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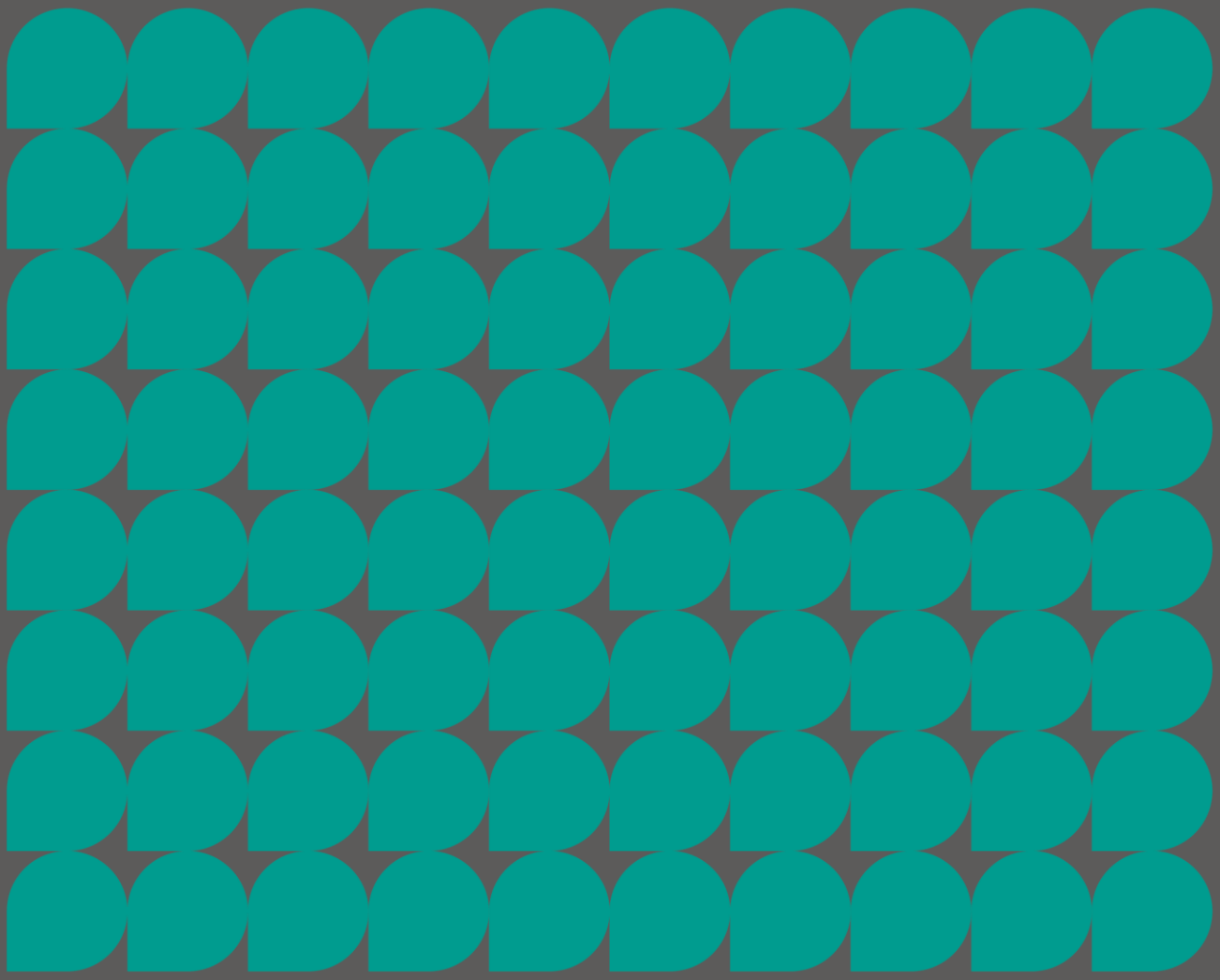
# Transport Locality Assessments Addendum

Wigan

Places for Everyone – July 2021



# PLACES FOR EVERYONE

Locality Assessment Update Note

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# 1. Executive Summary

1.1.1 Based on the most recent round of modelling work undertaken (June 2021), the conclusions of each of the Wigan Locality Assessments, November 2020, remain robust. The 2020 assessments gave an initial indication that the traffic impacts of the allocations can be sufficiently mitigated and that the allocations are deliverable with the proposed mitigations in place.

1.1.2 These conclusions have been tested again, using updated modelling where necessary, to reflect recent changes – such as Stockport's withdrawal from GMSF. The review has not identified any significant changes and, on this basis, the conclusions arrived at in the 2020 Locality Assessments are still considered to be valid.

1.1.3 However, further work and a full Transport Assessment will be necessary to ensure that potential mitigation measures are designed in more detail and remain appropriate as the allocations move through the planning process. The allocations will also need to be supported by continuing wider transport investment across Greater Manchester.

# 2. Introduction

## 2.1 Background

### 2.1. Background

2.1.1. Since April 2019, SYSTRA Ltd has been leading, on behalf of the nine Places for Everyone Local Authorities and Transport for Greater Manchester, on the assessment and mitigation of the transport impacts of the development Allocations identified in the Places for Everyone joint development plan (formerly the Greater Manchester Spatial Framework). This work resulted in the publication of a series of Locality Assessments which:

- Forecast the pattern of traffic movement in 2025 and 2040 on the Greater Manchester transport network, both before and after the addition of traffic resulting from the delivery of the GMSF Allocations;
- Assessed the impact of that additional traffic on exiting transport infrastructure;
- Identified measures which would mitigate the impact of the additional traffic by examining enhancements to the public transport, active travel and highway network;
- Priced those enhancements on a consistent basis to support the evaluation of the viability of the Plan; and,
- On the basis of the above, confirmed whether or not the Allocation was appropriate from a transport perspective.

2.1.2. Following the withdrawal of Stockport Council from the original Greater Manchester Spatial Framework 2020 Joint Development Plan Document (Joint DPD) preparations, the nine remaining Local Authorities have agreed to use the GMSF as the basis for a new Places for Everyone Plan Joint DPD. This new plan been prepared on the basis that it will have 'substantially the same effect' as the GMSF. Full details of the processes, dates of consultations and key decision meetings are set out in the Topic Papers.

2.1.3. The Transport Locality Assessment – Wigan – GMSF 2020 document formed part of the original evidence base which was assembled to support the policies and proposals in the GMSF 2020. Given the basis on which the PfE has been prepared, the GMSF evidence base remains valid in relation to the PfE 2021. That said, the original Locality Assessment for Wigan has been reviewed in the light of the change from GMSF 2020 to the PfE2021 and this addendum report has been produced to identify any minor amendments. This addendum should therefore be read in conjunction with the Transport Locality Assessment – Wigan – GMSF 2020 document made available in October 2020.

2.1.4. Since then a number of factors have necessitated a review of the conclusions of those Locality Assessments and revision or confirmations to those findings as appropriate. Those factors include:

- The removal of some Allocations from the Plan;
- Changes to the quantum of development proposed within some Allocations;
- Changes to the scale or type of transport supply (also known as transport mitigation schemes or interventions) proposed close to or within some Allocations;
- The withdrawal of Stockport Council and their associated Allocations from the Greater Manchester Spatial Framework; and,
- Modifications to the reference transport network to include newly committed schemes on the strategic road network (SRN).

2.1.5. These are factors which, taken together, may alter the pattern of traffic movements close to the remaining Allocations and impact on wider traffic movements across the conurbation. As such, it was considered necessary to check that the conclusions of the original assessments remain robust. This note sets out the processes behind, and conclusions of, the review for Wigan. This note identifies whether any of these changes are likely to significantly impact on the conclusions of the original assessments and where needed it sets out an updated technical assessment of the impact of the Allocations in Wigan on the operation of the transport network, and where necessary

reviews and revises the transport infrastructure necessary to mitigate the impacts of the site.

## 2.2. Approach to the production of the Locality Assessment Addendum

2.2.1. Since the completion of the original Locality Assessments in September 2020, a number of factors have necessitated a review of the original conclusions. These include the decision of Stockport Council to withdraw from GMSF 2020, resulting in a number of Allocations and supporting infrastructure schemes being removed from the Plan. Other local authorities have chosen for various reasons to either remove Allocations or to make changes to the amount of development, the development type, its phasing, or the type of supporting infrastructure, all of which may have an impact on the operation of the Allocation and it impact it may generate on the transport network. As a result of this SYSTRA Ltd were asked to look again at the assumptions and conclusions of their original work to reassess its validity.

2.2.2. This work began with an update to the to the transport model to reflect the changes summarised above in order to obtain a more relevant forecast of likely trip generation and distribution in the two forecast years of 2025 and 2040.

2.2.3. At the outset of the review process it became clear that the level of detail required would vary between allocations. Some would require only a fairly high-level qualitative review while others would require a more detailed quantitative review. There are a number of reasons for this distinction; some of which are Allocation-specific and some related to regional / GM-wide changes.

2.2.4. In terms of the allocation-specific changes, the key considerations in adopting a quantitative review approach were as follows:

- A material change in development quantum as compared to that which was assessed in Summer 2020 (either an increase or a decrease)
- Proposed changes to the transport interventions serving an allocation made after the core assessment in Summer 2020

- Requested changes relating to the analytical approach; e.g modified trip generation rates, increased spatial extent of the study area, sensitivity tests of alternative networks etc.

2.2.5. In terms of the regional / GM-wide changes, the key considerations in adopting a quantitative review approach were as follows:

- The removal of all of the Stockport allocations and the associated reduction in transport demand; most directly relevant to the neighbouring districts
- Changes in the status of major transport infrastructure; for example, the confirmation of the Simister Island highway network improvements was expected to change traffic distribution and flow patterns in the NE area of GM

2.2.6. The outputs of the strategic modelling at the small number of sites which were considered suitable for a qualitative review were compared to the outputs from the previous round of modelling which was used to inform the production of the original Locality Assessment, in those instances where the outputs were considered to be comparable no further work was deemed necessary.

2.2.7. In the majority of cases however, changes between the model outputs indicated that a quantitative review would be necessary. The scope for this was discussed and agreed with officers of the relevant Local Authority and Transport for Greater Manchester before work began.

2.2.8. The outputs from the strategic modelling exercise were inputted into the local junction models developed for the original Locality Assessment work. Where the strategic modelling indicated that new junctions were likely to come under strain in either of the two future year scenarios, these were built using industry standard 'Linsig v3' or 'Junctions 9' software. Traffic signal information, including signal phasing and timings, and lane geometry (alignment, profile and lane position) was obtained from TfGM in order to replicate the junctions as closely as possible.

2.2.9. In a manner which replicates the method originally used for the Locality Assessment work, junction performance was tested in both the Reference and PfE Scenarios and, assessed to confirm if the mitigations originally developed for the Allocations remained adequate, needed to be expanded, or in fact could be de-scoped or removed all together as a result of changes in traffic flow and distribution. As with the original work the objective here was to mitigate back to the Reference Case, rather than to reduce traffic flow back to the Base Case. This means that the mitigation may not result in the junction operating within capacity in the forecast year.

2.2.10. In a limited number of instances, the updated Locality Assessment work has indicated that traffic flow and distribution may be lower than originally forecast, but the decision has been made not to de-scope or remove a mitigation. This is in order to provide robustness and to future proof the PfE recommendations, recognising that further, more detailed work will be done on a site-by-site basis as part of the planning application process.

2.2.11. In addition to reviewing highways scheme, the non-highway and sustainable transport proposals were also reviewed. These included proposals for new or extended bus services, Metrolink extensions and cycling and walking. The transport evidence documents produced for the GMSF/PfE Plan refer to the Bee Network as Greater Manchester's walking and cycling network. Moving forward the Mayor's intention is for trams, buses, trains, taxis and private hire combined with walking and cycling in Greater Manchester to be branded under the terminology of the Bee Network.

2.2.12. Whilst this analysis considered primarily the local highway network, SYSTRA is undertaking a separate, parallel exercise in conjunction with TfGM and Highways England to examine wider impacts on the strategic road network (SRN). This parallel exercise is investigating cumulative PfE impacts on the SRN mainline links and is expected to deliver key findings in late Summer 2021. Any allocation-specific impacts, such as those occurring at SRN junctions, have been set out in the Locality Review documentation.

## 2.3. Conclusion

2.3.1. The Locality Assessment review exercise has confirmed the Transport Locality Assessment work published in October 2020 as robust in the light of recent changes and that the Allocations remain viable from a transport perspective. However, further work, including a full transport Assessment will need to be carried out on each Allocation as it comes forward for planning permission, which will ensure that the mitigation measure are revised in more detail and remain appropriate for the size and type of development.

2.1.1 N.B This note uses the GMSF reference numbers of each of the allocations to link them to the original Locality Assessment documents. For information, the new reference numbers for the Places for Everyone Joint Plan are shown in the table below:

**Table 1. Allocation specific changes**

| Allocation | GMSF 2020 Reference | PfE 2021 Reference |
|---|---|---|
| M6 Junction 25 | GMA42 | JPA34 |
| North of Mosley Common | GMA43 | JPA35 |
| Pocket Nook | GMA44 | JPA36 |
| West of Gibfield | GMA45 | JPA37 |

# 3. Changes since the publication of the Locality Assessment

## 3.1 Broad changes

3.1.1 The largest change to demand since the publication of the locality assessments has been the removal of the seven Stockport allocations from the plan. This has meant that a number of homes and employment sites has been removed from the modelling work. Whilst the removal of potential developments sites is not considered to be insignificant, the peripheral location of Wigan to the north west (in relation to Stockport) is considered to be far enough away to have a negligible impact on the district's allocations.

## 3.2 Allocation specific changes

| Allocation | Change | Notes |
|---|---|---|
| GMA42 M6 Junction 25 | Quantum: Reduction in employment (-12129sqm) 2025. but overall quantum is unchanged.<br><br>Infrastructure: No changes. | No assessment using strategic model flows needed. |
| GMA43 North of Mosley Common | Quantum: Reduction in houses (-40) and apartments (-10) in 2025. Increase of 100 units overall by 2040 with apartments removed | Minimal impact – wider model updates led to flow differences between 4th and 5th round modelling. Further assessment required at limited number |

| | | |
|---|---|---|
| | Infrastructure: No changes. | of junctions to validate previous conclusions. |
| GMA44 Pocket Nook | Quantum: No changes<br><br>Infrastructure: No changes. | Minimal impact – wider model updates led to flow differences between 4th and 5th round modelling. Further assessment required at limited number of junctions to validate previous conclusions. |
| GMA45 West of Gibfield | Quantum: No homes or apartments at 2025. Housing reduction to 500 at 2020 with no apartments. Employment quantum increased by 500sqm (B2 only) at 2040.<br><br>Infrastructure: No changes. | Minimal impact – wider model updates led to flow differences between 4th and 5th round modelling. Further assessment required at limited number of junctions to validate previous conclusions. |

## 3.1 Supporting interventions in Wigan

3.1.1 Wigan Council and TfGM have planned a number of improvements across Wigan which are intended to make it easier for people to travel sustainably. This includes elements of the Bee Network, a comprehensive cycling and walking network which covers all Districts within Greater Manchester. The overall delivery plan of strategic

transport interventions that will support all allocations in Wigan is shown in Figure 1, and detail of the Bee Network in Wigan is shown in Figure 2.

**Figure 1. Wigan Delivery Plan**

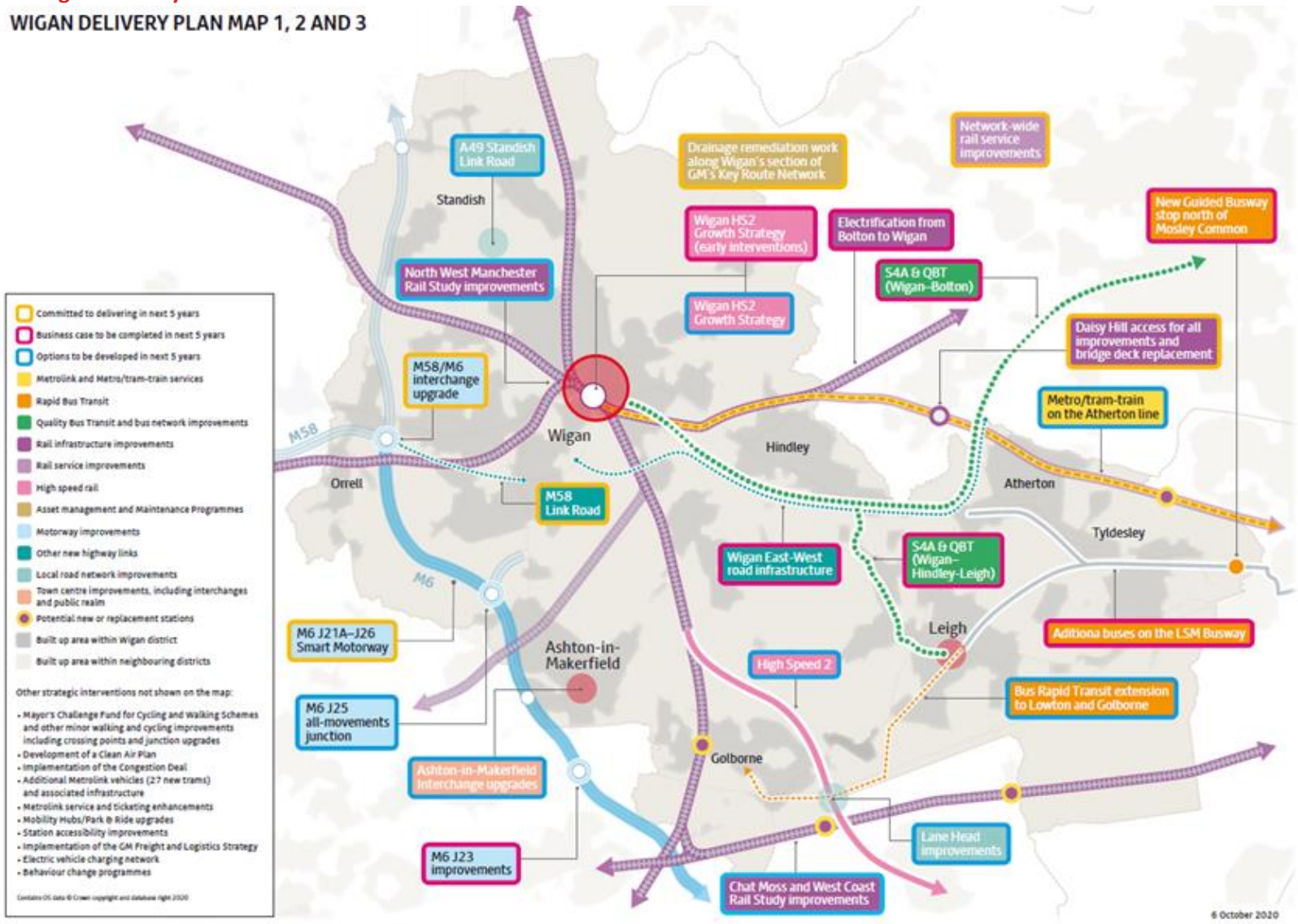
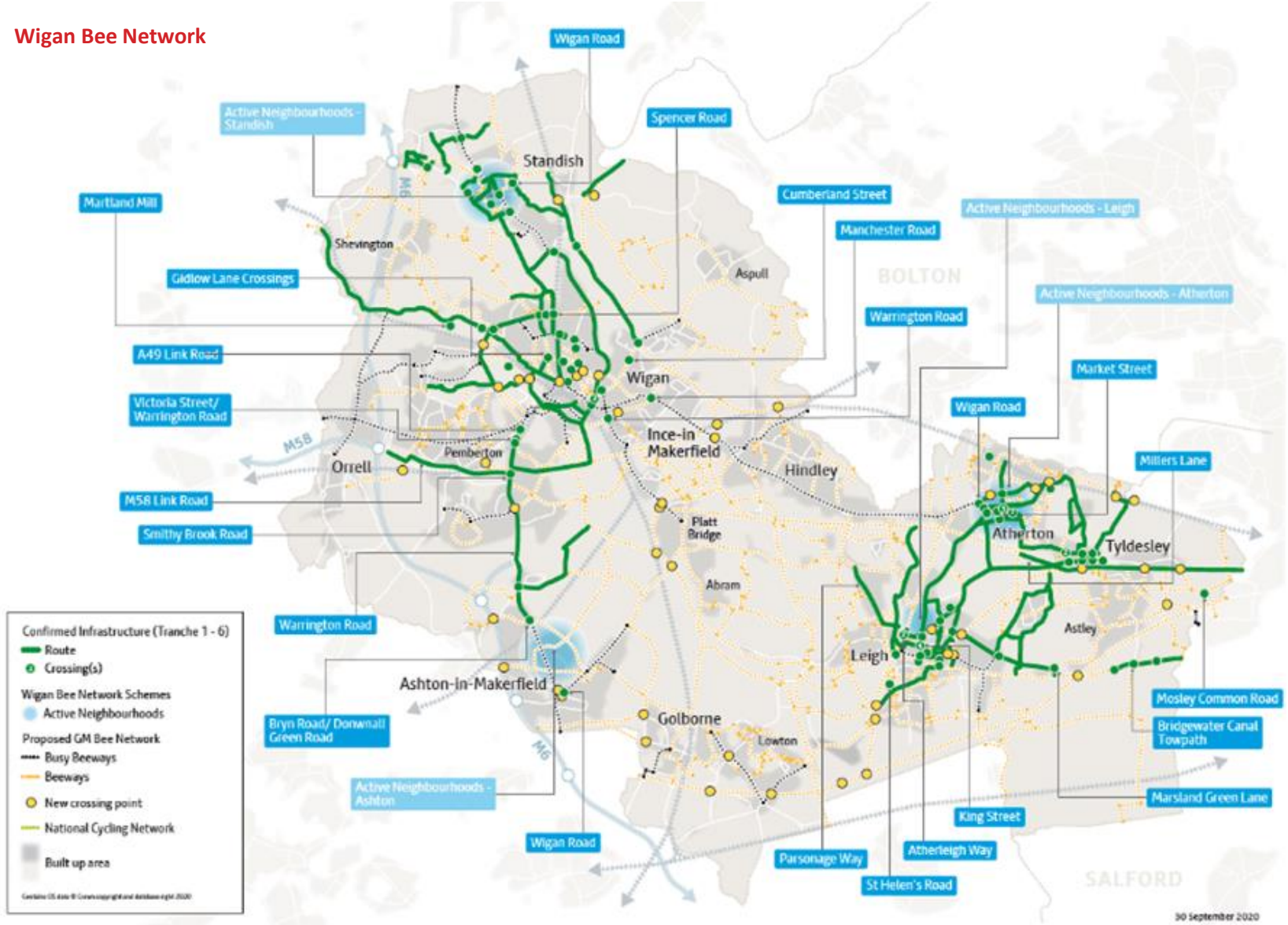


**Figure 2. Wigan Bee Network**



# 4. GMA42 M6 Junction 25

4.1.1 The Locality Assessment for GMA42 M6 J25 did not utilise strategic modelling outputs due to the allocation being further along in the planning process than other allocations across Greater Manchester. No further assessment has been undertaken in the 5th round of modelling for GMA42 M6 J25, however, with no changes to the quantum of development and with the allocation on the periphery of the modelling network, it is anticipated that the conclusions reached in the Locality Assessment remain valid.

# 5. GMA43 North of Mosley Common

## 5.1 Changes to the quantum of development

5.1.1 There have been changes to the quantum of development for GMA43 North of Mosley Common, with a revision in the phasing assumptions whereby no development is now anticipated to be delivered by 2025. At 2040, the number of houses increases to 1100 (from 960) with no apartments being delivered. Table 1 indicates the quantum of development for the allocation.

**Table 1. GMA43 North of Mosley Common development quantum**

| Development type | 2025 development quantum | 2040 development quantum |
|---|---|---|
| Houses | 0 (*previously 40*) | 1100 *(previously 960)* |
| Apartments | 0 *(previously 10)* | 0 *(previously 240)* |
| **Total** | **0** | **1100 houses (previously 1200)** |

5.1.2 These changes are unlikely to have significant impacts on the existing transport network.

## 5.2 Transport infrastructure changes

5.2.1 The following interventions and the indicative timescales for their implementation (where applicable) were identified in the previous Locality Assessment.

**Site access**

- Mort Lane
- City Road
- Bridgewater Road
- Pedestrian & cycle connectivity

**Necessary local mitigations**

- Between 2025 and 2030:
  - New guided busway stop (Leigh – Salford Manchester) and funding for additional services along the guided busway.
  - Junction improvement at A580 East Lancashire Road/ Mosley Common Road Junction.
- Between 2030 and 2040:
  - Junction improvement at Bridgewater Road/ Newearth Road Junction.
  - Junction improvement at Manchester Road East/ Armitage Avenue Junction.

## 5.3 Updated trip generation and distribution

5.3.1 Table 2 shows the updated traffic generation for the GMA43 North of Mosley Common allocation.

**Table 2. GMA43 North of Mosley Common vehicular trip generation**

| | Am peak hour departures | Am peak hour arrivals | Pm peak hour departures | Pm peak hour arrivals |
|---|---|---|---|---|
| 2025 High scenario | 0 | 0 | 0 | 0 |
| 2040 High scenario | 379 | 151 | 231 | 408 |

5.3.2 The development quantum changes result in no movements to or from the allocation at 2025. Slight decreases from the previous round of modelling are observed at 2040, which will have a lesser impact on the surrounding road network.

5.3.3 Table 3 below indicates the distribution of traffic to and from the allocation.

**Table 3. GMA43 North of Mosley Common traffic distribution**

| Route | AM peak hour | PM peak hour |
|---|---|---|
| A577 Sale Lane | 13% | 12% |
| A5082 Mort Lane | 23% | 25% |
| B5232 Newearth Road | 5% | 6% |
| A580 East Lancashire Road (East) | 38% | 32% |
| A572 Leigh Road | 9% | 14% |
| A580 East Lancashire Road (West) | 11% | 11% |

5.3.4 It can be seen that the major attractor/ generator is the A580 East Lancashire Road (East) which is to expected for trips to and from the Regional Centre. The A5082 Mort Lane is also a popular route in both the AM and PM peaks with traffic accessing employment opportunities along the M61 corridor.

## 5.4 Impact of allocation on the local road network

5.4.1 The assessment below is based on outputs from Greater Manchester's Variable Demand Model (GMVDM). While every effort has been made to accurately reflect the existing and planned road networks, it remains a strategic model. It may be the case that subsequent planning applications, utilizing more detailed traffic models / tools, may arrive at slightly different outcomes.

5.4.2 The expected changes in traffic routings and volumes in the vicinity of the GMA43 North of Mosley Common allocation as a result of changes to other allocations & wider network changes necessitate the reassessment of the following junctions;

- A580 East Lancashire Road/ Mosley Common Road;
- A580 East Lancashire Road/ Ellenbrook Road;
- A580 East Lancashire Road/ Walkden Road; and
- M60 Junction 13

5.4.3 Table 4 presents the updated junction capacity assessments using flows from the latest high scenario run of the GMVDM, which accounts for the updated quantum of development and wider network changes. The table also includes columns indicating allocation – specific flows through the junction for AM and PM peaks respectively.

**Table 4. Results of Local Junction Capacity Analysis Before Mitigation – Year 2040**

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR | Allocation flows AM PEAK HOUR | Allocation flows PM PEAK HOUR |
|---|---|---|---|---|---|---|
| A580 East Lancashire Road/ Mosley Common Road | 120% | 116% | 129% | 142% | 160 | 215 |

| | | | | | | |
|---|---|---|---|---|---|---|
| A580 East Lancashire Road/ Ellenbrook Road | 99% | 116% | 101% | 118% | 211 | 217 |
| A580 East Lancashire Road/ Walkden Road | 270% | 120% | 288% | 194% | 206 | 208 |

5.4.11 It can be seen from Table 4 that the A580 East Lancashire Road/ Mosley Common Road junction is over capacity at 2040 in the reference case and high scenario. The results for the reference case are identical to those from the previous round of modelling, however, the RFC's for the high scenario have increased from 122% and 136% for AM and PM peaks respectively.

5.4.12 A joint improvement scheme for the A580 East Lancashire Road/ A577 Mosley Common Road Junction has been developed by Salford and Wigan Councils. The scheme introduces a second approach lane on Mosley Common Road from the north and a dedicated left turning lane into Mosley Common Road north. As part of the scheme, improvements to pedestrian and cycling facilities will also be implemented. Section 106 funds have been secured from adjacent residential developments to improve the operation of the Junction. The scheme has been tested and results are provided in table 5 below.

5.4.13 At the A580 East Lancashire Road/ Ellenbrook Road junction, the difference between the reference case and high scenario is consistent with the results from the previous round of modelling (previously 122% AM and 136% PM peak). Flows attributable to the allocation are also almost identical to the previous modelling work and as a consequence, no further mitigation has been sought at the junction.

5.4.14 The A580 East Lancashire Road/ Walkden Road junction results are considerably worse than in the previous round of modelling. The allocation-specific flows through the junction are almost identical to the previous round of modelling which suggests that the impact at the junction is as a consequence of wider changes to the network putting the junction under greater strain. A workable scheme for the junction cannot be identified without the acquisition of third party land.

5.4.15 The transport interventions being explored are purely highway infrastructural interventions and do not take account of the impact public transport improvements could have along the A580 corridor. High frequency services to and from Manchester are already established along the corridor with further improvements being considered. The allocation will also benefit from the introduction of a stop on the guided busway which will further minimise the need to travel by private car.

5.4.16 Should the flows associated with the high side modelling forecasts become reality, significant infrastructural changes could be explored at junctions along the A580 East Lancashire Road, largely associated with complex cumulative growth.

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

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR |
|---|---|---|---|---|
| A580 East Lancashire Road/ Mosley Common Road | 120% | 116% | 119% | 123% |

5.4.22 It can be observed that the mitigation scheme at the junction is broadly still valid from the previous modelling work with the AM situation improving compared with the reference case scenario. The PM peak results do not perform as well as the reference case scenario, however, there is a further improvement from the previous round of modelling which stood at 132%.

## 5.5 Impact of the allocation on the strategic road network

5.5.1 The same caveats regarding the use of GMVDM model outputs, as set out in Section 5.4, also apply here. That is, it may be the case that subsequent planning applications, utilizing more detailed traffic models / tools, may arrive at slightly different outcomes.

5.5.2 The previous Locality Assessment found that the GMA43 North of Mosley Common allocation would not have a material impact on the operation of the SRN. The allocation is not in close proximity to the SRN, with the majority of trips generated by

the allocation likely to disseminate through the local road network before accessing an SRN junction.

5.5.3 Given the small scale of the changes to the quantum of development for the allocation, and the negligible impact at the local road network junctions outlined above, it is likely that the changes will not result in a material impact on the SRN and that the conclusions of the previous Locality Assessment remain valid.

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

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR | Allocation flows AM AM PEAK HOUR | Allocation flows PM PM PEAK HOUR |
|---|---|---|---|---|---|---|
| M60 Junction 13 | 126% | 143% | 123% | 147% | 52 | 97 |

5.5.11 Local Junction modelling was undertaken for Junction 13 of the M60 at the dumbbell roundabouts at Worsley Brow. The assessment indicates that the Junction operates above capacity in the reference case and is broadly comparable in the high scenarios.

## 5.6 Review of interventions

5.6.1 As outlined above, the interventions identified in the previous round of work to support the GMA43 North of Mosley Common allocation are:

- Allocation access junction on Mort Lane, City Road and Bridgewater Road;
- Pedestrian & cyclist connectivity;
- New guided busway stop (Leigh – Salford Manchester) and funding for additional services along the guided busway and
- Junction improvement schemes at; A580 East Lancashire Road/ Mosley Common, Bridgewater Road/ Newearth Road and Manchester Road East/ Armitage Avenue Junctions.

5.6.2 In terms of the allocation access junction, and the improvements proposed for walking, cycling and public transport modes, the changes to the quantum of development do not affect the requirement for these interventions or the indicative timescales proposed in the previous Locality Assessment.

## 5.7 Impact of the changes

5.7.1 The changes to the quantum of development set out above do not affect the need for the active mode and public transport interventions previously proposed. It should be noted that, since the publication of the Locality Assessments, an Active Travel Design Guide has been published by Greater Manchester Combined Authority and Transport for Greater Manchester. This Design Guide identifies design principles for the Bee Network that should be followed, and encompasses aspects such as segregated and shared infrastructure, crossing facilities and junction design. Any active mode interventions that are implemented in support of this allocation will need to follow this Design Guide.

## 5.8 GMA43 North of Mosley Common concluding remarks

5.8.1 The previous assessment gave an indication that the traffic impacts of the allocation are less than severe, and that the allocation is deliverable with the proposed mitigation measures in place.

5.8.2 The changes to the development quantum and subsequent vehicular trip generation are minimal, and no additional forms of intervention are considered necessary to support the allocation. The latest modelling run has highlighted that the A580 East Lancashire Road/ Walkden Road Junction is under considerable stress, however, this isn't solely as a consequence of the allocation but wider re-distribution of traffic. As concluded in the previous round of work, further work is required to mitigate the wider PfE impact at the junction.

5.8.3 At this stage, the modelling and analysis work is considered to be a 'worst case' scenario as it focuses on the high scenario forecasting results. Furthermore, it does not take full account of the extensive opportunities for active travel and public

transport improvements locally (specifically in relation to the guided busway stop) and in the wider GM area.

5.8.4 The A580 East Lancashire Road carries a significant volume of traffic towards and from the Regional Centre. The junction modelling work undertaken indicates that each of the junctions along the corridor is operating under considerable stress by 2040 and it is anticipated that a strategic corridor based approach to improving the operation of the junctions will be required. Based on current traffic flow projections, considerable engineering interventions are likely to be required should forecast traffic flows become a reality and the shift to public transport and active modes is not achieved.

# 6. GMA44 Pocket Nook

## 6.1 Changes to the quantum of development

6.1.1 There have been no changes to the quantum of development for the GMA44 Pocket Nook allocation in both 2025 and 2040. Table 7 indicates the quantum of development for the allocation.

**Table 7. GMA44 Pocket Nook development quantum**

| Development type | 2025 development quantum | 2040 development quantum |
|---|---|---|
| Houses | 0 *(as previous)* | 600 *(as previous)* |
| Apartments | 0 *(as previous)* | 0 *(as previous)* |
| Employment | 0 *(as previous)* | 15,000sqm *(as previous)* |
| **Total** | **0** | **600 houses & 15,000sqm B2/B8** |

6.1.2 The impact of the allocation on the network is not anticipated to have changed from the previous work undertaken as part of the Locality Assessment.

## 6.2 Transport infrastructure changes

6.2.1 The following interventions were identified in the previous Locality Assessment with an indicative delivery between 2030 and 2038.

**Site access**

- Atherleigh way Signalised junction (3 arm)junction on Smithy Bridge Road.

**Necessary strategic interventions**

- Bridge over HS2 line

**Supporting strategic interventions**

- Improved bus service connectivity
- New railway station in local area
- A580 East Lancashire Road / A579 Atherleigh Way Junction improvement
- A580 East Lancashire Road/ A572 Newton Road Junction improvement
- A580 East Lancashire Road/ B5207 Church Lane Junction improvement
- A572 Newton Road/ A579 Winwick Lane Junction improvement
- A580 East Lancashire Road/ A574 Warrington Road Junction Improvement

**Necessary local interventions**

- Permeable network for pedestrian and cyclist priority within the development
- Develop PRoW connection between Pocket Nook Lane and Schools
- Develop PRoW connection between Pocket Nook Lane and Moorfield Crescent

## 6.3 Updated trip generation and distribution

6.3.1 Table 8 shows the updated traffic generation for the GMA44 Pocket Nook allocation.

**Table 8. GMA44 Pocket Nook vehicular trip generation**

| | AM peak hour departures | AM peak hour arrivals | PM peak hour departures | PM peak hour arrivals |
|---|---|---|---|---|
| 2025 High scenario | 0 | 0 | 0 | 0 |
| 2040 High scenario | 241 | 140 | 169 | 203 |

6.3.2 There are no changes with regards to development quantum and as a consequence, trip generation.

6.3.3 Table 9 below provides the distribution of traffic to and from the allocation.

Table 9. GMA44 Pocket Nook traffic distribution

| Route | AM peak hour | PM peak hour |
|---|---|---|
| Sandy Lane | 2% | 0% |
| A572 St. Helens Road | 0% | 0% |
| A579 Atherleigh Way | 18% | 19% |
| A580 East Lancashire Road (East) | 58% | 56% |
| A579 Winwick Lane | 2% | 6% |
| A572 Newton Road | 3% | 2% |
| A580 East Lancashire Road (West) | 15% | 13% |
| B5207 Church Lane | 1% | 5% |

6.3.4 As would be anticipated, the majority of traffic in the AM and PM peaks is originating or destined to and from the A580 East Lancashire Road (East). Traffic is also observed to distribute along the A579 Atherleigh Way for traffic travelling to and from Leigh and origins/ destinations further north. The A580 East Lancashire Road (West) is the other main route where traffic is distributed.

## 6.4 Impact of allocation on the local road network

6.4.1 The assessment below is based on outputs from Greater Manchester's Variable Demand Model (GMVDM). While every effort has been made to accurately reflect the existing and planned road networks, it remains a strategic model. It may be the case that subsequent planning applications, utilizing more detailed traffic models / tools, may arrive at slightly different outcomes.

6.4.2 The expected changes in traffic routings and volumes in the vicinity of the GMA44 Pocket Nook allocation as a result of changes to other allocations necessitate the reassessment of the following junction;

- A580 East Lancashire Road/ Warrington Lane

6.4.3 Table 10 presents the updated junction capacity assessments using flows from the latest high scenario run of the GMVDM, which accounts for the updated quantum of development.

**Table 10. Results of Local Junction Capacity Analysis Before Mitigation – Year 2040**

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR | Allocation flows AM AM PEAK HOUR | Allocation flows PM PM PEAK HOUR |
|---|---|---|---|---|---|---|
| A580 East Lancashire Road/ Warrington Road | 122% | 171% | 151% | 231% | 213 | 196 |

6.4.11 The results from the 5th round of modelling show that the high scenario does lead to a worsening situation at the junction as it was in the previous round of modelling. The situation in the 5th round modelling is however an improvement in the high situation when compared with the 4th round (156% and 251% for AM and PM peaks respectively). It can be seen that the allocation flows are fairly consistent with the previous flows.

6.4.12 Mitigation was tested at the junction in the form of a signalised roundabout. This mitigation was tested again with results presented below.

Table 11. Results of Local Junction Capacity Analysis After Mitigation – Year 2040

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR |
|---|---|---|---|---|
| A580 East Lancashire Road/ Warrington Road | 122% | 171% | 137% | 147% |

6.4.18 It can be seen that the situation in the high scenario PM peak is improved when compared with the reference case, however, the mitigation does not work as well in the AM peak. There are improvements at the junction when compared with the previous round of modelling (162% and 155% for AM and PM peaks respectively).

## 6.5 Impact of the allocation on the strategic road network

6.5.1 The same caveats regarding the use of GMVDM model outputs, as set out in Section 6.4, also apply here. That is, it may be the case that subsequent planning applications, utilizing more detailed traffic models / tools, may arrive at slightly different outcomes.

6.5.2 The previous Locality Assessment found that the GMA44 Pocket Nook allocation would not have a material impact on the operation of the SRN. The allocation is not in close proximity to the SRN, with the majority of trips generated by the allocation likely to disseminate through the local road network before accessing an SRN junction.

6.5.3 Given that there are no changes to the quantum of development for the allocation, and the negligible impact at the local road network junctions outlined above, it is likely that the changes will not result in a material impact on the SRN and that the conclusions of the previous Locality Assessment remain valid.

## 6.6 Review of interventions

6.6.1 As outlined above, the interventions identified in the previous round of work to support the GMA44 Pocket Nook allocation are:

- Allocation access junction on Atherleigh Way
- Introduction of bridge over HS2 line
- Improvements bus service connectivity and a new rail station in the local area at Golborne
- Junction improvements at A580 East Lancashire Road / A579 Atherleigh Way, A580 East Lancashire Road/ A572 Newton Road, A580 East Lancashire Road/ B5207 Church Lane, A572 Newton Road/ A579 Winwick Lane and A580 East Lancashire Road/ A574 Warrington Road; and
- Permeable network for pedestrian and cyclist priority and rights of way improvements.

6.6.2 In terms of the allocation access junction, and the improvements proposed for walking, cycling and public transport modes, the changes to the quantum of development do not affect the requirement for these interventions or the indicative timescales proposed in the previous Locality Assessment.

## 6.7 Impact of the changes

6.7.1 There are no changes to the quantum of development for GMA44 Pocket Nook that require the active mode and public transport interventions previously proposed to be amended. It should be noted that, since the publication of the Locality Assessments, an Active Travel Design Guide has been published by Greater Manchester Combined Authority and Transport for Greater Manchester. This Design Guide identifies design principles for the Bee Network that should be followed, and encompasses aspects such as segregated and shared infrastructure, crossing facilities and junction design. Any active mode interventions that are implemented in support of this allocation will need to follow this Design Guide.

## 6.8 GMA44 Pocket Nook concluding remarks

6.8.1 The conclusions of the previous Locality Assessment are considered to remain valid. The previous assessment gave an indication that the allocation is suitable for allocation in the GMSF, however, further work would be needed as the allocation

moves through the planning process. This further round of work confirms these findings and that the allocation would need to be supported by continuing wider transport investment across GM.

6.8.2 With no changes to the development quantum and subsequent vehicular trip generation, no additional forms of intervention are considered necessary to support the allocation.

# 7. GMA45 West of Gibfield

## 7.1 Changes to the quantum of development

7.1.1 Since the Locality Assessment was published, there have been reductions to the total quantum of development by 2040 for GMA45 West of Gibfield. No changes are observed at 2025, however, the number of homes reduces from 700 to 500 at 2040 with a slight increase of 500sqm employment use at 2040. .

7.1.2 There has also been a change to the mix of development with apartments removed from the allocation.

7.1.3 Table 12 summarises the changes to the quantum of development for this allocation.

**Table 12. GMA45 West of Gibfield development quantum**

| Development type | 2025 development quantum | 2040 development quantum |
|---|---|---|
| Houses | 0 *(previously 180)* | 500 *(previously 630)* |
| Apartments | 0 *(previously 20)* | 0 *(previously 70)* |
| Employment | 0 *(previously 0)* | 45,500 *(previously 45,000)* |
| **Total** | **0 (previously 200 homes)** | **500 homes (previously 700) & 45,500sqm employment (previously 45,000sqm)** |

7.1.4 The impact associated with the reduction in quantum for the allocation at 2040 is likely to be less severe than the impact previously forecast.

## 7.2 Transport infrastructure changes

7.2.1 A number of interventions were identified in the previous round of work to support the GMA45 West of Gibfield allocation. The interventions identified and their indicative timescales are outlined below.

**Allocation access**

7.2.2 The allocation will benefit from an access of Gibfield Parkway which is intended to be delivered by 2025.

**Necessary strategic mitigation**

7.2.3 The following strategic interventions will be required by 2030 in order to deliver the allocation:

- A workable solution at Chequerbent Roundabout (such as signalisation) or the introduction of a link road between Chequerbent and Platt Lane.
- A577/A579/Gibfield Park Way Improvement.
- A579/B2535 Improvement.

**Necessary strategic mitigation**

7.2.4 The local area will benefit from the following supporting interventions.

- Measures (highway connections and/or east-west public transport) delivered by policy GM Strat 8 supporting the Wigan Bolton growth corridor.
- Tram-train improvements - The GM2040 Transport Strategy Delivery Plan identifies improvements for Tram-train on the Wigan – Manchester line which will support the allocation.

**Necessary local mitigation**

7.2.5 The following local mitigation is considered necessary for the allocation.

- Footway and cycleway connectivity.
- Travel Plans.

**Supporting local mitigation**

- Local Bee Network

**SRN Interventions**

7.2.6 The following intervention has been identified for the SRN.

- Improvement at the M61 at Junction 5

## 7.3 Updated trip generation and distribution

7.3.1 Using the revised development quantum outlined in Table 12, the vehicular trips generated by the proposed development are set out in Table 13.

**Table 13. GMA45 West of Gibfield vehicular trip generation (high scenario)**

| | AM peak hour departures | AM peak hour arrivals | PM peak hour departures | PM peak hour arrivals |
|---|---|---|---|---|
| 2025 high scenario | 0 | 0 | 0 | 0 |
| 2040 high scenario | 318 | 313 | 280 | 243 |

7.3.2 The distribution of allocation trips onto the surrounding highway network is presented in Table 14.

**Table 14. GMA45 West of Gibfield traffic distribution**

| Route | AM peak hour | PM peak hour |
|---|---|---|
| B5215 Leigh Road | 1% | 1% |
| A579 Atherleigh Way | 12% | 12% |
| A577 Wigan Road | 5% | 8% |
| B5235 Leigh Road | 2% | 1% |

| Route | AM peak hour | PM peak hour |
|---|---|---|
| Platt Lane | 67% | 69% |
| A579 Bolton Road | 10% | 6% |
| A577 Tyldesley Road | 3% | 3% |

7.3.3 It can be seen from Table 14 that Platt Lane in both the AM and PM peak hours is the most popular route for vehicles to and from the allocation. The A579 Atherleigh Way attracts 12% of traffic in the AM and PM Peaks carrying traffic to and from Leigh and beyond.

## 7.4 Impact of allocation on the local road network

7.4.1 The assessment below is based on outputs from Greater Manchester's Variable Demand Model (GMVDM). While every effort has been made to accurately reflect the existing and planned road networks, it remains a strategic model. It may be the case that subsequent planning applications, utilizing more detailed traffic models / tools, may arrive at slightly different outcomes.

7.4.2 The expected changes in traffic routings and volumes in the vicinity of the GMA45 West of Gibfield allocation as a result of changes to other allocations necessitate the reassessment of the following junction;

- A6 Manchester Road /A58 Park Road /Snydale Way (Chequerbent Roundabout)

7.4.3 Table 15 presents the updated junction capacity assessments using flows from the latest high scenario run of the GMVDM, which accounts for the updated quantum of development.

**Table 15. Updated junction capacity assessments (June 2021)**

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR |
|---|---|---|---|---|
| A6 Manchester Road /A58 Park Road /Snydale Way (Chequerbent Roundabout) | 129% | 169% | 151% | 151% |

7.4.9 It can be seen that Chequerbent roundabout is anticipated to operate significantly above capacity in 2040 in both the reference case and high scenarios without mitigation.

7.4.1 Mitigation options were considered in the previous round of work with no clear decision made on the form it would take. As with the previous round of work, mitigation has been tested in the form of signalisation at the roundabout with the results presented in Table 16 below.

**Table 16. Results of Local Junction Capacity Analysis After Mitigation – Year 2040**

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR |
|---|---|---|---|---|
| A6 Manchester Road /A58 Park Road /Snydale Way (Chequerbent Roundabout) | 129% | 169% | 119% | 110% |

7.4.7 It can be seen that the situation in the high scenario is improved when compared with the reference case. Whilst this may not be the actual scheme on the ground, it does show that a workable scheme is achievable at the Junction.

7.4.1 Aside from committed development traffic, background growth and PfE allocations, a planning application was approved in 2020 by the Secretary of State for the Hulton Park development (subject to conditions) for 1000+ homes, a hotel and Championship Golf Course. It should be noted that the model does not include this development, however further work is being undertaken by the developers Consultants to take account of the modelling work to date and factor in the impact of the Hulton Park development.

## 7.5 Impact of the allocation on the strategic road network

7.5.1 The same caveats regarding the use of GMVDM model outputs, as set out in Section 7.4, also apply here. That is, it may be the case that subsequent planning applications, utilizing more detailed traffic models / tools, may arrive at slightly different outcomes.

7.5.2 The previous Locality Assessment found that the GMA45 West of Gibfield allocation would have an impact at M61 Junction 5. As a consequence, mitigation was identified in the form of widening the A58 approaches to the Junction. This mitigation was included in the most recent model run for the 'high' scenario and shows the Junction witnessing an improvement in the PM peak with a negligible difference in the AM peak when compared with the reference case.

**Table 17. Results of SRN Junction Capacity Analysis Before Mitigation – Year 2040**

| JUNCTION | 2040 ref case AM PEAK HOUR | 2040 ref case PM PEAK HOUR | 2040 high scenario AM PEAK HOUR | 2040 high scenario PM PEAK HOUR |
|---|---|---|---|---|
| M61 Junction 5 | 127% | 148% | 128% | 102% |

7.5.8 Given the small scale of the changes to the quantum of development for the allocation, it is anticipated that the conclusions drawn from the the previous Locality Assessment remain valid.

## 7.6 Review of interventions

7.6.1 As outlined above, the interventions identified in the previous round of work to support the GMA45 West of Gibfield allocation are:

- Allocation access at Gibfield Parkway
- Intervention at Chequerbent roundabout and at the M61 Junction 5
- Improvements at A577/A579/Gibfield Park Way and A579/B2535 Junctions
- Measures (highway connections and/or east-west public transport) delivered by policy GM Strat 8 and Tram – Train improvements
- Footway and cycleway connectivity and Bee Network improvements as well as Travel Plan measures.

7.6.2 In terms of the allocation access junction, and the improvements proposed for walking, cycling and public transport modes, the changes to the quantum of development do not affect the requirement for these interventions or the indicative timescales proposed in the previous Locality Assessment.

## 7.7 Impact of the changes

7.7.1 The changes to the quantum of development set out above do not affect the need for the active mode and public transport interventions previously proposed. It should be noted that, since the publication of the Locality Assessments, an Active Travel Design Guide has been published by Greater Manchester Combined Authority and Transport for Greater Manchester. This Design Guide identifies design principles for the Bee Network that should be followed, and encompasses aspects such as segregated and shared infrastructure, crossing facilities and junction design. Any active mode interventions that are implemented in support of this allocation will follow this Design Guide.

## 7.8 GMA45 West of Gibfield concluding remarks

7.8.1 The conclusions of the previous Locality Assessment are considered to remain valid. The previous assessment gave an indication that the traffic impacts of the allocation

could be accommodated, and that the allocation is deliverable with the proposed mitigation measures in place. Further work is required to progress with a scheme at Chequerbent roundabout, however, workable solutions are considered feasible.

7.8.2 The changes to the development quantum and subsequent vehicular trip generation are minimal, and would potentially have a less severe impact than previously identified, and no additional forms of intervention are considered necessary to support the allocation.

# 8. Overall Conclusion

8.1.1 Following a further round of modelling work, a number of junctions have been re-assessed to check the validity of conclusions reached in the previously submitted Locality Assessment. For the Wigan allocations, the updated assessments have not identified any significant changes and on this basis, the conclusions arrived at in the Locality Assessments are still considered to be valid.

| APPROVAL | | | | | |
|---|---|---|---|---|---|
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