GMVDM were used to derive with GMSF development flows for 2040. These flows were then entered into junction based models for the junctions identified in section 8. Flows from a 2040 reference case scenario (including approved Local Plan development from the respective districts) were also extracted to provide a comparison between the operation of those junctions in the 2040 reference case and the 2040 with GMSF development scenarios.

10.1.2 The 'with GMSF' scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the districts. Through discussions with TfGM and the Combined Authority, it has been agreed that where mitigation is required, it should mitigate the impacts back to a reference case scenario. It should be noted that mitigating back to this level of impact may not mean that the junction operates within capacity.

10.1.3 This section looks at the impact on the network at the junctions highlighted in section 8. Signalised junctions were assessed in detail using industry-standard modelling software LINSIG version 3. Where possible, traffic signal information was requested from TfGM in order to ensure that the local junction models reflected (as far as possible), the operation of the junctions on the ground. Junctions 9 software was used to assess priority and roundabout junctions. Table 5 below provides a comparison between the operation of the in scope junctions in the 2040 reference case and the 2040 'high side' scenarios, as well as the allocation development flows through each respective junction. The table shows a comparison between the ratio of flow to capacity on the worst case arm at each junction as well as the total development flows through the junction.

10.1.4 For reference, a figure of between 85% and 99% illustrates that the junction is nearing its operational capacity, and a figure of 100% or over illustrates that flows exceed the operational capacity at the junction and increased vehicle queuing and delay are likely to occur.

10.1.5 Table 5 summarises the results of the individual junctions models assessing the junctions on the Local Road Network (LRN).

Table 5. Results of Local Junction Capacity Analysis Before Mitigation – Year 2040

No.	Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1	M56 Junction 6	116	117	126	120	127	87
2	A538/Sunbank Lane	73	74	79	78	137	96

M56 Junction 6

10.1.6 This junction currently experiences congestion in both the AM and PM peak as outline in Section 8. The strategic and local junction modelling has incorporated committed improvements at this location (rainbow works and smart motorways between junction 6 and 8).

10.1.7 The junction is over capacity in the Reference Case and the additional traffic generated in the GMSF high scenario does impact the capacity of the junction. With the current tools available it has not been possible to identify mitigation at this location, further work is required in this location.

A538/Sunbank Lane

10.1.8 The A538/Sunbank Lane junction is a recently upgraded signalised junction operating within capacity in the Reference Case and is broadly comparable in the 'with GMSF scenarios'. As a consequence, no mitigation has been investigated as the junction still operates within capacity at 2040.

11. Transport Interventions Tested on the Local Road Network

11.1.1 The planned highway upgrading measures at the airport (rainbow works) and smart motorway scheme between M56 junction 6 to 8 are already included within the reference case.

12. Impact and mitigation on the Strategic Road Network

12.1 Overview

12.1.1 This chapter covers those impacts where traffic generated by the GMSF allocations meets the Strategic Road Network (SRN). Junctions at the interface between the Local Road Network (LRN) and the Strategic Road Network (SRN) have been assessed using a similar approach to that described in the preceding chapters. Wider issues relating to the SRN mainline are being assessed separately as described below.

12.1.2 TfGM is currently consulting with Highways England and the Combined Authority in relation to the wider impacts of the GMSF allocations on the Strategic Road Network (SRN). This consultation is ongoing and it is expected that it will allow Highways England to gain a strategic understanding of where there is an interaction between network stress points and GMSF allocation demand. Further discussion and transfer of information between TfGM, Highways England and the Local Authorities will be required to ensure points of agreement can be set out in a statement of common ground relating to the acceptability of GMSF allocations in advance of the Examination in Public (EiP).

12.2 Impact of Allocation Before Mitigation on the Strategic Road Network

12.2.1 Tables 6 summarises the results of the assessment of the SRN junction which is impacted by the allocation.

Table 6. Results of Strategic Junction Capacity Analysis Before Mitigation – Year 2040

No.	Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1	M56 Junction 6	116	117	126	120	127	87

12.2.2 As highlighted in Section 11 this junction currently experiences congestion in both the AM and PM peak however committed improvements at this location (rainbow works and smart motorways between junction 6 and 8) have been incorporated within the modelling exercise to support this locality assessment. Despite these improvements the modelling results show this junction is over capacity in the reference case by 2040.

12.2.3 Table 6 illustrates that in the GMSF high side scenario the operation of junction 6 is worse than in the reference case. With the current tools available it has not been possible to identify mitigation at this location, further work is required in this location. As highlighted in section 1 a study is currently underway which aims to develop a strategic approach to mitigate the significant impacts of HS2, NPR and other major development including GMSF and Airport City in the vicinity of Manchester Airport. This multi modal Highway and Transport Study is required to manage access to the Manchester Airport area and develop an approach to mitigating the impact on the M56 which can be implemented in phases over a period of time as developments are realised but which provides a holistic solution.

13. Final list of interventions

13.1.1 The proposed final list of interventions is summarised in Table 7.

Table 7. Final List of Interventions

Mitigation	Description
Allocation Access	
Three arm priority junction	Access junction from internal estate road of phase 2 of Global Logistics (not yet on site).
Supporting Strategic Measures	
M56 J6 improvements	Improvements to be identified through further work.
Necessary Local Mitigations	
A538/Sunbank Lane	Required Improvement not yet defined
Walking and cycling access and crossing	Segregated walking and cycling access points connecting to the shared use cycleway along Sunbank Lane to the west and north of the allocation, with safe crossings of Sunbank Lane where required.

14. Strategic Context – GM Transport Strategy Interventions

14.1.1 Greater Manchester has established a long-term vision for transport, of providing world class connections that support long-term, sustainable economic growth and access to opportunity for all. The four key elements of this vision, which are set out in TfGM's 2040 Strategy and which represent the goals of that strategy are:

- Supporting sustainable economic growth;
- Protecting the environment;
- Improving quality of life for all; and,
- Developing an innovative city region.

14.1.2 To achieve these goals, Greater Manchester must address several challenges. It must support a forecast increase in population of three million by 2040, provide at least 200,000 new homes and the same number of new jobs; all whilst reducing carbon emissions to achieve zero carbon by 2038 at the latest.

14.1.3 In addition to supporting the GMSF, delivering on these four key elements will support an increasingly successful economy recognised as being at the heart of the Northern Powerhouse; help tackle congestion and enable efficient and effective movement of people and goods; ensure transport contributes to high-quality, liveable and healthy neighbourhoods; and create an inclusive and accessible transport network that enables access to opportunities.

14.1.4 Greater Manchester's task is to determine how this growth can be accommodated sustainably, and the 2040 Strategy details the City Region's commitment to providing a transport system capable of supporting its wider social, economic and environmental objectives.

14.1.5 Currently, approximately 60% of all trips in Greater Manchester are made by car, and the majority of these are under 2km. TfGM's 2020-2025 Delivery Plan sets out an aspiration and a plan, to improve the transport system to enable a reduction in car use to no more than 50% of daily trips, with the remaining 50% made by public transport, walking and cycling, an objective referred to as the 'Right Mix' vision.

14.1.6 Achieving this vision will mean a million more trips can be made each day in Greater Manchester by 2040 with no increase in overall motor traffic.

14.1.7 It will enable the City Region to deliver on its economic growth ambitions without increasing overall motor traffic. To achieve this aim, cycling and walking needs to be the natural choice for short trips, people across Greater Manchester will need genuine alternatives to the private car, improvements to the existing transport network will be needed to improve its frequency and reliability, arresting the decline in bus patronage and continuing the growth on rail and Metrolink. In addition, new developments need to be designed to support sustainable transport, and town and district centres need to be planned to make sure they are pleasant, thriving and well connected, to encourage shorter, sustainable journeys over longer distance trips to the Regional Centre.

14.1.8 Streets for All is Greater Manchester's overarching framework which sets out a new way of thinking about the role of streets in creating sustainable. Healthy and resilient places. It focuses on balancing the movement of people and goods alongside the creation of more people-friendly streets and places, making areas more attractive for pedestrians and cyclists as well as for public transport. Work is underway on a Streets for All Strategy which will set out how this framework will be rolled out. To support application of this new approach, TfGM will work with Districts to produce a Streets for All Design Guide that will establish key principles for new street infrastructure, identify best practice to support design of schemes, and provide an audit tool to ensure proposals meet the needs of all people who travel on our streets.

14.1.9 Key to delivering this Streets for All vision will be encouraging growth in bus patronage. More than three quarters of all public transport journeys in Greater Manchester are made by bus, and the bus plays a vital role in tacking congestion and providing access to work leisure and other destinations. Patronage on the bus network has been in decline, with an approximate 10% reduction since 2010. Greater Manchester has invested in its bus network in recent years and has committed significant funding to a number of interventions to improve bus travel.

14.1.10 Following the introduction of the Bus Services Act 2017, GMCA is considering whether to make use of new powers to improve the bus market in GM. This includes considering a proposed bus franchising scheme for GM and other realistic courses of action.

14.1.11 Greater Manchester also has ambitious plans to develop the Bee Network - the UK's largest cycling and walking network as a key element to delivering on the 'Right Mix' vision, and the Combined Authority has allocated £160m between 2018 and2022 to fund the first phase of the Bee Network.

The network has at its core a programme of new and upgraded pedestrian and cycling crossing points of major roads and other sources of severance, connected by a network of signed cycling and walking routes – known as Beeways – on existing quiet streets. These will be complemented by a number of routes on busier roads where Dutch style cycle lanes protected from motor traffic will be constructed.

14.1.12 The Delivery Plan sets out a comprehensive programme of work across all modes and in all Districts which is focused on ensuring the realisation of the 'Right Mix' vision. Many of these interventions support the GMSF allocations directly, whilst others are intended to provide alternatives to private car travel more generally. The schemes demonstrate a clear plan for delivering strategic transport interventions for the first five years of the GMSF plan period, whilst also laying the foundations for longer term investment in sustainable transport across the length of the plan period.

14.1.13 There are a number of measures already planned by Manchester City Council and Transport for Greater Manchester to support sustainable travel, and to contribute to the achievement of Greater Manchester's 'Right Mix' ambition.

14.1.14 Manchester City Council is awaiting Department for Transport approval for the Castlefield rail corridor improvements which will significantly improve the capacity of the line linking Manchester Piccadilly, Oxford Road, Deansgate as well as Victoria Stations, maximising the benefit from other Northern Hub schemes, and permitting increases in capacity and reductions in journey times for both passenger and freight services. This would be in addition to upgrades to Salford Central Station; including platform lengthening and both feasibility and operational works to accommodate longer trains and which would open up new connections to Liverpool, Chester and Manchester Airport.

14.1.15 In addition, there is also an intention to provide increased Metrolink capacity and frequency between Piccadilly and Victoria Stations through the redevelopment of Piccadilly Station planned as part of the HS2 and Northern Powerhouse Rail proposals. This will allow for significant future growth and enable additional Metrolink/tram train service development in the future.

14.1.16 Growth in demand on the rapid transit network will, in the future need to be accommodated by a major increase in capacity through the Regional Centre. A city centre metro tunnel is being considered which would facilitate improved services throughout Greater Manchester and improved services on shorter distance suburban rail lines by conversion to tram-train.

15. Phasing Plan

15.1 Phasing Plan

15.1.1 No development on GMA 10 Global Logistics is anticipated pre 2025. All the development is anticipated to come forward between 2025 and 2040.

15.1.2 The assessments included within this document for Global Logistics have been based on the improvements known as the rainbow works covering Junction 6 of the M56 and Runger Lane (see section 1) and the Smart Motorway improvement between junction 6 and junction 8 of M56 being provided. Phasing of this development is therefore linked to the delivery of these schemes.

15.1.3 As outlined in the site location and overview section of this document, the land to the north of this allocation has an existing planning approval on it, given that the access to the Global Logistic allocation is via internal estate roads as part of this planning approval, the phasing the Global Logistic allocation is linked to the development of this existing planning approval.

Table 8. Allocation Phasing: Global Logistics

Allocation Phasing	2020 25	2025 30	2030 2038	2038+	Total
GMA10 Global Logistics	0	0	25,000 sqm	0	**25,000 sqm**
Total	0	0	25,000 sqm	0	**25,000 sqm**

15.1.4 Table 9 provides an indicative delivery timetable for the identified mitigation measures. It is expected that a more precise implementation timeframe for these schemes will be developed as part of the five-year review of the plan.

15.1.5 For the purposes of the testing the impact of the allocation through the strategic model, a total of 25,000 square metres employment uses have been assumed to be built out by 2040. The GM

transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

15.1.6 All phasing plans information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

15.1.7 GM modelling suite has a 2040 forecast year, as such it uses 2040 data as proxy for 2037 full build out, this will not materially impact on the analysis.

Table 9. Indicative intervention delivery timetable: Global Logistics

Mitigation	2020 2025	2025 2030	2030 2038
Allocation Access			
Three arm priority junction			✓
Supporting Strategic Mitigation			
M56 J6 improvement (SRN)			✓
Necessary Local Mitigations			
Walking and cycling access and crossing			✓
A538/Sunbank Lane junction			

16. Summary

16.1.1 GMA10 Global Logistics is situated immediately to the south of the existing Global Logistics Hub, to the west of Manchester Airport. The allocation is located to the south of junction 6 of the M56.

16.1.2 The Global Logistics allocation comprises 25,000 square metres of B2 (Industrial) and B8 (Warehousing) floorspace. No development on the Global Logistics allocation is anticipated pre 2025, therefore no impact is anticipated at this point. All the development is anticipated to come forward between 2025 and 2040.

16.1.3 A major improvement was recently completed on the A538 Wilmslow Road increasing capacity between the Sunbank Lane and M56 junction 6 from single lane to dual carriage way and upgrading the junction at A538 Wilmslow Road and Sunbank Lane from a priority to a signalised junction. This provided significantly more capacity in this location.

16.1.4 MAG has a number of obligations in relation to the future local highway network as a result of previous planning applications. These improvements are known as the rainbow works and include improvements to Thorley Lane/Runger Lane junction, Runger Lane and Junction 6 of the M56.

16.1.5 GMA10 Global Logistics forms part of the large number of development plans and aspirations in this part of Greater Manchester with a view to creating a diverse neighbourhood with homes, offices and hotels.

16.1.6 Phase 2b of High Speed Rail 2 is proposed to have a station at Manchester Airport. The station location is to the west of the M56 and to the north of GMA10 Global Logistics. It is anticipated that further work will be undertaken in relation to this allocation and its interaction with HS2 in due course. A HS2 station at this location would have a significant impact on the local and strategic road network in this location. A detailed piece of work is required to look at the combined impact of development sites within Manchester and Trafford alongside the HS2 development.

16.1.7 Vehicular access to the allocation would be via internal estate roads onto the existing access route of A538 Wilmslow Road and Sunbank Lane.

16.1.8 The Global Logistics allocation is served by buses travelling along the A538 Wilmslow Road. This road is served by an hourly service between Altrincham and Macclesfield and a second hourly service between Manchester Airport and East Didsbury. The Wythenshawe local links service also covers the Global Logistics site area.

16.1.9 The constrained and high side model runs take account of traffic associated with all GMSF allocations. GMA46 Timperley Wedge and GMA11 Roundthorn Medipark extension are both within the vicinity of the allocation and would contribute traffic and congestion along the M56. The outputs for GMA10 Global Logistics have therefore been considered in conjunction with Allocations GMA46 Timperley Wedge and GMA11 Roundthorn Medipark.

16.1.10 The ‘with GMSF’ scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the districts. Analysis of two junctions within the vicinity of the allocation has indicated that Sunbank Lane/A538 Wilmslow Road does not experience a significant severe impact as a result of development traffic from Global Logistics allocation. Junction 6 is overcapacity in the reference scenario and development traffic from GMA10 Global Logistics impacts on this junction. It is important to note that the planned highway upgrading measures at the airport (rainbow works) and Smart Motorway scheme between M56 junction 6 to 8 are already included within the reference case. With the current tools available it has not been possible to identify mitigation at this location, further work is required in this location. A study is currently underway which aims to develop a strategic approach to mitigate the significant impacts of HS2, NPR and other major development including GMSF and Airport City in the vicinity of Manchester Airport.

Greater Manchester Spatial Framework

Locality Assessment:

Southwick Park (GMA11)

Publication Version 2: November 2020

Identification Table	
Client	Manchester City Council/TfGM
Allocation	Southwick Park
File name	GMA11 Manchester - Southwick Park LA 021020
Reference number	GMA11 (2020 GMSF) previously GMA12 (2019 GMSF)

Approval					
Version	**Role**	**Name**	**Position**	**Date**	**Modifications**
0	Author	AS	AC/AD	27/08/20	Base report
	Checked by	DK/JB	AD	27/08/20	
	Approved by	SH	AD	27/08/20	
1	Author	John Cookson	TfGM	25/09/20	Consistency edits
	Checked by	Duncan McCorquodale	Manchester City Council	30/09/20	
	Approved by	Duncan McCorquodale	Manchester City Council	30/09/20	

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Allocation Data	
Allocation Reference No.	GMA11
Allocation Name	Southwick Park
Authority	Manchester
Ward	Brooklands
Allocation Proposal	24 dwellings
Allocation Timescale	0-5 years ✓ 6-15 years ☐ 16 + years ☐

Glossary

"2025 GMSF Constrained" - is the 2025 forecast case in which the model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be travel via a different route, mode, location or time of day.

"2040 GMSF Constrained" - as above, but for a 2040 forecast year

"2025 GMSF High-Side"- is the 2025 forecast case in which the model does not adjust the input demand based on how the cost of travel changes. In this scenario congestion does not lead to a reassignment of traffic, and therefore road traffic flow will generally be higher.

"2040 GMSF High-Side" - as above, but for a 2040 forecast year

"2025 Reference Case" - is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2025

"2040 Reference Case"- is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2040

AADT - Annual average daily traffic, is a measure used in transportation planning to quantify how busy the road is

Bee Network - is a proposal for Greater Manchester to become the very first city-region in the UK to have a fully joined-up cycling and walking network: the most comprehensive in Britain covering 1,800 miles.

Bus Rapid Transit - is a bus-based public transport system designed to improve capacity and reliability relative to a conventional bus system. Typically, a BRT system includes roadways that are dedicated to buses, and gives priority to buses at junctions where buses may interact with other traffic

Existing Land Supply - these are sites across the conurbation that have been identified by each local planning authority in Greater Manchester and are available for development

Greater Manchester Variable Demand Model (GMVDM) - the multi-modal transport model for Greater Manchester. This transport model provides estimates of future year transport demand as well as the estimates of travel behaviour changes and new patterns that the Plan is likely to produce. These include changes in choices of routes, travel mode, time of travel and changes in journey destinations for some activities such as work and shopping.

“LRN” (Local Road Network) All other roads not classed as Strategic Road Network (see below) comprise the Local Road Network. The LRN is managed by the local highways authorities

National Trip End Model (NTEM) - is a Department for Transport forecast that ensures that measures of population, jobs and trips made by various mode are consistent across the whole of Great Britain.

Rapid transit services - refers to high frequency, high capacity metro style transport services including Metrolink and Bus Rapid Transit.

“SRN” (Strategic Road Network) The Strategic Road Network comprises motorways and trunk roads, the most significant ‘A’ roads. The SRN is managed by Highways England.

“TfGM” - Transport for Greater Manchester, the Passenger Transport Executive for Greater Manchester

Urban Traffic Control (UTC) - is a specialist form of traffic management that, by coordinating traffic signals in a centralised location, minimises the impact of stop times on the road user.

1. Allocation Location & Overview

1.1.1 This Locality Assessment provides an assessment for the Greater Manchester Allocation 11 (GMA 11) Southwick Park; its purpose is to identify the likely transport and highways impacts of the allocation and formulate appropriate mitigation strategies to support the inclusion of the allocation in to the GMSF.

1.1.2 The allocation is located at an existing local park, within a residential area of North Wythenshawe, between the M60 Manchester Outer Ring Road and Southwick Road, north of the B5166 Sale Road within Manchester District.

1.1.3 The allocation comprises 24 houses. Two thirds of the dwellings are anticipated before 2025, with the remainder before 2040.

1.1.4 The allocation currently falls within the Green Belt boundary.

1.1.5 Note that all boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps.

Figure 1. Location Map

Note that at the time of production of this figure, GMA11 was known as GMA12.

1.1.6 For the purposes of the testing the impact of the allocation through the strategic model, a total of 24 dwellings have been assumed to be built out by 2040. The GM transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

1.1.7 All phasing plans information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

2. Key Issues from Consultation

2.1.1 The Greater Manchester Plan for Homes, Jobs and Environment (Spatial Framework) consultation ran from 14th January to 18th March 2019. Transport was not a large issue for this allocation, the comments made during the 2019 GMSF consultation relate to the allocation having good transport link and the allocation potentially having a harmful impact on traffic levels.

3. Existing Network Conditions and Site Access

3.1.1 Southwick Road Connects Southwick Park to B5166 Sale Road. The B5166 connects the A6144 in Sale Moor to the A5103 in Northenden, running parallel to the M60 between junctions 5 and 6.

3.1.2 Southwick Road is a residential street accommodating two way traffic with footpaths on both sides. The road has street lights but no road markings. There are a number of local residential roads leading off of Southwick Road. Cars are parked along the road side along the length of Southwick Road.

3.2 Proposed Site Access

3.2.1 Vehicular access would be via a priority junction onto Southwick Road, there is currently an entrance into the park at this location. There would also be pedestrian and cycle access at this point including footways on either side of the carriageway.

Figure 2. Allocation Access Arrangements (Indicative)

3.2.2 Note that all boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps. Note that at the time of production of this figure, GMA11 was known as GMA12.

4. Multi-modal accessibility

4.1 Overview

4.1.1 Greater Manchester Accessibility Levels (GMAL) are a detailed and accurate measure of the accessibility of a point to the public transport network. The accessibility index score is categorized into eight levels, 1 to 8, where level 8 represents a high level of accessibility and level 1 a low level of accessibility. The GMA11 Southwick Park allocation has a GMAL of 4.

Public Transport

4.1.2 Table 1 identifies the current accessibility of public transport for Southwick Park, exploring the proximity and the frequency of travel during peak hours.

Table 1. Accessibility of and proximity to Public Transport.

Mode	Nearest Stop/ Station	Distance (km)	Peak Hour Frequency (Mins)
Bus	Sale Road	0.23	15

Mode	Nearest Stop/ Station	Distance (km)	Peak Hour Frequency (Mins)
Rail	Gatley	4.2	60
Metrolink	Northern Moor	0.4	12

4.1.3 The nearest bus stop is located on B5166 Sale Road approximately 200m from the development allocation. Both of these bus stops are served by 4 bus routes, the 19, 18, 41 and X5. Table 2 summarises the routes and frequencies of these bus services. Bus services are provided along B5166 Sale Road with regular services to Sale, Altrincham and the Trafford Centre.

Table 2. Current bus service provision

Service	Route	Frequency	Operator
19	Altrincham - Wythenshawe	20 minutes	Arriva
18	Trafford Centre - Wythenshawe	Hourly	Manchester Community Transport
41	Sale – Middleton	15 minutes	Go North West
X5	Sale - Stockport	Hourly	Manchester Community Transport

4.1.4 The nearest rail station is at Gatley some 4 kilometres away. This station is on the Styal Line, served regularly by Transpennine Express services between Redcar and Manchester Airport and Northern Rail services between Liverpool Lime Street and Crewe.

4.1.5 There are 5 trains an hour from the station two serving Manchester Airport and a train per hour to Crewe. A further 2 trains per hour serve Liverpool Lime Street and Redcar Central respectively via Manchester central stations.

4.1.6 Metrolink services are available at the nearby Northern Moor stop. This stop is served by the Navy line linking to Victoria and Manchester Airport.

Walking and cycling

4.1.7 Existing pedestrian infrastructure in the vicinity of the allocation comprises footways along both sides of Southwick Road. These footways are illuminated with street lighting. Southwick Road connects to Sale Road, which also has footways on both sides and is illuminated by street lights. To the west of the Southwick Road junction with Sale Road is a pedestrian crossing.

4.1.8 The allocation is within the vicinity of a number of traffic free routes and links into the Beeways network at the junction of Southwick Road /Fell Park Road providing good cycle connections to the local centres of Wythenshawe, Sale, Altrincham and Gatley.

Road Safety

4.1.9 The safety record on roads within the vicinity of the allocation is generally good. Table 3 shows the number of vehicle collisions between 2016 and 2018 within a kilometre area surrounding GMA11 Southwick Park. There have been no fatal incidents in this period.

Table 3. Collision data

Fatal	Serious	Slight	Total
0	4	-	4

4.2 Proposed

4.2.1 The allocation should facilitate improvements to the local highway network, including entry/egress from Southwick Road in the south, to enable safe vehicular and pedestrian access to and from the allocation.

5. Parking

5.1.1 No specific standards; provision is on a site by site basis. 1 space per dwelling likely.

6. Allocation Trip Generation and Distribution

6.1.1 Future trip generation to/from the allocation (i.e. how many people and vehicles will enter or leave the allocation) was estimated by applying a set of GM-wide trip rates to the agreed development quantum for each allocation. The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model.

6.1.2 Two thirds of the allocation (16 dwellings) is anticipated at this allocation ahead of 2025. At 2040 the allocation is fully built out and is forecast to generate around 15 two-way vehicle trips during both the AM and PM peak hours. Of those trips accessing the allocation approximately 45% do so from the west along the B5166 Northenden Road with a further 45% coming from the east along the B5166 Sale Road. 9% access the allocation from Wythenshawe Road via Orton Road and the B5166 Sale Road.

6.1.3 Those trips leaving the allocation in the PM 46% go via B5166 westbound and 46% along the B5166 eastbound. Those accessing the M60 (both clockwise and anticlockwise) do so via Junction 6 with a proportion of M60 anticlockwise trips going via A5103, M56 and joining the M60 at Junction 3. 8% of trips go via the B5166 Sale Road and Orton Road onto Wythenshawe Road to the south of the allocation

Table 4. Development Quantum

Residential	Houses	16	8
Residential	Apartments	0	0
Industrial	e.g. B2/B8 etc.	0	0
Total		**16**	**24**

Table 5. Allocation Traffic Generation: Southwick Park

Year	AM Peak Hour Departures	AM Peak Hour Arrivals	PM Peak Hour Departures	PM Peak Hour Arrivals
2025 GMSF Constrained	6	2	3	6
2025 GMSF High-Side	6	2	3	6
2040 GMSF Constrained	8	2	4	9
2040 GMSF High-Side	8	3	5	9

Units are in PCU (passenger car units/hr)

Table 6. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)

Route	AM Peak Hour	PM Peak Hour
Wythenshawe Road (via B5166 Sale Road/Orton Road)	9%	8%
B5166 Sale Road (eastbound)	45%	46%
B5166 Northenden Road (westbound)	45%	46%

Figure 3. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)

Note that at the time of production of this figure, GMA11 was known as GMA12.

6.1.4 Note that all boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps.

7. Current Highway Capacity Review

7.1.1 During the AM and PM peaks Southwick Road, which the access for the allocation would feed onto, does not experience congestion.

7.1.2 Southwick Road connects to the B5166 via a priority junction. The B5166 is a 2-lane single-carriageway. During the AM and PM peak B5166 Sale Road experiences congestion in places in both directions.

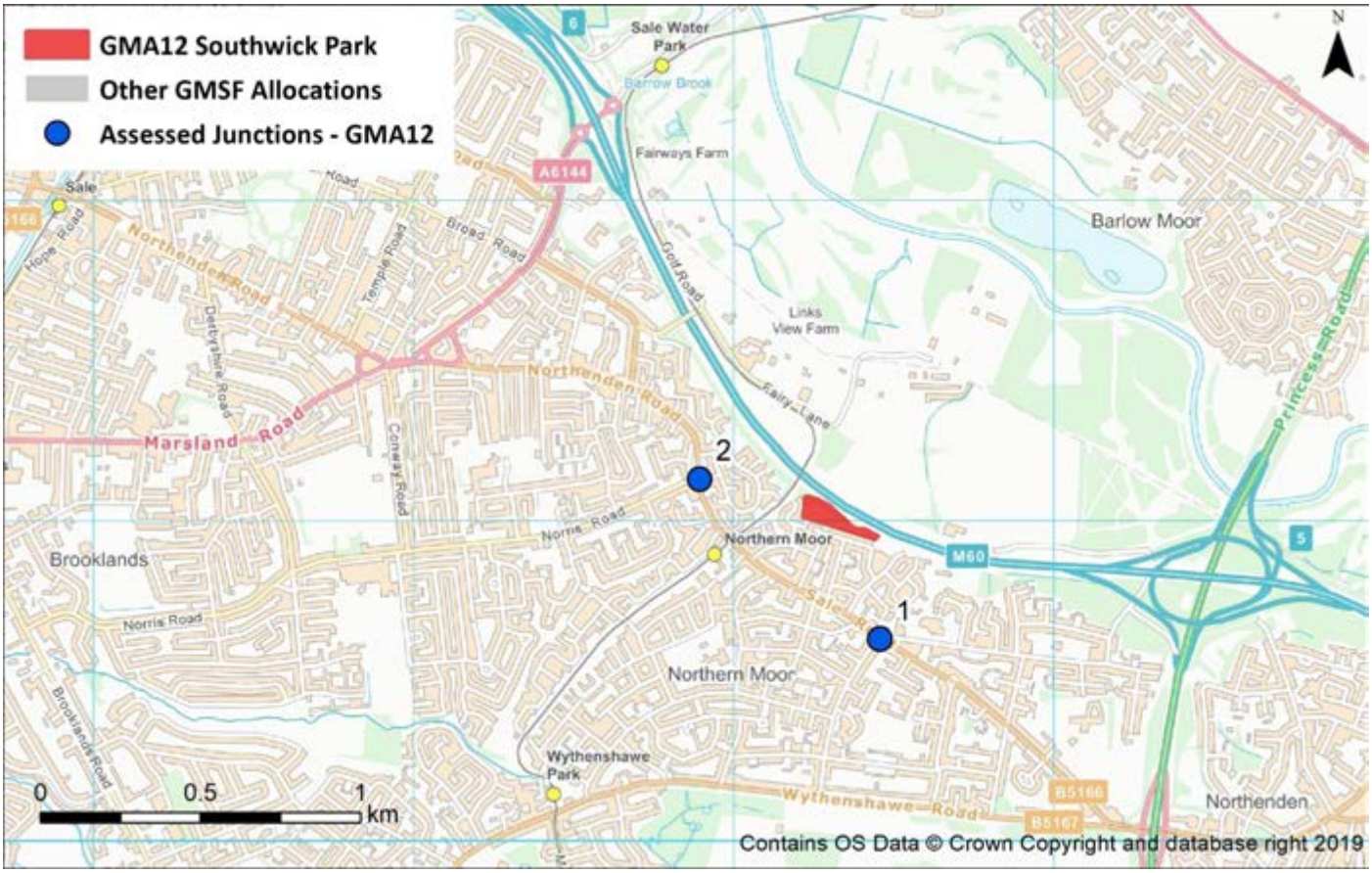
7.1.3 There is a level crossing on the B5166 250m to the west of its junction with Southwick Road, which impacts on the traffic flow along B5166.

7.1.4 There are a number of junctions in proximity to the allocation where additional traffic could have an impact on their operation based on existing conditions. The following junctions have been modelled to understand the impact on the local road network. These junction are shown in Figure 4:

1. Orton Road/B5166 Sale Road

2. B5166 Sale Road/Norris junction

Figure 4. Assessed Junctions



Note that at the time of production of this figure, GMA11 was known as GMA12.

7.1.5 Note that all boundaries shown were correct at time of writing – for definitive boundary information refer to the GMSF allocation maps.

8. Treatment of Cumulative Impacts

8.1.1 The constrained and high side model runs take account of traffic associated with all GMSF allocations. However there are no other GMSF allocations within close proximity of the Southwick Park allocation and it is not likely that other allocations would impact on the same junctions as Southwick Park.

9. Allocation Access Assessment

9.1.1 Vehicular access would be via a priority junction onto Southwick Road. This allocation access arrangement has been developed to illustrate that there is a practical option for allocation access in this location and to develop indicative cost estimations. It is assumed that a detailed design consistent with Greater Manchester's best practice Streets for All highway design principles will be required at the more detailed planning application stage.

10. Impact of Allocation Before Mitigation on the Local Road Network

10.1.1 In order to understand a worst case impact of the GMSF, the 'high side' runs from the GMVDM were used to derive with GMSF development flows for 2040. These flows were then entered into junction based models for the junctions identified in section 8. Flows from a 2040 reference case scenario (including approved Local Plan development from the respective districts) were also extracted to provide a comparison between the operation of those junctions in the 2040 reference case and the 2040 with GMSF development scenarios.

10.1.2 The 'with GMSF' scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the districts. These assessments were then used to identify the junctions where there was considered to be a substantial impact, relative to the operation of the junction in the 2040 reference case, and hence where mitigation was considered to be required in order to bring GMSF allocations forward. Through discussions with TfGM and the Combined Authority, it has been agreed that where mitigation is required, it should mitigate the impacts back to a reference case scenario. It should be noted that mitigating back to this level of impact may not mean that the junction operates within capacity by 2040.

10.1.3 This section looks at the impact on the network at the junctions highlighted in section 8. Junctions 9 software was used to assess priority junctions. Table 7 below provides a comparison between the operation of the in scope junctions in the 2040 reference case and the 2040 'high side' scenarios, as well as the allocation development flows through each respective junction. The table shows a comparison between the ratio of flow to capacity on the worst case arm at each junction as well as the total development flows through the junction.

10.1.4 For reference, a figure of between 85% and 99% illustrates that the junction is nearing its operational capacity, and a figure of 100% or over illustrates that flows exceed the operational capacity at the junction and increased vehicle queuing and delay are likely to occur.

10.1.5 The following table summarises the results of the individual junctions models assessing the junctions on the Local Road Network (LRN).

Table 7. Results of Local Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1. Orton Road/B5166 Sale Road	67%	67%	68%	66%	6	6
2. B5166 Sale Road/Norris junction	55%	57%	63%	72%	5	8

10.1.6 In the Reference Case Orton Road/B5166 Sale Road is operating within capacity. The worst performing arm in 2040 reference is operating at 67% capacity and is broadly comparable in the 'with GMSF scenarios', where the worst performing arm is operating at 68%. As a consequence, no mitigation has been investigated as the junction still operates within capacity at 2040.

10.1.7 In the Reference Case B5166 Sale Road/Norris junction is operating within capacity. The worst performing arm in 2040 is in the PM and is operating at 57% and is broadly comparable in the 'with GMSF scenarios'. where the 2040 PM the worst arm is operating at 72%. As a consequence, no mitigation has been investigated as the junction still operates within capacity at 2040.

11. Transport Interventions Tested on the Local Road Network

11.1.1 No mitigation has been identified as required based on the impact of the allocation described in section 11.

12. Impact and mitigation on Strategic Road Network (Where applicable)

12.1.1 The very small volume of allocation generated traffic is not expected to impact the Strategic Road Network.

12.1.2 TfGM is currently consulting with Highways England and the Combined Authority in relation to the wider impacts of the GMSF allocations on the Strategic Road Network (SRN). This consultation is ongoing and it is expected that it will allow Highways England to gain a strategic understanding of where there is an interaction between network stress points and GMSF development demand which will facilitate further discussion and transfer of information between TfGM and Highways England (yet to be defined) in reaching agreement and/or common ground relating to the acceptability of GMSF allocations in advance of Examination in Public (EiP).

13. Final list of interventions

13.1.1 The proposed final list of interventions is summarised in Table 8.

Table 8. Final List of Interventions

Mitigation	Description
Site Access	
GMA11	Priority junction onto Southwick Road
Necessary Strategic interventions	
N/A	
Supporting Strategic Interventions	
N/A	-
Necessary Local Mitigations	
N/A	
Supporting Local Mitigations	
N/A	
SRN Interventions	
N/A	

14. Strategic Context – GM Transport Strategy Interventions

14.1.1 Greater Manchester has established a long-term vision for transport, of providing world class connections that support long-term, sustainable economic growth and access to opportunity for all. The four key elements of this vision, which are set out in TfGM's 2040 Strategy and which represent the goals of that strategy are:

- Supporting sustainable economic growth;
- Protecting the environment;
- Improving quality of life for all; and,
- Developing an innovative city region.

14.1.2 To achieve these goals, Greater Manchester must address several challenges. It must support a

forecast increase in population of three million by 2040, provide at least 200,000 new homes and the same number of new jobs; all whilst reducing carbon emission by 80% by 2050 (from 1990 levels).

14.1.3 In addition to supporting the GMSF, delivering on these four key elements will support an increasingly successful economy recognised as being at the heart of the Northern Powerhouse; help tackle congestion and enable efficient and effective movement of people and goods; ensure transport contributes to high-quality, liveable and healthy neighbourhoods; and create an inclusive and accessible transport network that enables access to opportunities.

14.1.4 Greater Manchester's task is to determine how this growth can be accommodated sustainably, and the 2040 Strategy details the City Region's commitment to providing a transport system capable of supporting its wider social, economic and environmental objectives.

14.1.5 Currently, approximately 60% of all trips in Greater Manchester are made by car, and the majority of these are under 2km. TfGM's 2020-2025 Delivery Plan sets out an aspiration and a plan, to improve the transport system to enable a reduction in car use to no more than 50% of daily trips, with the remaining 50% made by public transport, walking and cycling, an objective referred to as the 'Right Mix' vision.

14.1.6 Achieving this vision will mean a million more trips can be made each day in Greater Manchester by 2040 with no increase in overall motor traffic.

14.1.7 It will enable the City Region to deliver on its economic growth ambitions without increasing overall motor traffic. To achieve this aim, cycling and walking needs to be the natural choice for short trips, people across Greater Manchester will need genuine alternatives to the private car, improvements to the existing transport network will be needed to improve its frequency and reliability, arresting the decline in bus patronage and continuing the growth on rail and Metrolink. In addition, new developments need to be designed to support sustainable transport, and town and district centres need to be planned to make sure they are pleasant, thriving and well connected, to encourage shorter, sustainable journeys over longer distance trips to the Regional Centre.

14.1.8 Streets for All is Greater Manchester's overarching framework which sets out a new way of thinking about the role of streets in creating sustainable, healthy and resilient places. It focuses on balancing the movement of people and goods alongside the creation of more people-friendly

streets and places, making areas more attractive for pedestrians and cyclists as well as for public transport. Work is underway on a Streets for All Strategy which will set out how this framework will be rolled out. To support application of this new approach, TfGM will work with Districts to produce a Streets for All Design Guide that will establish key principles for new street infrastructure, identify best practice to support design of schemes, and provide an audit tool to ensure proposals meet the needs of all people who travel on our streets.

14.1.9 Key to delivering this Streets for All vision will be encouraging growth in bus patronage. More than three quarters of all public transport journeys in Greater Manchester are made by bus, and the bus plays a vital role in tacking congestion and providing access to work leisure and other destinations. Patronage on the bus network has been in decline, with an approximate 10% reduction since 2010. Greater Manchester has invested in its bus network in recent years and has committed significant funding to a number of interventions to improve bus travel.

14.1.10 Following the introduction of the Bus Services Act (2017), the Greater Manchester Combined Authority asked TfGM to carry out an assessment of a bus franchising scheme. After its completion and the conclusion of an independent audit, the GMCA decided to proceed to with a consultation on a proposed scheme which ran until January 2020. The responses to that consultation are currently under consideration and the Mayor will be able to use the powers provided by the Act to make a decision on whether to introduce the proposed franchising scheme or not.

14.1.11 Greater Manchester also has ambitious plans to develop the Bee Network - the UK's largest cycling and walking network as a key element to delivering on the 'Right Mix' vision, and the Combined Authority has allocated £160m between 2018 and2022 to fund the first phase of the Bee Network. The network has at its core a programme of new and upgraded pedestrian and cycling crossing points of major roads and other sources of severance, connected by a network of signed cycling and walking routes – known as Beeways – on existing quiet streets. These will be complemented by a number of routes on busier roads where Dutch style cycle lanes protected from motor traffic will be constructed.

14.1.12 The Delivery Plan sets out a comprehensive programme of work across all modes and in all Districts which is focused on ensuring the realisation of the 'Right Mix' vision. Many of these interventions support the GMSF allocations directly, whilst others are intended to provide alternatives to private car travel more generally. The schemes demonstrate a clear plan for delivering strategic transport interventions for the first five years of the GMSF plan period, whilst

also laying the foundations for longer term investment in sustainable transport across the length of the plan period.

14.1.13 There are a number of measures already planned by Manchester City Council and Transport for Greater Manchester to support sustainable travel, and to contribute to the achievement of Greater Manchester's 'Right Mix' ambition.

14.1.14 Manchester City Council is awaiting Department for Transport approval for the Castlefield rail corridor improvements which will significantly improve the capacity of the line linking Manchester Piccadilly, Oxford Road, Deansgate as well as Victoria Stations, maximising the benefit from other Northern Hub schemes, and permitting increases in capacity and reductions in journey times for both passenger and freight services. This would be in addition to upgrades to Salford Central Station; including platform lengthening and both feasibility and operational works to accommodate longer trains and which would open up new connections to Liverpool, Chester and Manchester Airport.

14.1.15 In addition, there is also an intention to provide increased Metrolink capacity and frequency between Piccadilly and Victoria Stations through the redevelopment of Piccadilly Station planned as part of the HS2 and Northern Powerhouse Rail proposals. This will allow for significant future growth and enable additional Metrolink/tram train service development in the future.

14.1.16 Growth in demand on the rapid transit network will, in the future need to be accommodated by a major increase in capacity through the Regional Centre. A city centre metro tunnel is being considered which would facilitate improved services throughout Greater Manchester and improved services on shorter distance suburban rail lines by conversion to tram-train.

14.1.17 TfGM is also considering the role of bus reform in Manchester over the next five years. Following the introduction of the Bus Services Act 2017, GMCA is considering whether to make use of new powers to improve the bus market in GM. This includes considering a proposed bus franchising scheme for GM and other realistic courses of action.

15. Phasing Plan

15.1.1 Two thirds of the dwellings at GMA11 Southwick Park are anticipated before 2025, with the remainder before 2040.

15.1.2 No interventions or mitigations are planned as a result of this allocation. A priority junction is

required as access to the allocation.

15.1.3 For the purposes of the testing the impact of the allocation through the strategic model, a total of 24 dwellings have been assumed to be built out by 2040. The GM transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

15.1.4 All phasing plans information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

Table 9. Allocation Phasing: Southwick Park

Allocation Phasing	2020 25	2025 30	2030 2038	2038+	Total
GMA11	16	8			**24**
Total	16	8			**24**

Table 10. Indicative intervention delivery timetable: Southwick Park

Mitigation	2020 2025	2025 2030	2030 2038
Site Access			
Priority junction onto Southwick Road	✓		
Necessary Strategic interventions			
N/A			
Supporting Strategic Interventions			
N/A			
Necessary Local Mitigations			
N/A			
Supporting Local Mitigations			

N/A			
SRN Interventions			
N/A			

16. Summary & Conclusion

16.1.1 The allocation comprises 24 houses. Two thirds of the dwellings are anticipated before 2025, with the remainder before 2040.

16.1.2 The allocation is located at an existing local park, within a residential area of North Wythenshawe, between the M60 Manchester Outer Ring Road and Southwick Road, north of the B5166 Sale Road within Manchester District

16.1.3 The allocation currently falls within the Green Belt boundary.

16.1.4 Vehicular access would be via a priority junction onto Southwick Road, there is currently an entrance into the park at this location. There would also be pedestrian and cycle access at this point including footways on either side of the carriageway.

16.1.5 Allocation access assessments have been undertaken and based on the suggested quantum of development it has been concluded that the priority junction arrangements would be sufficient to accommodate the expected level of demand.

16.1.6 Southwick Park is served by buses traveling along B5166 Sale Road. With 4 regular services serving Trafford Centre, Altrincham, Wythenshawe, Sale, Middleton and Stockport. No bus services are provided along Southwick Road.

16.1.7 The allocation is within the vicinity of a number of traffic free routes and links in to the Beeways network at the junction of Southwick Road /Fell Park Road providing good cycle connections to the local centres of Wythenshawe, Sale, Altrincham and Gatley.

16.1.8 The 'with GMSF' scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the districts. Analysis of two junctions within the vicinity of the allocation has indicated that neither experience a significant severe impact as a result of development traffic from Southwick Park allocation.

16.1.9 No interventions or mitigations are planned as a result of this allocation. A priority junction is required as access to the allocation.

16.1.10 Based on the information contained within this report, we conclude that the traffic impacts of the allocation are considered to be less than severe. The modelling work indicates that junctions within the vicinity of the allocation will operate within capacity in 2040 with GMSF development. At this stage, the modelling work is considered to be a 'worst case' scenario as it does not take full account of the extensive opportunities for active travel and public transport improvements in the local area. On this basis, we would consider that the allocation is deliverable from a transport perspective.