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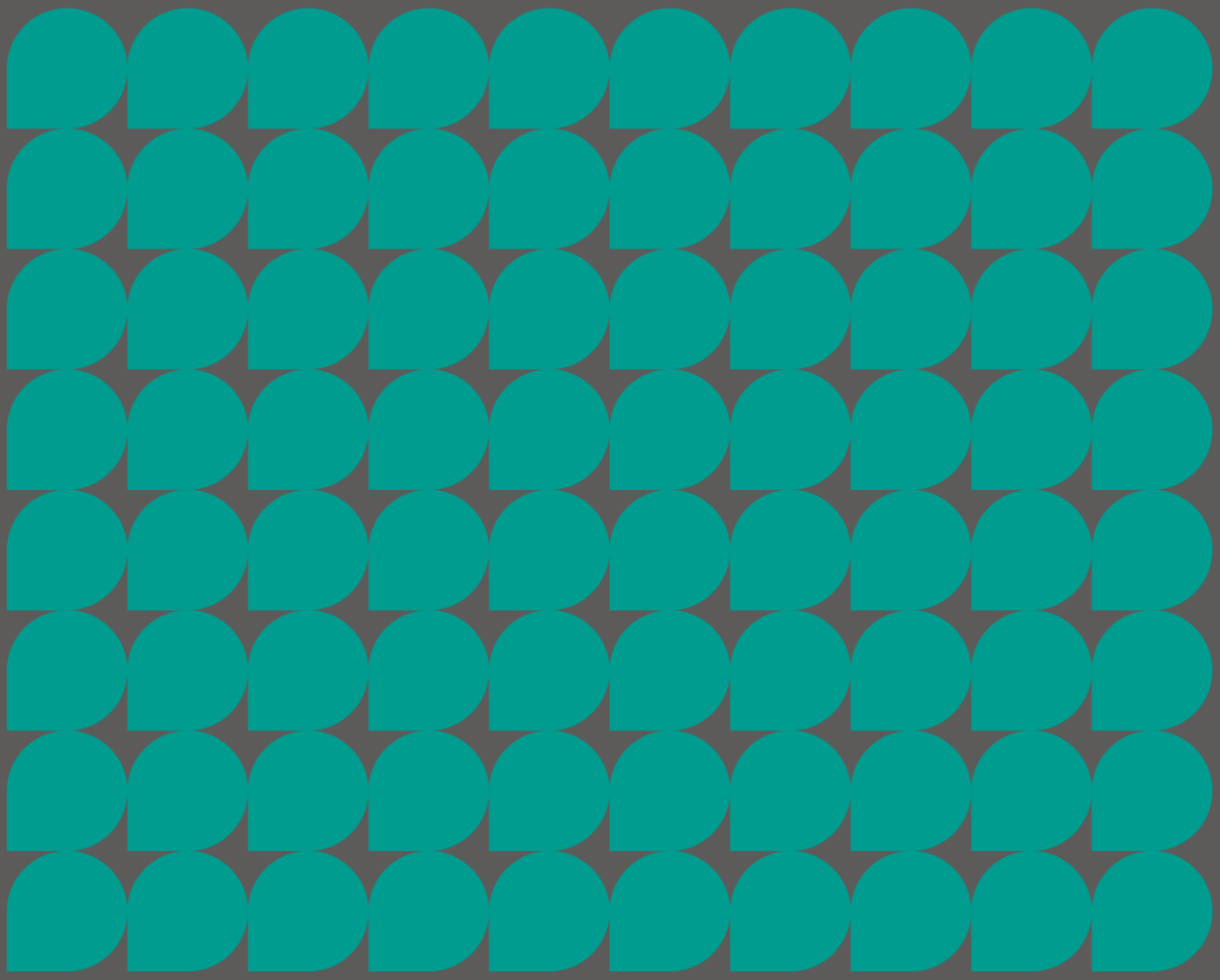
Transport Locality Assessments Addendum

Trafford – New Carrington

Places for Everyone – July 2021



Places for Everyone

Locality Assessment Update Note

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1. Executive Summary

1.1.1 The conclusions of the New Carrington Locality Assessment, November 2020, remain robust. The 2020 assessments demonstrated that the traffic impacts of the allocation can be sufficiently mitigated and that the allocation is deliverable with the proposed mitigations in place.

1.1.2 These conclusions have been tested again, using updated modelling where necessary, to reflects recent change – 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

2.1.1. 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 existing 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 Paper.

2.1.3. The "Transport Locality Assessment – Trafford – 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 Trafford 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 – Trafford – 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 Trafford. 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 Trafford 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 Greater Manchester.

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.

2.3.2. This note uses the GMSF reference numbers of the allocation to link them to the original Locality Assessment document. For information, the new reference numbers for the Places for Everyone Joint Plan are shown in the table below:

Table 1. Revised allocation reference numbers

Allocation	GMSF 2020 Reference	PfE 2021 Reference
New Carrington	GMA41	JPA33

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. It is anticipated that the removal of traffic associated with Stockport allocations will have an impact on the highway network in and around Trafford.

3.1.2 Further analysis of the model has been undertaken in order to understand the impact of removing the Stockport allocations. The impact of the removal of Stockport allocations broadly leads to a reduction In flows in the vicinity of the allocations and around Stockport, principally on the M60, A34 and A555.

3.1.3 The following table indicates the changes to the allocation since the GMSF work undertaken in Autumn 2020.

3.2 Allocation specific changes

Allocation	Change	Notes
GMA41 New Carrington	Quantum: Slight reduction in quantum at 2025 and 2040 Infrastructure: Changes associated with Carrington Link Road and Spur.	Slight reduction in development trips in both 2025 and 2040 expected. Moderate wider network impact associated with removal of Stockport allocations from the modelling.

3.3 Supporting interventions in Trafford

3.3.1 Trafford Council and TfGM have planned a number of improvements across Trafford which are intended to make it easier for people to travel sustainably. This includes public transport and active travel improvements, as well as 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 Trafford and details of the Bee Network in Trafford are shown in the images below.

Figure 1. Trafford Delivery Plan

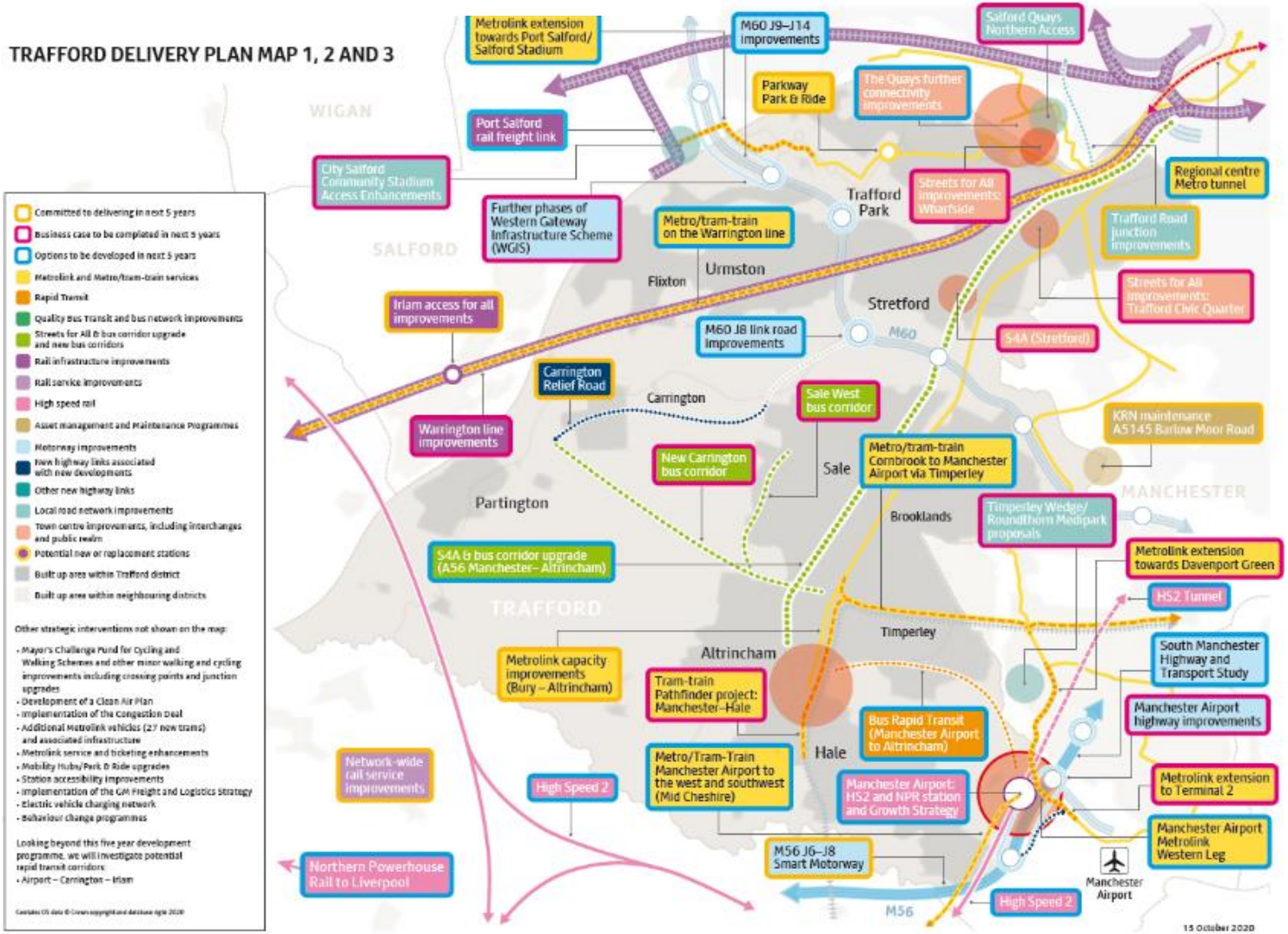
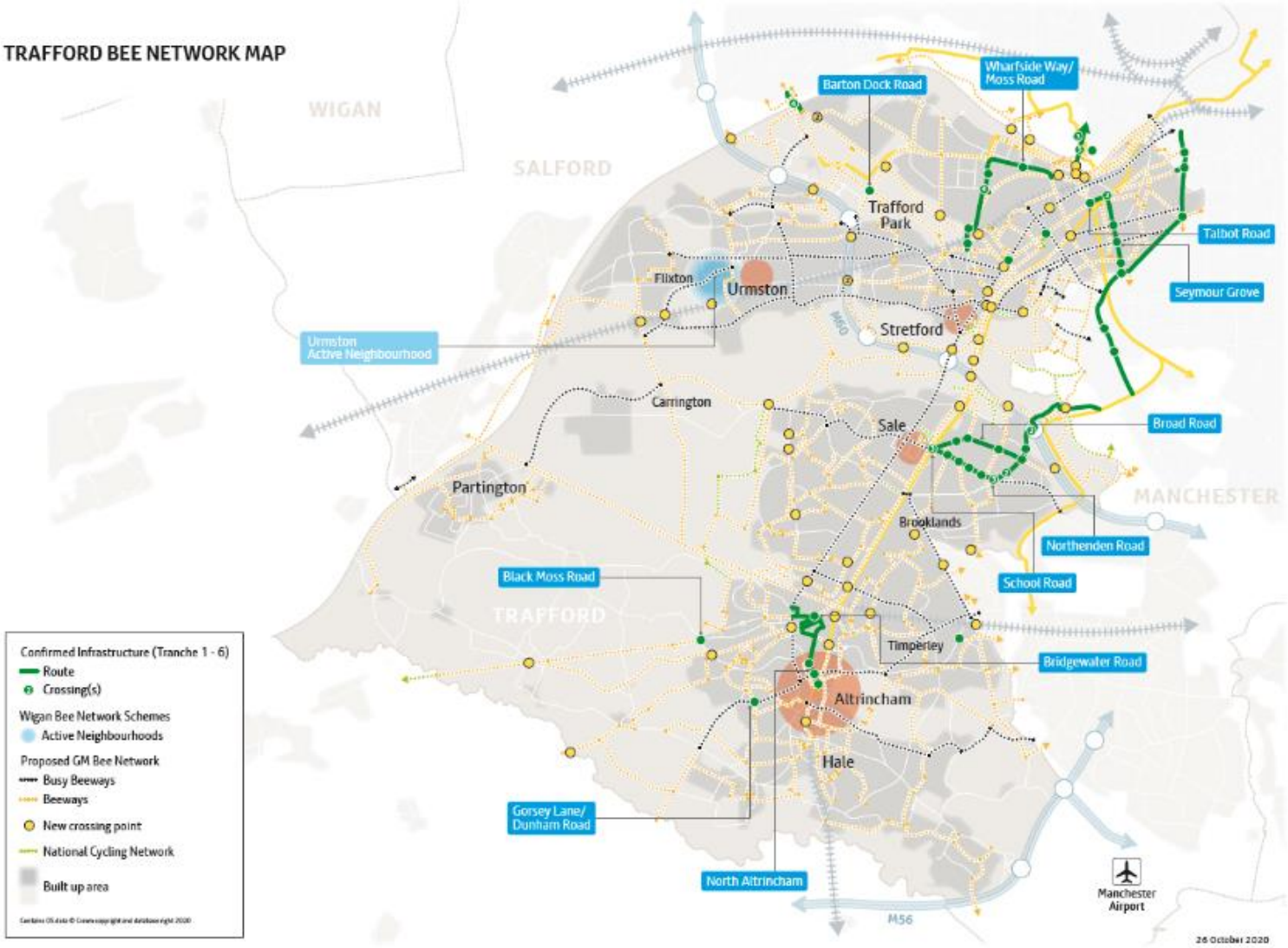


Figure 2. Trafford Bee Network



4. GMA41 New Carrington

4.1 Changes to the quantum of development

4.1.1 There have been changes to the quantum of development for GMA41 New Carrington based on the latest agreed assumptions for the allocation. From the previous assessment conducted to align with the delivery of the Locality Assessment for GMA41 New Carrington, there has been a reduction in the number of houses allocated together with the introduction of employment land.

Table 2. GMA41 New Carrington development quantum

Development type	2025 development quantum	2040 development quantum
Houses	159 (*previously 661*)	2,505 *(previously 2,786)*
Apartments	40 *(previously 156)*	626 *(previously 697)*
Employment (B2/B8)	0 (as previous)	92,160sqm (previously 0)
Total	**199 homes (previously 817 homes)**	**3,131 homes (previously 3,483 homes) & 92,160sqm employment**

4.1.2 With the minor changes associated with housing and employment land aligned with the removal of Stockport allocations, it is anticipated that there will be changes to highway impacts for GMA41 New Carrington. As a consequence, it was recommended that further re-assessment would be required to validate the conclusions arrived at in the Locality Assessment for GMA41 New Carrington.

4.1.3 In addition to the information contained above, it should be noted that 1,558 homes (2018 land supply position) and approx. 280,000 sqm employment floorspace are also contained within the reference case as committed development. The housing and

employment development which has been assessed as part of the Locality Assessment is on either Green Belt or safeguarded land and therefore requires the PfE to release this land for development.

4.2 Transport infrastructure changes

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

Site access

- Site accesses to be provided in accordance with Planning Applications and Masterplan Framework (2020 though to 2038)

Necessary Strategic Interventions

- Carrington Relief Road (2020-2025)
- Carrington Spur widening (2025 – 2030)
- Carrington Relief Road widening (2030-2037)
- Flixton Road Signalisation: Phase 1 (2020 – 2025)
- Flixton Road Signalisation: Phase 2 (2025 – 2030)
- Carrington Link/ Carrington Spur / Banky Road Phase 1 (2020 – 2025)
- Carrington Link/ Carrington Spur / Banky Road Phase 2 (2030-2037)
- Isherwood Road widening (2025 – 2030)
- Southern & Eastern link roads through development (2025 – 2030)
- Sale West link (2025 – 2030)

Supporting Strategic Interventions

- Western Gateway Infrastructure Scheme (WGIS) (2025 – 2030)
- Trafford Greenway (2025 – 2030)

Necessary local mitigations

- Junction upgrade A56 Junction/ Manchester Road/ Barrington Road Signalised Junction (2025 – 2030)

- Altrincham - A56 Dunham Road/ Highgate Road realignment (2025 – 2030)
- Heatley - Paddock Lane/ Bent Lane Junction widen Radii (2025 – 2030)
- Hollins Green - Manchester Road/ Warburton Bridge Road Junction (2030 – 2037)
- Public Transport Measures: Carrington to Stretford (via Urmston) corridor (2020 – 2025)
- Public Transport Measures: Access to Altrincham Package (2020 – 2025)
- Public Transport Measures: Access to Sale Package (2025 – 2030)
- Public Transport Measures: Extend/reroute 260 service and increase frequency (2020 – 2025)
- Greenway Link to Sale (2020 – 2025)
- PROW improvements (2020 – 2025)
- Controlled pedestrian crossings at the A56 Dunham Road/ Park Road/ Charcoal Road (2020 – 2025)

SRN Mitigation

- M56 Bowdon Roundabout improvement (2025 – 2030)

4.3 Updated trip generation and distribution

4.3.1 Table 3 shows the updated traffic generation for the GMA41 New Carrington allocation.

Table 3. GMA41 New Carrington vehicular trip generation

	AM peak hour departures	AM peak hour arrivals	PM peak hour departures	PM peak hour arrivals
2025 High scenario	66	24	39	74
2040 High scenario	1214	744	837	1188

4.3.2 The development quantum results in broadly moderate changes in trip generation since the previous round of modelling.

4.3.3 Table 4 below indicates the distribution of traffic to and from the allocation.

Table 4. GMA41 New Carrington traffic distribution

Route	AM peak hour	PM peak hour
A6194 Warburton Lane	8%	5%
B5158 Flixton Road	4%	4%
A6144 Carrington Spur	72%	73%
Glebelands Road	1%	1%
B5166 Ashton Lane	1%	1%
A6144 Harboro Road	2%	3%
Woodhouse Lane	1%	1%
Sinderland Lane	4%	4%
Blackmoss Road	4%	4%
School Lane	3%	5%

4.3.4 It can be seen that the major attractor/ generator is the A6144 Carrington Spur which is to be expected for trips to and from the M60, Regional Centre and wider Strategic Network. This is a similar trip distribution to the previous modelling rounds.

4.4 Impact of allocation on the local road network

4.4.1 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.

4.4.2 The expected changes in traffic routings and volumes in the vicinity of the GMA41 New Carrington allocation as a result of changes to the allocation, other allocations & wider network changes necessitate the reassessment of the following junctions;

- M60 Junction 10
- M60 Junction 9
- M60 Junction 8
- M60 Junction 7
- A56 Manchester Road/ Barrington Road
- Carrington Link/ Carrington Spur/ Carrington Link/ Bank Lane
- Carrington Link / Manchester Road/ Carrington Link/ Flixton Road
- A56 Dunham Road / St Margarets Road (Altrincham)
- A56 Dunham Road/ Highgate Road (Altrincham)
- A56 Dunham Road/ Park Road/ Charcoal Road (Altrincham)
- M56 - Bowdon Roundabout
- Townfield Lane/ Bent Lane (Heatley)
- Paddock Lane/ Bent Lane (Heatley)
- Warburton Bridge Road/ Bent Lane (Heatley)
- Moss Lane/ Manchester Road/ New Manchester Road (Partington)
- Manchester Road/ Warburton Bridge Road (Rixten)

4.4.3 Table 5 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 prior to mitigation. The table also includes columns indicating allocation – specific flows through the junction for AM and PM peaks respectively.

4.4.4 The assessment indicates the work performing arm in capacity terms (ratio of flow to capacity) for reference case and high scenarios, AM and PM peak.

Table 5. 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
A56 Manchester Road/ Barrington Road	146%	84%	146%	86%	35	36
Carrington Link/ Carrington Spur/ Carrington Link/ Banky Lane	105%	109%	110%	112%	1413	1473
Carrington Link / Manchester Road/ Carrington Link/ Flixton Road	115%	137%	99%	99%	325	194
A56 Dunham Road / St Margarets Road (Altrincham)	103%	104%	113%	108%	21	19
A56 Dunham Road/ Highgate Road (Altrincham)	165%	281%	208%	214%	35	49
A56 Dunham Road/ Park Road/ Charcoal Road (Altrincham)	95%	110%	97%	108%	80	123
Townfield Lane/ Bent Lane (Heatley)	70%	70%	75%	80%	104	77

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
Paddock Lane/ Bent Lane (Heatley)	132%	136%	132%	145%	148	110
Warburton Bridge Road/ Bent Lane (Heatley)	105%	115%	85%	106%	42	37
Moss Lane/ Manchester Road/ New Manchester Road (Partington)	147%	98%	66%	71%	13	19
Manchester Road/ Warburton Bridge Road (Rixten)	94%	100%	83%	94%	43	34

4.4.12 It can be seen from Table 5 that the Carrington Link/ Carrington Spur/ Carrington Link/Banky Lane is observed to operate over capacity in both the reference case and high scenarios. The impact in the latest round of modelling is considerably higher than the previous round of modelling due to re-assignment of traffic locally with a scheme in place. A mitigation scheme at the Junction was identified in the previous round of work which has been tested to assess its validity.

4.4.13 This scheme at the Carrington Link/ Carrington Spur/ Carrington Link/ Banky Lane Junction broadly returns the Junction to the reference case situation and is a significant improvement on the pre-mitigation situation considering the volume of traffic travelling through the Junction. It should be noted that the scheme is an indication of what could be achieved at the Junction to mitigate the impact of the allocation and may not be the scheme on the ground. The developer will need to

satisfy the local authority that a scheme can be delivered and accommodated at the Junction as the allocation moves through the planning process.

4.4.14 The Carrington Link / Manchester Road/ Carrington Link/ Flixton Road Junction shows a drop in the high scenario compared with the reference case. This is attributable to the mitigation scheme previously identified for the Junction being coded in to the latest run round of strategic modelling which includes lane widening on the Junction approaches.

4.4.15 At the A56 Dunham Road / St Margarets Road (Altrincham) Junction, it can be observed that the high scenario is forecast to operate above the reference case situation which is also above capacity. Whilst the allocation-specific flows through the Junction are low, mitigation has been considered at the Junction in the form of signalisation with results provided in Table 6.

4.4.16 The previous round of modelling identified that the A56 Dunham Road/ Highgate Road (Altrincham) would experience significant congestion in both the reference case and high scenarios. A mitigation scheme at the Junction was identified in the previous round of work which has been tested to assess its validity. Results are presented in Table 6.

4.4.17 The Paddock Lane/ Bent Lane (Heatley) Junction was also identified in the previous round of modelling and this is confirmed in the latest round. Mitigation has been tested and results are presented in Table 6.

Table 6. 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
A56 Dunham Road / St Margarets Road (Altrincham)	103%	104%	102%	106%

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
A56 Dunham Road/ Highgate Road (Altrincham)	165%	281%	151%	174%
Paddock Lane/ Bent Lane (Heatley)	132%	136%	81%	115%

4.4.23 The signalisation of the A56 Dunham Road / St Margarets Road (Altrincham) Junction brings the Junction in line with the reference case situation, however, allocation-specific flows through the Junction are relatively low (21 PCUs in the AM and 19 in the PM peak).

4.4.24 The mitigation scheme at the A56 Dunham Road/ Highgate Road (Altrincham) Junction out performs the reference case scenario. The scheme involves the realignment of Highgate Road approach to improve the available flare and introduce a right turning pocket to improve capacity and safety.

4.4.25 A similar pattern is observed at the Paddock Lane/ Bent Lane (Heatley) Junction where the scheme is observed to allow the Junction to operate within capacity in the AM peak and whilst this situation is not achieved in the PM peak, the results are better than in the reference case. The scheme involves the introduction of a right turning lane and widening to improve visibility, capacity and safety.

4.5 Impact of the allocation on the strategic road network

4.5.1 The same caveats regarding the use of GMVDM model outputs, as set out in Section 4.4, 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.

4.5.2 The previous Locality Assessment found that the GMA41 New Carrington allocation would have an impact on the operation of the SRN. With, in excess of 70% of traffic

forecast to use the A6144 Carrington Spur, there will be an impact at Junction 8 of the M60.

Table 7. 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 10	80%	92%	85%	93%	130	176
M60 Junction 9	97%	107%	98%	107%	140	213
M60 Junction 8	63%	64%	109%	107%	1374	1410
M60 Junction 7 - On/ Off South Signals	88%	83%	88%	85%	65	113
M60 Junction 7 - On/ Off North Signals	103%	101%	91%	106%	159	161
M56 - Bowdon Roundabout Junction	69%	112%	72%	113%	57	91

4.5.10 It can be observed that at Junction 10 of the M60, the situation worsens in the high scenario although is still forecast to operate within capacity.

4.5.11 Very little changes are observed between the reference case and high scenario at Junction 9 requiring no mitigation associated with the allocation.

4.5.12 At Junction 8, the biggest impact can be observed on the SRN with the high scenario operating above capacity whilst the reference case is forecast to remain within capacity. A mitigation scheme was identified in the previous round of work which has been tested with the revised traffic flows from the 5th round of modelling. The results are presented in Table 8.

4.5.13 At Junction 7, the situation in the high scenario is very similar to the reference case at the southern signals with improved performance at the northern signals in the AM peak and slight worsening in the PM peak. No mitigation has been considered at the Junction as the results between the reference case and PfE scenario are broadly similar.

4.5.14 At the M56 Bowdon roundabout, there is little change between the reference case and high scenario. The impact at the Junction was worse in the previous round of modelling and necessitated a scheme. The scheme has been tested with 5th round flows and the results are presented in Table 8.

Table 8. Results of SRN 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
M60 Junction 8	63%	64%	91%	88%
M56 - Bowdon Roundabout Junction	69%	112%	72%	103%

4.5.20 Whilst the mitigation for M60 Junction 8 does not return the Junction back to the reference case situation, it does bring the Junction back within capacity. The mitigation at Junction 8 consists of widening on the eastbound approach to M60 Junction 8. An improvement in the stacking distance for vehicles and designation of lanes 1 and 2 for northbound and southbound M60 traffic with yellow boxes on the circulatory roundabout.

4.5.21 At the M56 Bowdon roundabout, the mitigation brings the Junction in line with the reference case situation in the AM peak with an improvement observed in the PM peak. The mitigation at the Junction consists of circulatory widening and re-designation of lanes on both the circulatory and on exit approaches. Based on the modelling results, the scheme is still considered to be required.

4.6 Review of interventions

4.6.1 As outlined above, the interventions identified in the previous round of work to support the GMA41 New Carrington allocation are:

- Site accesses in accordance with Planning Applications and Masterplan Framework (2020 though to 2038)
- Infrastructure related to Carrington Relief Road incorporating Spur Road widening, relief road widening, Flixton Road Signalisation, Ishwerwood Road widening and Carrington Link/ Spur and Banky Lane scheme.
- Southern & Eastern link roads through development and Sale West Link
- Western Gateway Infrastructure Scheme (WGIS)
- Trafford Greenway
- Local Junction improvements at;
    - A56 Junction/ Manchester Road/ Barrington Road
    - Altrincham - A56 Dunham Road/ Highgate Road realignment
    - Heatley - Paddock Lane/ Bent Lane Junction widen Radii)
    - Hollins Green - Manchester Road/ Warburton Bridge Road Junction
- Public Transport Measures including Carrington to Stretford, Access to Altrincham and Sale and the extension/ rerouting of service 260
- Active travel improvements including the Greenway Link to Sale and PROW improvements as well as the introduction of controlled pedestrian crossings at the A56 Dunham Road/ Park Road/ Charcoal Road Junction
- Improvement at the M56 Bowdon Roundabout

4.6.2 Whilst development flows to and from the allocation are low, a scheme incorporating traffic signals has been tested for the A56 Dunham Road / St Margarets Road (Altrincham) Junction and is shown to bring the Junction back in line with the reference case situation at 2040. This was not identified in the previous round of work.

4.6.3 Based on the assessments undertaken, improvements at the Manchester Road/ Warburton Bridge Road Junction (Hollins Green) are no longer required.

4.6.4 In terms of the allocation access junctions, 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.

4.7 Impact of the changes

4.7.1 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.

4.8 GMA41 New Carrington concluding remarks

4.8.1 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.

4.8.2 The impact of development-specific traffic through the A56 Dunham Road / St Margarets Road (Altrincham) Junction is negligible, however, a scheme has been identified which broadly brings the Junction back in line with the reference case situation.

4.8.3 A mitigation scheme has been included in the latest strategic modelling run at the Carrington Link/ Carrington Spur/ Carrington Link/ Banky Lane Junction. The scheme broadly returns the Junction to the reference case situation and is a significant improvement on the pre-mitigation situation considering the volume of traffic travelling through the Junction. It should be noted that the scheme is an indication of what could be achieved at the Junction to mitigate the impact of the allocation and

may not be the scheme on the ground. The developer will need to satisfy the local authority that a scheme can be delivered and accommodated at the Junction as the allocation moves through the planning process.

4.8.4 The latest round of work indicates that conclusions from the locality assessment are valid, however, as the Masterplan develops, further work will be required to ensure that impacts associated with the development can be accommodated on the network.

5. Overall Conclusion

5.1.1 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 New Carrington allocation, 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					
Version	**Name**		**Position**	**Date**	**Modifications**
1	Author	Huw Williams/ Amy Sykes	Associate Directors	23/06/2021	First Draft for Comment
	Checked by	Darren Kirkman	Project Manager	23/06/2021	
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2	Author	Huw Williams	Associate Director	06/07/2021	Final Version
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