

GREATER MANCHESTER SPATIAL FRAMEWORK

Strategic Options Background Paper 2

Economic Development Needs Assessment

November 2015

BOLTON
BURY

MANCHESTER
OLDHAM

ROCHDALE
SALFORD

STOCKPORT
TAMESIDE

TRAFFORD
WIGAN

Greater Manchester Spatial Framework

Economic development needs assessment

Executive summary

Background

- S1. This report summarises and analyses the main evidence available to inform the identification of employment floorspace requirements across Greater Manchester.

Functional economic market areas

- S2. Greater Manchester has very high levels of self-containment, both in terms of migration and commuting. This reflects both its size and the fact that there are large areas of open land separating the conurbation from many of the nearest large settlements. Greater Manchester is also an important administrative unit, for example having its own Combined Authority and Local Enterprise Partnership. It is also a recognised area of search for many businesses when looking for premises. On this basis, it provides an appropriate starting point for considering employment floorspace requirements.
- S3. The complex functioning of housing and labour markets within Greater Manchester means that there is no simple way of subdividing the sub-region into identifiable functional economic areas. Any boundaries would essentially be arbitrary, and risk masking important relationships. Given these problems, together with the relatively small distances involved in most migration and commuting, the issues of district identity, and the availability of forecast data, it is considered that the most appropriate unit of analysis below the Greater Manchester level is the individual districts. This would be expected to enable a greater level of analysis, taking into account a better understanding of the relationships between different places, than would the combination of districts into larger sub-areas. However, even a district-based analysis could mask significant cross-boundary connections, and it will be important to have regard to the analysis in this report and supplementary data when interpreting assessments of demand and need for individual districts.

Strategic growth opportunities

- S4. There is a wide range of strategic opportunities that could potentially support increased levels of economic growth within Greater Manchester. Key government initiatives such as the Northern Powerhouse, and proposed major transport infrastructure investments including High Speed 2, could help to support higher growth rates than foreseen in baseline economic forecasts.
- S5. Greater Manchester also has some significant competitive advantages compared to many other regional cities, which could be utilised to improve its

economic position, such as the extent of its devolved powers, the scale and diversity of its economy, its performance in key growth sectors, the strength of the city centre, the extent of its knowledge assets, and major infrastructure such as Manchester Airport and the proposed Port Salford.

Economic forecasts

- S6. It is important to recognise the uncertainty associated with economic forecasting, which generally increases when looking at smaller geographical areas and longer time periods. Forecasts are only able to provide a broad indication of the direction of travel, and they cannot accurately predict the future with a high level of confidence. An analysis of methodologies and assumptions is important, but ultimately the outputs of any approach need to be realistic and desirable, and simple comparisons with past changes can be informative in this regard.
- S7. Five economic forecasts have been used to inform the analysis of economic development prospects up to 2035. Two forecasts provide a 'baseline' position, namely the 2014 Greater Manchester Forecasting Model produced by Oxford Economics (2014 GMFM) and the UK Local Market Forecast from June 2015 produced by Experian. Such baseline forecasts would be expected to give the best estimates of future economic activity based on the continuation of past trends and relationships. A further three forecasts have been produced by Oxford Economics centred on an Accelerated Growth Scenario (AGS). These are based around the delivery of key elements of the Government's long term economic plan for the North West, and therefore assume higher levels of growth than in the baseline forecasts, utilising different levels of population growth as inputs (ranging from the 2012-based sub-national population projection at the lower end to a very high level of population growth at the upper end). These three accelerated growth scenarios are referred to as AGS-SNPP, AGS-High and AGS-Higher, reflecting the scale of population growth involved in each.
- S8. The various Oxford Economics forecasts identify average economic growth rates for Greater Manchester over the period 2014-2035 ranging from 2.5% to 3.3% per annum, compared to their baseline forecasts of 2.3% for the North West, 2.5% for the UK and 3.0% for Greater London. An accelerated growth scenario based on the objectively assessed need for housing identified in the separate report on that issue (referred to as the Housing OAN) would be likely to generate average economic growth of 2.8% per annum. The forecast increases in employment in Greater Manchester over the period 2014-2035 range from around 156,000 to 376,000 in the various scenarios, with that using the objectively assessed need for housing estimated to result in around 228,000 additional jobs.
- S9. There are some quite significant differences between the forecasts from Oxford Economics and Experian in terms of individual economic sectors, for example with the Experian forecasts generally envisaging higher growth in the public sector, such as for education and health. However, overall, the

forecasts are broadly similar in terms of the expected continued changes in the composition of the economy across Greater Manchester as a whole, with the expansion of the service sectors, particularly in terms of professional and business services, and continued contraction in manufacturing employment across Greater Manchester.

- S10. It is difficult to draw any firm conclusions from the sectoral forecasts at a district level. The dominant position of Manchester is regularly seen both in existing levels of employment, and forecast absolute growth, although other districts often match or exceed it in terms of the rate of increase. Salford, Stockport and Trafford also perform relatively well on several sectors, whereas Tameside, Oldham, Rochdale and Bury are often at the lower end of current employment numbers and forecast growth. This suggests some spatial pattern to current economic performance and future growth, with the centre/south reinforcing its position, as may be expected in forecasts that are based on past trends, and the north/east seeing less employment growth, with the north-west often somewhere in the middle. However, the two forecast sources also demonstrate the uncertainty inherent in any estimates of future employment growth, particularly when looking at individual sectors and/or districts, and there is often significant variation between the forecasts in the scale and pattern of change across Greater Manchester.

Net change in floorspace

- S11. It is possible to estimate the net change in floorspace that may result in each of the forecasts, using assumptions around the type of accommodation that different economic sectors require and the amount of floorspace per worker that would be needed. For industrial floorspace, the forecasts range from a net reduction of 729,000m² to a small net increase of 26,000m² for the period 2014-2035. All of the forecasts expect a net increase in both warehousing and office floorspace, ranging from 464,000m² to 1,467,000m² for warehousing, and from 1,152,000m² to 2,182,000m² for offices over the same period.
- S12. It is estimated that an approach based on the objectively assessed need for housing (as identified in a separate report on this issue), coupled with the accelerated growth scenario assumptions, would lead to a net change in employment floorspace in Greater Manchester over the period 2014-2035 of 297,000m² for industrial/warehousing floorspace and 1,529,000m² for office floorspace.

Market signals

- S13. There is limited public information on land values and rents, but that which is available indicates that values in Manchester are broadly comparable with competing cities such as Leeds and Birmingham. Average office rents in Manchester are generally far higher than in other parts of Greater Manchester.

- S14. Market commentaries suggest that the level of short-term demand for employment floorspace from investors and developers can change very quickly in response to supply dynamics, seemingly shifting from a shortage to an oversupply and back again in a very short space of time. This results in the 'tap' of new floorspace being switched on and off, rather than providing a steady and continuous flow of development, which inevitably leads to periods of perceived shortfall followed by an apparent oversupply that then dampens development activity. In terms of a land-use planning response, this all points towards the need to ensure the continuous supply of development opportunities attractive to occupiers, developers and investors, which are available when demand dictates, but with no guarantee that such demand will manifest. It also suggests that the scale of the long-term supply needs to be constantly revisited in light of the speed with which development opportunities are taken up.
- S15. In terms of industrial and warehousing provision, the focus in recent years has been on pre-lets, where the ability to respond quickly to occupier enquiries is key to securing investment, although Greater Manchester is just starting to see a few proposals for speculative schemes. Although prime rents within Greater Manchester are comparable with other UK regional cities, there is mixed data in terms of the direction of travel, with some sources suggesting that supply pressures are impacting on rental levels whilst others point towards a flatter market. There is a perception that Greater Manchester may have missed out on some major potential investment opportunities because of a lack of large, readily developable sites in suitable locations, and an over-reliance on small sites and existing premises in secondary locations. However, attracting and retaining businesses is not necessarily just about the availability of new sites. The ability of major employment estates such as Trafford Park to continually adapt and reinvent themselves will be vital to ensuring that Greater Manchester remains a competitive location for industrial, warehousing and distribution uses. A recent logistics study concluded that the opportunities for increasing Greater Manchester's logistics role depend very much on the availability of suitable sites of sufficient size and with multi-modal potential.
- S16. Greater Manchester appears to be in a strong position in terms of its office market. With appropriate investment, it should be possible not only to continue this, but to further enhance its pre-eminence amongst UK regional cities, which could potentially have benefits for other economic sectors in the sub-region. However, the achievement of significantly increased levels of new office floorspace compared to past development rates will be dependent on the ability to find a way of delivering a high quality product at a value that both attracts investment in search of higher yields than are available in London and also promotes major growth in occupier demand. Furthermore, maintaining and enhancing Greater Manchester's competitiveness as an office location will not just depend on the availability of high quality sites and floorspace, but will also be heavily influenced by factors such as the availability of skilled workers, the quality and reliability of internal and external transport links, provision of high quality telecommunications, good place marketing, and good places to market.

Site characteristics

- S17. It is possible to identify some ideal site characteristics that may help to attract major investment to Greater Manchester. Most locations that best meet these characteristics are likely to require significant investment in transport infrastructure if higher levels of development are to be brought forward. In practice, a much wider range of sites than those that precisely meet the ideal characteristics will be required, and existing employment areas will continue to play a vital role.
- S18. For all sectors, value for money and the certainty and speed of delivery will be important. Industrial and warehousing occupiers will often require sites that also offer good transport connections, access to suppliers and customers, access to labour, scale and profile. The locations currently best placed in Greater Manchester to meet these requirements could be around the M60/M62 west (within Salford and Trafford), Manchester Airport (within Manchester and Trafford), the M60/M62/M66 (within Rochdale and Bury), the M6 corridor (within Wigan), and the M60/M61 (within Bolton and Salford). There may also be significant potential in some other locations, such as Carrington (within Trafford) and opportunities opened up by the improvements linked to the Northern Powerhouse along the M60/M62/M67 corridor (within Rochdale, Oldham and Tameside). Major investment in infrastructure would need to be secured to enable them to better meet occupier demand.
- S19. Offices occupiers will often also value good transport connections, with a greater emphasis on public transport accessibility, as well as digital connectivity, access to labour, a high quality environment, a high profile and clustering opportunities. The locations in Greater Manchester that are best placed to meet these requirements are likely to be the city centre (within Manchester and Salford), Salford Quays (within Salford and Trafford), Manchester Airport (within Manchester and Trafford), the major town centres (Altrincham, Ashton-under-Lyne, Bolton, Bury, Oldham, Rochdale, Stockport and Wigan), and the Trafford Centre.

Spatial distribution of activity within Greater Manchester

- S20. The evidence in terms of past activity, current conditions, forecasts and key opportunities is reasonably consistent in identifying that Manchester and Salford are in a particularly strong position. If Greater Manchester is to be successful then it will be essential that the best is made of this competitive position of the two cities.
- S21. The evidence is also quite consistent in indicating that some locations, particularly the north-east districts of Oldham, Rochdale and Tameside, but also Wigan on some measures, have been playing a lesser role than the rest of Greater Manchester in delivering employment growth and are likely to continue to do so in the future. It will therefore be important that a strong economic function can be found for these areas so that they are able to make

a more significant contribution to Greater Manchester's economic growth, and to fully share in its benefits. This must be focused on securing net additional investment to Greater Manchester if long-term sub-regional growth prospects are to be enhanced. Major interventions may be required to exploit this potential and transform the growth prospects of these areas, for example in terms of employment, housing, labour market and skills, so that they are better able to attract investment targeted at more than just the local market.

Supply and gross floorspace requirements

- S22. The ten local authorities have provided data on their estimated employment land supply for the period 2014-2035, in terms of the gross new floorspace that could be provided on specific sites. This totals 3,031,158m² for industry/warehousing and 3,087,891m² for offices.
- S23. Taking into account the estimated net floorspace change, past development rates, and the need for choice and flexibility in the site supply, a gross employment floorspace requirement has been estimated for each of the Oxford Economics forecasts and the Housing OAN. The table below summarises the figures for industrial/warehousing floorspace and office floorspace, with those associated with the objectively assessed need for housing highlighted in bold.

Scenario	Greater Manchester employment floorspace requirements and supply 2014-2035 (m ²)			
	Estimated net floorspace change	Gross floorspace requirement	Total supply requirement	Current supply position: surplus(+)/ shortfall(-)
<i>Industrial/warehousing floorspace</i>				
2014 GMFM	-265,532	3,171,015	3,805,219	-774,061
AGS-SNPP	243,695	3,425,629	4,110,755	-1,079,597
Housing OAN	297,062	3,452,312	4,142,775	-1,111,617
AGS-High	892,442	3,750,002	4,500,003	-1,468,845
AGS-Higher	1,493,150	4,050,356	4,860,428	-1,829,270
<i>Office floorspace</i>				
2014 GMFM	1,151,679	2,210,038	2,652,046	435,409
AGS-SNPP	1,499,783	2,384,090	2,860,908	226,547
Housing OAN	1,528,942	2,398,669	2,878,403	209,051
AGS-High	1,854,253	2,561,325	3,073,590	13,865
AGS-Higher	2,182,474	2,725,436	3,270,523	-183,068

1. Background

- 1.1 The National Planning Policy Framework states that “local planning authorities should plan proactively to meet the development needs of business and support an economy fit for the 21st century”¹.
- 1.2 It is intended that the Greater Manchester Spatial Framework (GMSF) will identify employment floorspace and land requirements for each district in Greater Manchester, split by office and industry/warehousing and informed by an objective assessment of economic development needs.
- 1.3 The Government’s Planning Practice Guidance (PPG) sets out in more detail some of the issues that should be taken into account in assessing economic development needs and identifying employment land requirements (see paragraphs 2a-030-20140306 to 2a-034-20140306). These essentially focus on the identification of functional economic areas, economic forecasts, past activity, market intelligence, and the translation of forecasts into requirements. There is a strong emphasis on considering the needs of different sectors and types of business.
- 1.4 This report summarises and analyses the main evidence available to inform the identification of employment floorspace requirements. More general information on the economy has been published in the Integrated Greater Manchester Assessment² and the Greater Manchester Spatial Framework, Integrated Assessment Scoping Report³.
- 1.5 Further detailed work is also being carried out, which will be used to inform future stages of the Greater Manchester Spatial Framework. This includes the ‘Deep Dives’, which will be a wide-ranging analysis of the economic issues and opportunities across Greater Manchester carried out at a greater degree of granularity than ever before. This will provide a detailed understanding of the spatial implications of, and barriers to, growth at a local level through looking at supply side issues (e.g. labour force, skills, health) as well as demand side factors (e.g. land/sites, accessibility/connectivity). The outcomes will be independently verified and used to inform a range of growth and reform interventions, as well as being essential as the Greater Manchester Spatial Framework is further developed.

¹ Department for Communities and Local Government (March 2012) *National Planning Policy Framework*, paragraph 20

² New Economy/AGMA (May 2014) *Integrated GM Assessment: Economic Evidence Base*

³ AGMA (July 2015) *Integrated Assessment of the Greater Manchester Spatial Framework: Integrated Appraisal Scoping Report*

2. Functional economic market areas

- 2.1 A separate report has been produced which considers the appropriate area of assessment both for employment floorspace and for housing. The summary from that report is reproduced below.

Migration and housing market areas

- 2.2 A wide range of factors influence decisions regarding migration and the precise location of where to live, including:
- Availability of suitable housing
 - Price
 - Location of family
 - Location of friends
 - Cultural communities
 - Education of children
 - Commuting times/routes to work
 - Access to shops, facilities, etc
 - Lifestyle
 - Identity and familiarity
 - Environmental quality
 - Crime levels
- 2.3 The relative importance of these factors can vary significantly between different households, and some may generally be more important for particular household types and age groups than others.
- 2.4 The use of migration data in the identification of housing market areas tends to focus on determining when self-containment levels reach a particular threshold, such as 70% as referred to in the Planning Practice Guidance. Migration data for Greater Manchester from the 2011 Census suggests that previous definitions of housing market areas from the regional and sub-regional housing market assessments of 2008 represent a gross over-simplification of the way in which the housing market functions within Greater Manchester. The notion of largely self-contained housing markets may make sense in some parts of the country, but in a large, integrated conurbation such as Greater Manchester it does not appear to offer an appropriate or helpful description of reality. Data from the last two censuses indicates that self-containment levels are decreasing, suggesting housing markets are gradually becoming more and more integrated.
- 2.5 In practice, most migration is over a relatively short distance. This is likely to be due to the relative importance of some of the above factors relating to family, friends, and familiarity with an area. Generally, moves to and from individual places occur in all directions, irrespective of any identified housing market area boundaries. Each neighbourhood is effectively at the centre of its own housing market area, with such areas collectively forming a series of overlapping markets that cover the whole of Greater Manchester. Some areas

may face more towards one direction than another, and this will often be a function of geographical factors such as the proximity to other neighbourhoods, the quality of transport connections, and the location of the nearest major employment, retail and/or leisure destination. The directions of the most important links may vary depending on whether the source or destination of migration is being considered, as different locations perform different functions within the wider market. For example, the city centre area draws in people from a very wide catchment, extending well beyond Greater Manchester, and then out-migration is to a less extensive though still significant area, with a moderate bias towards the south. In contrast, some of the areas with higher house prices attract people from surrounding areas, irrespective of prevailing house prices within them, but then see outward moves over a wider area with a greater emphasis on locations with similar characteristics. Although there are exceptions, generally, proximity appears to be far more important than price in terms of an influence on the level of migration between areas.

- 2.6 Overall, Greater Manchester as a whole has a very high level of self-containment, both in terms of the proportion of people moving from an address in Greater Manchester who remain within the sub-region, and the proportion of people moving to an address in Greater Manchester who already lived within the sub-region, exceeding 80% on both measures (as a proportion of all their moves within England and Wales). The most important external migration flows for each district in Greater Manchester are generally with their immediately adjoining districts that also lie within Greater Manchester, and links to adjoining districts outside the sub-region are usually more limited. However, individual settlements outside Greater Manchester that are located very close to its border, particularly where they lie on a key transport connection such as a railway, can have quite strong links to adjoining districts within the sub-region. Some nearby parts of Cheshire East, High Peak and Rossendale may partly have a role as locations to which Greater Manchester residents move, but in all cases there are also quite significant though usually lesser flows in the opposite direction. Some parts of High Peak appear to have a wider catchment within Greater Manchester than might be expected from the general patterns described above, with modest flows from the city centre and south Manchester.
- 2.7 Data from the censuses and ONS indicates that Manchester and Salford have a quite distinctive role within Greater Manchester. The two cities effectively accounted for all of the net in-migration to Greater Manchester over the period 2002-2012 (over 4,650 people per annum, with the other eight districts collectively seeing net out-migration at over 650 people per annum), due to them seeing very high levels of net international in-migration, although Manchester does have considerable net out-migration to other parts of the country. The role of Manchester and Salford appears to have evolved between the last two censuses, with a major increase in net in-migration, particularly net migration to Manchester from outside Greater Manchester, whereas most other parts of the sub-region have seen a significant increase in net out-migration. Flows between the two cities have also become far more important, more than doubling between 2001 and 2011.

- 2.8 Manchester and Salford attract more migrants from outside Greater Manchester (but within England and Wales) than any of the other eight districts in the sub-region. Only around one-third of in-migrants to Manchester come from elsewhere in Greater Manchester, demonstrating its ability to attract people from a wide area. The top ten net inflows to Manchester are from other cities in the North and Midlands, reflecting its role and relative importance, and Salford shares some similarities in this regard. Manchester and Salford are the only Greater Manchester districts for which locations within England and Wales outside Greater Manchester make up a higher proportion of the sources of all migrants than they do the proportion of the destination of all migrants, again highlighting their role as entrance points to the sub-region from which there is then some redistribution to other parts of the conurbation.
- 2.9 The location of the city centre and Salford Quays within Manchester and Salford is likely to be a key factor in explaining this role of the two cities. The two wards covering those areas have a very broad reach, particularly in terms of the source of migrants, drawing people from a very wide catchment and then redistributing them across a broad area of Greater Manchester. The main sources and destinations for the City Centre ward in Manchester appear to have quite a strong southward bias, whereas this is less pronounced for the Ordsall ward covering Salford Quays and the western part of the city centre. Manchester is by far the most important external migration source and destination for several districts within the sub-region, always with net outflows from Manchester, and is particularly significant in the case of Salford, Stockport and Trafford, again suggesting a southward focus to the city's relationships. The outflow rates from Manchester to Salford and Trafford, and the inflow rates from them, are very high relative to the size of the population of those two districts, and are the most significant in Greater Manchester.
- 2.10 There is other evidence of differences between the northern and southern parts of Greater Manchester, though Bury is often different to other parts of the north of the sub-region. For example, although the previous definitions of housing market areas within Greater Manchester are clearly problematic, it is notable that the two northern areas (North West and North East) have high levels of self-containment, whereas the two southern areas (Central and South) have lower self-containment below the 70% threshold. This picture is further reinforced by the significant flows between the Central and South HMAs, particularly in terms of those moving from the Central HMA to the South HMA. The more northern districts of Bolton, Oldham, Rochdale and Tameside all individually have high levels of self-containment, close to or exceeding 70%, though self-containment is much lower in Bury. The North West and North East HMAs also have a higher proportion of their moves contained within Greater Manchester than the Central and South HMAs. The analysis of ward-level data reinforces this picture, with the clusters of low self-containment generally focused in the south of the conurbation, particularly in terms of the source of migrants, which all indicates that locations in the centre and south quite often have a broader reach than places in the north. Manchester, Stockport and Trafford generally have lower levels of

containment, but this should still be seen within the overall picture of most moves being over relatively short distances. The absolute flows to and from the northern part of Cheshire East are reasonably significant, particularly for Stockport, reflecting the proximity of neighbourhoods. South Trafford has a particularly low level of containment, which may partly be a function of the high house prices. Some of the areas of high self-containment in the north are due to particular concentrations of ethnic groups.

- 2.11 There is also some evidence of differences between the west and east of Greater Manchester. The four eastern districts of Oldham, Rochdale, Stockport and Tameside collectively saw net out-migration of more than 1,500 people per annum over the period 2002-2012, whereas the four western districts of Bolton, Salford, Trafford and Wigan had net in-migration of more than 2,200 people per annum. Oldham, Rochdale and Tameside have the highest proportion of their migrants coming from within Greater Manchester. Although there are some links with High Peak, the east of Greater Manchester generally has very limited migration connections to its east, particularly to Calderdale and Kirklees. Oldham and Rochdale stand out on some measures, having the highest net out-migration over the period 2002-2012, and the highest self-containment within Greater Manchester, both individually and together.
- 2.12 In considering housing markets within Greater Manchester, it would therefore seem advisable to avoid seeking to define distinct housing market areas, but instead to focus on the roles of different places and the interactions between them. Although there are some migration links to settlements just outside the sub-region, Greater Manchester generally appears to be an appropriate starting point for analysis, supplemented by assessment of individual districts. The generally short-distance nature of most migration moves will be an important consideration, as will be the apparent increasing integration of housing markets.
- 2.13 Overall, there appears to be little evidence that differences in house prices are a major determinant of migration patterns. Proximity appears to be the key issue, largely irrespective of whether areas have similar or different average house prices. The primary issue associated with house prices may be that households with lower incomes typically appear to move over shorter distances, which could suggest that their location choices are more limited than those who can afford higher house prices.

Commuting

- 2.14 Almost 88% of commuters who live in Greater Manchester also work in the sub-region, and more than 85% of commuters who work in Greater Manchester also live in the sub-region. These high levels of commuting self-containment are perhaps unsurprising given the size of the area involved, but suggest that Greater Manchester is reasonably self-sufficient both in terms of the provision of employment opportunities and the supply of labour. Overall, there is net in-commuting to Greater Manchester from the rest of England and

Wales of 28,316, which could be considered very low given that more than 1,000,000 people commute to a location within the sub-region. Greater Manchester is a very important source of jobs for High Peak and Rossendale, accounting for more than 30% of their commuters, but the largest absolute commuting flows are with Cheshire East.

- 2.15 Manchester, Salford and Trafford all draw in a large number of workers from outside their districts, often from each other, and have net in-commuting and low worker self-containment. Manchester has a dominant role, with very high levels of net in-commuting exceeding 100,000, whereas the levels for Salford and Trafford are much more modest. The other seven Greater Manchester districts have quite significant net out-commuting. Bolton, Oldham and Rochdale appear to have quite localised commuting, with relatively high self-containment both in terms of workers and commuters. Bury, Stockport and Tameside have lower commuter self-containment rates. Wigan is quite distinctive, having the highest worker self-containment in Greater Manchester but low numbers of commuters coming from other parts of the sub-region, the lowest proportion by far of its residents working in Greater Manchester, the highest net out-commuting of any Greater Manchester district, and being the only district in the sub-region for which Manchester is not the most important external commuting destination (it is only the fifth).
- 2.16 Overall, similar to migration, the pattern of commuting flows is reasonably predictable based on the size and location of employment areas relative to the main areas of population. The primary sources of commuters are always the immediately surrounding areas, but the extent of an employment area's influence and the average length of commuting journeys will vary depending on its function within the sub-region. Although they are very important within the districts in which they are located, the eight major town centres in Greater Manchester have a relatively localised commuting catchment, with the main flows for each being from the district that they are located within, together with modest flows from adjoining districts, the size of which typically reflects the proximity of the main residential neighbourhoods, the quality of transport connections and the availability of other areas of major employment opportunities. Significant industrial areas such as Kingsway appear to have similarly localised catchments. Wigan Town Centre stands out as having a very high proportion of commuters from within the district (75%), and the proportions for Bolton and Rochdale Town Centre are also high (more than 65%). Stockport Town Centre appears to have a broader reach than most of the other major town centres in Greater Manchester, with significant flows from Manchester and Tameside in particular, though those from Cheshire East and Trafford are also quite considerable.
- 2.17 The major employment areas at the core of the conurbation (the city centre, Salford Quays and Trafford Park) have a significantly broader reach, drawing a lower proportion of workers from the immediate area, and having longer average travel to work distances (with median commuting distances of 14-16km compared to 7-9km for the town centres). Manchester, Salford and Trafford collectively still provide more than half of the workers for each of these employment areas, but there are also major flows from the other

Greater Manchester districts to the city centre. The districts in the north of Greater Manchester generally provide fewer workers for the city centre than does the south of the sub-region and, equally, the city centre is less significant as a source of jobs for the districts in the north, in both cases with the exception of Bury. Oldham and Rochdale are relatively disconnected from Salford Quays and Trafford Park, and Bolton and Wigan send the fewest people to the city centre from within Greater Manchester. This southward bias of commuting appears to extend into adjoining districts, with the largest inward flows to the core employment areas generally being from Cheshire East, Warrington and High Peak. The flows from Rossendale show that the employment opportunities in the core are relatively important to that district, and it is notable that Rossendale lies immediate to the north of Bury, which is the part of the north of Greater Manchester that supplies the most commuters for the core areas despite having the smallest population.

- 2.18 In the same way that Greater Manchester has a series of overlapping housing market areas, the majority of employment areas in Greater Manchester appear to lie at the centre of modest sized commuting catchments, with those catchments overlapping each other rather than being distinct travel to work areas. There is some skewing of this, including due to geographical factors (for example with Rochdale having little influence to its east in West Yorkshire) or the proximity of the city centre (for example with Bury largely drawing in people from the north but not the south, and Tameside from the east rather than the west).
- 2.19 However, overlaying these localised catchments are the broader catchments for the employment areas at the core of the conurbation, and the city centre in particular appears to have a distorting effect. Although it draws in very large numbers of commuters from nearby, the city centre's broad reach influences commuting patterns across Greater Manchester, and over 57,000 of its workers travel more than 10km. In the case of Salford, Stockport, Tameside and Trafford, Manchester as a whole provides employment for more than 20% of their commuters, and these four districts also had the highest proportions of their migration flows accounted for by Manchester.
- 2.20 As noted above, there is some evidence that the north-west (Bolton and Wigan) and north-east (Oldham and Rochdale) are less connected to some of the employment opportunities within the core than other parts of the conurbation, but there are still quite significant commuting flows from those districts, for example with Wigan being the fifth most important source of commuters for both Salford Quays and Trafford Park. Furthermore, the ONS definition of travel to work areas (TTWAs) identified separate Bolton and Rochdale & Oldham TTWAs in 2001, but these were subsumed into the Manchester TTWA in 2011, suggesting increasing functional integration of different parts of Greater Manchester. It is possible that new and improved transport infrastructure, such as the Metrolink line to Oldham and Rochdale, could lead to further changes in these patterns in the future.
- 2.21 Nevertheless, proximity is still a vital component, and it is not necessarily the size and role of Manchester that draws people in from outside Greater

Manchester, for example with Wigan and Bolton being more important for Chorley commuters, Rochdale and Bury being more important for Rossendale commuters, and Stockport and Tameside being equally as important as Manchester for High Peak commuters.

Retail catchments

- 2.22 There is a significant overlap of the principal retail catchments of the city centre and eight main town centres, particularly on the eastern side of Greater Manchester. This reflects the integrated nature of the conurbation, but the individual town centres still retain strong identities and influence over their surrounding communities. The lack of a main town centre in Salford reduces the catchment overlap on the western side of Greater Manchester, although the Trafford Centre's influence will be stronger there, and the largely discrete nature of Wigan's principal catchment reinforces some of the patterns seen in relation to migration and commuting. There are similarities between the commuting patterns and retail catchments of the town centres, in terms of their size and geography.

Conclusions on the area of assessment

- 2.23 Greater Manchester has very high levels of self-containment, both in terms of migration and commuting. This reflects both its size and the fact that there are large areas of open land separating the conurbation from many of the nearest settlements. Greater Manchester is also an important administrative unit, for example having its own Combined Authority and Local Enterprise Partnership. It is also a recognised area of search for many businesses when looking for premises. On this basis, it provides an appropriate starting point for considering housing and employment floorspace requirements.
- 2.24 However, the evidence on both migration and commuting suggests that there are important connections with areas adjoining Greater Manchester that need to be taken into account. The nature of these connections varies depending on the proximity of settlements within and outside Greater Manchester, the location and relative strength of key employment areas, and the availability of direct transport connections. Many of the interactions are very localised, contained around the boundaries of the sub-region, but the strength of the city centre as an employment location is felt across a much broader area. Some migration and commuting flows are skewed in one particular direction, whereas others are more even with low net flows masking high absolute flows. In some cases the importance of the interactions may be more important to the districts adjoining Greater Manchester but of less significance to Greater Manchester and the districts within it, due to the differing size of the areas involved and the availability of alternative sources of employment and labour. The implications of emerging housing and employment floorspace requirements and proposals, both within and outside Greater Manchester, will therefore need to be carefully considered as work on the Greater Manchester

Spatial Framework progresses, so as to ensure that there is an appropriate balance of housing and jobs across the wider area.

- 2.25 Most people migrate over relatively small distances, resulting in a series of overlapping markets rather than relatively discrete housing market areas. Migration patterns are generally quite predictable, based on issues such as proximity, transport connections, employment opportunities and local identity, rather than reflecting previously identified housing market areas. Similarly, most employment areas see people commuting to them primarily from quite nearby, again leading to overlapping catchments. However, the major concentration of employment opportunities at the core of the conurbation, focused around the city centre, has a distorting effect, drawing people in from longer distances and limiting the commuting catchment of some of the other employment areas within Greater Manchester.
- 2.26 There are also other broader patterns that are discernible, such as higher levels of migration self-containment in the north of Greater Manchester, a generally more fluid market in the south, typically lower self-containment for those moving from more prosperous areas, net in-migration in the west and net out-migration in the east, and a very extensive in-migration catchment for the core of the conurbation that is then redistributed to some extent to surrounding areas. Wigan tends to have weaker connections to the rest of Greater Manchester than the other nine districts in the sub-region, both in terms of migration and commuting, as might be expected given its location. There is some evidence that migration is more contained within districts than if it were purely a function of distance and transport links. Familiarity with, and proximity to, particular town centres, as reflected in the geography of their core catchments, along with other aspects of local identity, could potentially explain this.
- 2.27 This complex functioning of housing and labour markets within Greater Manchester means that there is no simple way of subdividing the sub-region into identifiable housing market areas or functional economic areas. Any boundaries would essentially be arbitrary, and risk masking important relationships, as has been seen with the housing market areas that have previously been identified. Given these problems, together with the relatively small distances involved in most migration and commuting, the issues of district identity, and the availability of population and household projection data, it is considered that the most appropriate unit of analysis below the Greater Manchester level is the individual districts. This would be expected to enable a greater level of analysis, taking into account a better understanding of the relationships between different places, than would the combination of districts into larger sub-areas. However, even a district-based analysis could mask significant cross-boundary connections, and it will be important to have regard to the analysis in this report and supplementary data when interpreting assessments of demand and need for individual districts. For example, an ongoing 'Deep Dives' analysis of the economic issues and opportunities across Greater Manchester will provide a more thorough understanding of economic activity at a sub-district level.

Distribution of housing and employment floorspace requirements

- 2.28 Although the analysis of 2011 Census migration data suggests that most moves are over a relatively short distance, and many moves are likely to be constrained by links to family and friends, a comparison of past population projections with actual change indicates that the cumulative impact of migration can result in reasonably significant changes over time compared to those that have been forecast. Over a period of 20 years, this could easily lead to household growth being several thousand higher or lower than projected in any district, even if the Greater Manchester total is as forecast. Consequently, there would appear to be considerable scope for household growth to be redistributed around the sub-region if that were considered to be an appropriate strategy. For example, if a more sustainable pattern of household growth could be identified than that which is forecast, in terms of minimising the need to travel and the impact of residential development on the environment, then it would appear realistic to work towards it provided that appropriate measures could be put in place to ensure that locations identified for higher than forecast growth could attract any available migration.
- 2.29 The 1993-based population projections show that any additional population and household growth within the sub-region could realistically be focused on a small number of districts, as the higher than forecast growth in the following 20 years was focused solely in Manchester, Salford and Trafford, but again this would only be likely to be achieved in practice if such locations were sufficiently attractive in terms of access to employment, lifestyle, housing quality, etc. The overall spatial strategy for accommodating household growth is therefore influenced by the forecast pattern of household change across Greater Manchester, but is not completely set by it, and there is significant potential to move at least part of that household growth to other locations.
- 2.30 Overall, the high migration inflows relative to population size for Manchester and Salford mean that these two cities are likely to have the greatest potential for their population levels to deviate from those forecast in the ONS 2012-based projections, either due to deliberate policy interventions or changing circumstances. Trafford, and to a lesser extent Bury, also have above average projected migration inflows relative to their population size, and so could also possibly see significant redistribution of growth both within and outside Greater Manchester. In contrast, the migration inflow rates are projected to be quite low for Wigan, Oldham, Rochdale and Tameside, with Oldham and Rochdale having relatively high natural change. Consequently, there may be more limited scope to move the projected population growth of these districts into surrounding areas, particularly given that three of the districts adjoin each other on the north-east side of Greater Manchester, and have seen relatively modest population growth over the last few decades compared to some other parts of the sub-region and also have relatively high migration self-containment rates.
- 2.31 The commuting analysis highlights a series of issues that will need to be taken into account when determining the desirable distribution of population

growth relative to the distribution of employment opportunities, and vice versa. Patterns of development that are likely to result in longer average journey distances will probably only be appropriate if there is very considerable investment in transport networks, and a significant modal shift away from the private car. The fact that commuting flows to the major employment areas at the conurbation core are generally lower from the northern districts (with the exception of Bury) than from the south does not necessarily mean that such areas should provide less of the housing to accommodate an increase in workers in the core. The lower commuting levels may be due to a variety of issues, such as the type of dwellings and residential environments that are currently available in such locations, skill levels and health, as well as the quality of transport links. Similarly, regard will need to be had to the fact that Wigan is generally less integrated with the rest of Greater Manchester than the other nine districts, but actions to address this could potentially have significant economic and social benefits.

3. Strategic growth opportunities

Looking beyond Greater Manchester

- 3.1 The economic growth prospects of Greater Manchester will be strongly influenced by, and dependent on, a broad range of initiatives and investments covering a much wider area. Some of these will affect not only the overall scale of growth that may be seen, but also the locations to which it may be directed. National strategies, such as the UK productivity plan⁴, provide an important broader context, supporting some of the individual initiatives.

The Northern Powerhouse

- 3.2 In June 2014, the Chancellor of Exchequer made a speech advocating the creation of a Northern Powerhouse:

“Not one city, but a collection of northern cities - sufficiently close to each other that combined they can take on the world. Able to provide jobs and opportunities and security to the many, many people who live here, and for whom this is all about.”⁵

- 3.3 The concept is expanded upon in the Northern Transport Strategy, which explains that:

“Our shared aim is to transform Northern growth, rebalance the country’s economy and establish the North as a global powerhouse. ... Our aim is for economic growth in the North to be at least as high as the rest of the country, to complement and act as a balance to the economic weight of London.”⁶

“This transport strategy has brought together central and local government, the national transport agencies and Local Enterprise Partnerships behind a single joined up vision. That vision is for a North which has a vibrant and growing economy, acts as a magnet for inward investment, and which capitalises on the strengths of Northern cities to build a Northern Powerhouse. We need a new approach to maximise the economic potential of the North; allowing the North’s talent to become more mobile; allowing companies to access the widest pool of people and skills they need to grow; and connecting businesses to each other to make them more efficient. And crucially, it should be at a pan-Northern level, to create a single economy across the North. The Northern Powerhouse needs each city region in the North to perform to its maximum.”⁷

⁴ HM Treasury (July 2015) *Fixing the foundations: Creating a more prosperous nation*

⁵ The Rt Hon George Osborne MP (23 June 2014) *We need a Northern Powerhouse* (<https://www.gov.uk/government/speeches/chancellor-we-need-a-northern-powerhouse>)

⁶ HM Government and Transport for the North (March 2015) *The Northern Powerhouse: One Agenda, One Economy, One North – A report on the Northern Transport Strategy*, p.2-3

⁷ Ibid, p.4

- 3.4 The strong and widespread commitment to delivering a Northern Powerhouse has two main implications for Greater Manchester's economic growth. Firstly, it will be vital for Greater Manchester to play a full role in supporting the Northern Powerhouse. Its position as the strongest economy in the North of England means that it has the potential to take a leading role in driving forward wider economic growth. Secondly, the central position within a more successful North will provide additional economic opportunities that can help to promote higher levels of economic growth within Greater Manchester than would otherwise be the case. The advantages of a location within a wider area of economic success can already be seen in the South East of England.
- 3.5 Major improvements to transport connections between the cities of the North are seen as a central element of achieving the Northern Powerhouse. As well as improving the overall potential of Greater Manchester, the location of these links may also change its economic geography, for example with new/enhanced links to Leeds and Sheffield providing particular benefits for those areas within Greater Manchester that can most easily access them.

The North West Economic Plan

- 3.6 In January 2015, the Prime Minister and Chancellor set out a long-term economic plan for the North West, supporting the delivery of the Northern Powerhouse. Designed to achieve an £18bn real terms increase in the size of the North West economy by 2030, the plan focuses on the following six points:
- 1) to increase the long term growth rate of the North West to at least the forecast growth rate of the whole UK
 - 2) to raise the employment rate in the North West to that of the UK average
 - 3) to deliver the largest ever and most sustained investment in the long-term transport infrastructure of the North West
 - 4) to make the North West a global centre of outstanding scientific innovation, with a particular focus on material science, biomedicine, supercomputing and energy with major investments in the excellent universities and NHS teaching hospitals of the region, and making sure the energy resources are used to the benefit of local people
 - 5) to raise the quality of life in the North West by supporting its great cultural and sporting strengths, building up to 25,000 new homes, nurturing the rural environment and improving education outcomes in the region's schools so over 75,000 more pupils attend outstanding schools
 - 6) to give greater power and voice to the great cities and counties of the North West
- 3.7 The plan does not specify the scale of growth required in individual parts of the North West, but Greater Manchester's role as the largest economy in the region means that the uplift in the North West's growth rate would be unlikely to be delivered without a strong contribution from Greater Manchester. As with the Northern Powerhouse concept more generally, increased activity across the rest of the North West would also be expected to enhance growth prospects within Greater Manchester.

High Speed 2

3.8 High Speed 2 (HS2) is a proposal to connect major cities in Britain through a high speed rail network, increasing capacity and improving connectivity between London, the Midlands and the North. As well as providing fast, high quality passenger services, HS2 should also release capacity on the existing rail network thereby providing opportunities to improve existing commuter, regional passenger and freight services.

3.9 It is currently proposed that HS2 will be completed in two phases:

Phase 1: London to Birmingham

Phase 2: A 'Y' network from Birmingham, with one leg extending to the West Coast Main Line via Crewe with a connection into Manchester, and the other to Leeds via Nottingham and Sheffield

3.10 The link to Manchester is programmed for completion by 2033, but the Northern Transport Strategy seeks its much earlier delivery as it is seen as fundamental to supporting the Northern Powerhouse.

3.11 HS2 stations will be provided at both Manchester Piccadilly and Manchester Airport. By reducing travel time, particularly to London and Birmingham, and increasing business productivity and connectivity, HS2 will make Greater Manchester a significantly more attractive business location. The economic prospects of locations around the two proposed stations within Greater Manchester would be expected to see a very considerable boost, but wider benefits should be felt across the sub-region. There may also be complementary opportunities to increase the capacity and speed of services for both passengers and freight on the existing West Coast Mainline, providing additional growth potential around stations such as Stockport and Wigan.

Panama Canal widening

3.12 Although it is more than 5,000 miles away, the widening of the Panama Canal could have significant economic implications for Greater Manchester. It will open up new routes for the very largest container ships, expanding the opportunities for ports on the western side of the UK. A new deep water container terminal at the Port of Liverpool will be able to accommodate 95% of the global container vessel fleet, enhancing the port's role as an international gateway.

3.13 The Manchester Ship Canal provides direct shipping links to the Port of Liverpool, and the M62 and M58 offer good motorway connections, which will enable Greater Manchester to benefit from the investment and additional activity there. This could considerably enhance the potential for Greater Manchester to attract not only regional and national logistics development but

also related uses such as component assembly plants. This would be expected to have particular implications for the west of the sub-region, alongside the Manchester Ship Canal, M62 and M58.

Motorway network

- 3.14 The M60 motorway is a key asset for Greater Manchester, affording high capacity highway access around the sub-region, and links to the M62, M61 and M56 which provide routes to other major cities such as Leeds and Liverpool. The western part of Greater Manchester also benefits from one of the key north-south motorways in the country, the M6, together with the M58 connection from it to Liverpool. However, large parts of the network within and beyond Greater Manchester suffer from high levels of congestion at peak times, particularly where the motorways intersect, which impacts on the contribution that they make to the economic success of the sub-region.
- 3.15 The Highways Agency is working with a wide range of organisations to identify potential solutions to these problems of congestion. This is likely to require very considerable investment in the motorway network. Depending on the solutions that are chosen, this could significantly enhance the relative attractiveness of some locations, helping to boost their potential future contribution to economic growth.

Forging links with surrounding areas

- 3.16 The Northern Powerhouse is very much about taking advantage of opportunities to enhance the economic potential of the North by improving connections between places. Developing links between Greater Manchester and key business locations in surrounding districts has an important role to play in this, particularly where there are major sectoral clusters outside Greater Manchester that complement and relate to activity within it.
- 3.17 Examples of where there may be particular opportunities include one of two UK science and innovation campuses at Daresbury in Halton, the leading life science facility in the North of England at Alderley Park in Cheshire East, and the major logistics and manufacturing site at Omega in Warrington.

Competitive advantages of Greater Manchester

- 3.18 If Greater Manchester is to maximise its economic potential and support sustained high levels of growth in the future, then it will need to make the most of the advantages that it has compared to competing cities across the UK and beyond. A large, diverse and successful conurbation will have a wide range of important attributes, but the following are considered to be particularly significant to its growth prospects, in terms of differentiating Greater Manchester from other locations.

Devolution

- 3.19 In November 2014, the Greater Manchester Combined Authority (GMCA) signed a groundbreaking devolution agreement with the Government, which set out powers and responsibilities to be transferred to Greater Manchester. The sub-region is to get its own directly elected mayor with powers over transport, housing, planning and policing, and an interim mayor has since been appointed. The proposals also involved devolving further powers to the GMCA, including over support for business growth, skills and help to join up health and social care budgets⁸.
- 3.20 In July 2015, additional new freedoms for Greater Manchester were announced in the Budget, which will further strengthen the area's ability to shape a more prosperous future and more effective public services. This includes responsibilities relating to land, planning, fire and rescue services, health and social care, children's services, employment and skills, and Sunday trading.
- 3.21 These new powers and responsibilities, and the potential for further devolution including fiscal responsibilities, will enable Greater Manchester to have much more control over its own future. This could open up a range of new economic opportunities, enabling higher levels of growth to be achieved.

Scale

- 3.22 Greater Manchester has a population of 2.6 million and is the largest functional economic area in the United Kingdom outside London, generating almost a fifth of the total economic output of the North of England⁹. It also has the largest travel-to-work area of any conurbation outside London, with 5.2 million people within an hour's commute of the conurbation core¹⁰.
- 3.23 Overall, Greater Manchester is seen to benefit from agglomeration economies that have created a critical mass of skilled, knowledge-based jobs, and this will become increasingly important for future economic growth¹¹. In other words, the size of Greater Manchester is seen to be one of its key attributes in terms of economic competitiveness.

Economic diversity

- 3.24 Greater Manchester is one of the most economically diverse areas in the country. This should enable it take advantage of growth opportunities across different sectors. The wider and more varied network of business connections that are available within a highly diverse economy are likely to make it more attractive as a potential business location, providing a range of business

⁸ HM Treasury and Greater Manchester Combined Authority (November 2014) *Greater Manchester Agreement: devolution to the GMCA & transition to a directly elected mayor*

⁹ Manchester's Commission for the New Economy (January 2011), *Greater Manchester Local Economic Assessment: Summary & Conclusions*, paragraphs 1.1 and 3.1

¹⁰ Ibid, paragraphs 3.1 and 3.3

¹¹ Ibid, paragraphs 3.3 and 8.14

opportunities that may not be available in competing locations. Economically diverse areas are also more likely to be able to withstand economic downturns and shocks to individual sectors, providing a more stable economic environment for all businesses, investors and workers.

Manchester City Centre

- 3.25 Greater Manchester's economic growth has been driven by the large scale and rapid expansion of the service sector, particularly financial and professional services. This sector accounts for a sixth of employment, a fifth of GVA and businesses, and contributed 45% of all GVA growth across Greater Manchester over the decade prior to the recession, rising even higher in the conurbation core, making the conurbation a centre for financial and professional services of national, not just regional significance¹². Outside London, Manchester is the UK's main centre of financial and professional services, employing over 190,000 people and generating £9 billion per year of GVA¹³.
- 3.26 Manchester is generally acknowledged as having the strongest office market in the country outside London. The existing scale of activity and profile of the city centre provide a robust basis on which to secure future investment, exploiting and reinforcing its pre-eminent position. The large number of sites available for office development within the city centre, many of which are close to major public transport facilities, provides a combination of location, scale, quality of development opportunity and access to a large pool of skilled labour that other sub-regional centres may struggle to match.

Manchester Airport

- 3.27 Manchester Airport is the third busiest airport in the UK, after Heathrow and Gatwick, and is the only airport in England other than Heathrow with two full length runways. It is therefore a key asset for the country, and its range of international connections provides a competitive advantage for Greater Manchester compared to many other regional cities.
- 3.28 The Airport is embarking on a £1 billion investment programme to transform its facilities and infrastructure, with the ambition to ultimately grow from 20 million passengers in 2013 to 55 million passengers per annum. An increasing range and frequency of international connections is likely to considerably expand the economic opportunities available to Greater Manchester. This would be expected to benefit not just the area around the airport itself but also the wider sub-region and beyond, particularly locations which have excellent transport connections to the airport such as the city centre.

¹² Manchester's Commission for the New Economy (January 2011), *Greater Manchester Local Economic Assessment: Summary & Conclusions*, paragraphs 4.1

¹³ Greater Manchester Combined Authority and the Association of Greater Manchester Authorities (December 2013), *Stronger Together: Greater Manchester Strategy 2013*, p.25

Port Salford and the Manchester Ship Canal

- 3.29 The Manchester Ship Canal is a unique infrastructure asset, offering direct shipping links to a deep sea container port (at Liverpool) from an inland conurbation. The proposed development of Port Salford will provide a nationally important logistics facility for Greater Manchester offering genuine multi-modal opportunities close to some of the country's largest markets. One of the challenges will be how best to maximise the benefits of Port Salford for the sub-region, both in terms of accommodating further logistics development and helping to attract investment in other sectors.
- 3.30 The recent Greater Manchester logistics study specifically refers to Greater Manchester's "unique selling point at a national level: the availability of a site at Port Salford for a tri-modal distribution park on the Manchester Ship Canal with a barge service to a deep water container port at Liverpool"¹⁴.

Universities and the knowledge economy

- 3.31 The Local Economic Assessment identifies that the size, strength and importance of Greater Manchester's universities mean that Higher Education is another key service specialism for the conurbation. It highlights that the Corridor Manchester, focused around Oxford Road in Manchester, comprises Europe's largest concentration of knowledge assets, including Universities, hospitals, and Manchester Science Park¹⁵. Education employs 105,000 people and adds GVA of £3.0 billion per year to the city. Greater Manchester's five universities have over 100,000 students, creating one of the largest concentrations of students in Europe. Greater Manchester has the largest materials science research base in Europe, and hosts several internationally renowned research centres¹⁶. The discovery of Graphene at the University of Manchester is a global growth opportunity¹⁷.
- 3.32 This combination of knowledge assets has the potential to make a major contribution to Greater Manchester's economic growth and competitive position, enabling the sub-region to develop clusters in a range of key sectors. However, part of the challenge will be to provide the type of jobs and environment that can help to retain graduates, and reduce the outflow of knowledge to London.

Digital and creative industries

- 3.33 The Greater Manchester Local Economic Assessment explains that Greater Manchester has "developed its creative & digital industries to the stage where they represent the UK's biggest centre for the industries outside the Greater

¹⁴ MDS Transmodal (September 2014) *Greater Manchester Logistics Study: Technical Report*, p.66

¹⁵ Manchester's Commission for the New Economy (January 2011), *Greater Manchester Local Economic Assessment: Summary & Conclusions*, paragraphs 7.1 and 4.3

¹⁶ Greater Manchester Local Economic Partnership and the Greater Manchester Combined Authority (2015) *Greater Manchester Manufacturing Strategy*, p.7

¹⁷ Greater Manchester Combined Authority and the Association of Greater Manchester Authorities (December 2013), *Stronger Together: Greater Manchester Strategy 2013*, p.25

Southeast. This specialisation is forecast to increase over the coming decade as MediaCity and other assets develop and agglomeration economies increase.”¹⁸ The Greater Manchester Strategy also notes the importance of these sectors, with MediaCityUK acting as a national hub for digital and creative industries¹⁹ and having major occupiers such as the BBC and ITV. The Sharp Project²⁰, which recently won the Government’s Enterprising Britain Award, further enhances the sub-region’s competitiveness in such activities.

- 3.34 Overall, the Greater Manchester Strategy identifies that the sub-region’s creative and digital sector accounts for 105,000 jobs creating GVA of £4.7 billion each year, with national growth opportunities at MediaCityUK and the Sharp Project. This provides a strong basis on which to secure further expansion of sectors that are likely to be fundamental to driving economic growth over the next few decades, as well as helping to raise the profile and image of Greater Manchester.

Cultural identity

- 3.35 Greater Manchester has a strong cultural identity, as do many of the individual places within it. This provides a good basis on which to positively distinguish the sub-region from competing cities across the world, enabling it to more effectively attract skilled workers and investment.
- 3.36 This positive identity extends well beyond directly economic factors, and encapsulates Greater Manchester’s sporting heritage (e.g. host city for the Commonwealth Games in 2002; and two internationally renowned football clubs in Manchester United and Manchester City), and its key role in the arts (e.g. major and distinctive contribution to popular music over recent decades; a wide range of high quality performing arts venues, such as Bridgewater Hall and The Lowry, with further provision proposed at The Factory; and high profile galleries, including the award winning Whitworth Art Gallery).

¹⁸ Manchester’s Commission for the New Economy (January 2011), *Greater Manchester Local Economic Assessment: Summary & Conclusions*, paragraph 4.2

¹⁹ Greater Manchester Combined Authority and the Association of Greater Manchester Authorities (December 2013), *Stronger Together: Greater Manchester Strategy 2013*, p.6

²⁰ The Sharp Project is a multi-million pound investment by Manchester City Council, Northwest Regional Development Agency (NWDA) and the European Regional Development Fund (ERDF) specifically aimed at expanding creative and digital sectors in order to create job and career opportunities in the area. It offers affordable, flexible office space for rent to companies which will offer complementary or additional services that will allow creative companies to develop their skills and support their businesses to grow.

4. Projections and forecasts

The imperfect art of forecasting

- 4.1 The September 2014 consultation on the Greater Manchester Spatial Framework highlighted some of the uncertainties associated with projections and forecasts, and the fact that those uncertainties increase over longer time periods and for smaller geographical areas. An updated table from that analysis is included here as an example of how economic forecasts can change significantly over a short space of time.
- 4.2 The data below relates to the UK GDP forecasts produced by the Office of Budget Responsibility (OBR), which was created in 2010 specifically to provide independent and authoritative analysis of the UK's public finances, and to increase confidence in forecasting figures used in budgets and comprehensive spending reviews. The bottom line of the table calculates the percentage point difference between the highest and lowest GDP growth forecasts, which shows very considerable differences for 2012 and 2013.

Date of OBR projection	UK GDP forecast by year (annual percentage change)											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
March 2010	-4.9	1.2	2.3	2.8	2.9	2.7	2.7					
November 2010	-5.0	1.8	2.1	2.6	2.9	2.8	2.7					
March 2011	-4.9	1.3	1.7	2.5	2.9	2.9	2.8					
November 2011		1.8	0.9	0.7	2.1	2.7	3.0	3.0				
March 2012		2.1	0.8	0.8	2.0	2.7	3.0	3.0				
December 2012			0.9	-0.1	1.2	2.0	2.3	2.7	2.8			
March 2013			0.9	0.2	0.6	1.8	2.3	2.7	2.8			
December 2013				0.1	1.4	2.4	2.2	2.6	2.7	2.7		
March 2014				0.3	1.8	2.7	2.3	2.6	2.6	2.5		
December 2014					1.7	3.0	2.4	2.2	2.4	2.3	2.3	
March 2015					1.7	2.6	2.5	2.3	2.3	2.3	2.4	
July 2015						3.0	2.4	2.3	2.4	2.4	2.4	2.4
Largest percentage point difference	0.1	0.9	1.5	2.9	2.3	1.2	0.8	0.8	0.5	0.4	0.1	

- 4.3 The nature of the methodology and assumptions used by the OBR means that subsequent forecasts all point towards a similar level of growth in the medium term, but it can be seen that they have given very different views of the short-term picture and the timing of economic recovery. The OBR forecasts are specifically intended to be independent, and are measuring the whole economy at a large geographical scale over a short period of time. Greater inaccuracies would normally be expected for more detailed forecasts over a longer period, such as those relating to smaller geographical areas or specific economic sectors, of the type that could inform estimates of the demand for employment land at the local level up to 2035.
- 4.4 The graph below updates one that was included in the September 2014 consultation. It highlights the differences between estimates of the number of employees in Greater Manchester over the period 2004-2013. If different forecasts are using different data, or interpretations of that data, to calculate

their trends, relationships and base points, then significant variation in forecast outputs might be expected. Not only is there disagreement over what may happen in the future, but also what has happened in the past and the adequacy of the data available. In relation to the GMFM, Oxford Economics has noted that “the model relies heavily upon published data which, unfortunately, is becoming less and less reliable with BRES data in particular coming under severe criticism at local sectoral level. It is however better to base decisions upon imperfect information than no information at all.”²¹



- 4.5 In light of these issues, all economic forecasting outputs need to be treated with some caution, particularly for smaller geographical areas, and will be subject to a high level of uncertainty.

Local economic forecasts

Greater Manchester Forecasting Model (GMFM)

- 4.6 The Greater Manchester Forecasting Model (GMFM) is produced by Oxford Economics on behalf of AGMA. It uses historic data as a basis for estimating the inter-relationships between variables, based on a detailed analysis of data and research. The baseline forecast is consistent with the regional, national and global models produced by Oxford Economics. The latest version of the GMFM baseline forecast was published in December 2014 (referred to hereafter as the 2014 GMFM).

²¹ Oxford Economics (Winter 2014) *Greater Manchester Forecasting Model – Technical note: Model description and data sources*, p.4

Accelerated growth scenario (AGS)

- 4.7 Oxford Economics has also produced three different versions of an accelerated growth scenario (AGS), focusing on the North West and Greater Manchester, using the framework of the GMFM but with some additional assumptions²². These three scenarios are referred to as:
- AGS-SNPP, which uses the ONS 2012-based sub-national population projections as an input
 - AGS-High, which uses the Popgroup population forecast referred to as scenario 5 in the separate report on the objectively assessed need for housing²³
 - AGS-Higher, which uses the Popgroup population forecast referred to as scenario 6 in the aforementioned report²⁴
- 4.8 The AGS-SNPP is based around the achievement of two key aspirations announced in the long term economic plan for the North West²⁵, namely:
- 1) To increase the long term growth rate of the North West to at least the forecast growth rate of the whole of the UK
 - 2) To raise the employment rate in the North West to the UK average, which would ensure that over 100,000 additional people are in employment in the North West during this Parliament (i.e. by 2020)
- 4.9 The AGS-High and AGS-Higher utilise the same assumptions and relationships as the AGS-SNPP, but with higher levels of population growth factored in.
- 4.10 The sectors that are expected to contribute most to the additional growth in the North West in the AGS tend to be more heavily concentrated in Greater Manchester than elsewhere in the region, and they are also the sectors in which Greater Manchester is expected to have a comparative advantage. Consequently, Greater Manchester sees a larger boost to economic growth than the rest of the North West in the AGS.
- 4.11 The additional jobs between the AGS and the baseline GMFM forecast are translated into the additional number of people in work in Greater Manchester, with no distinction made between residents and in-commuters, and this figure will be lower than the number of additional jobs as some people hold more than one job. The additional people working in Greater Manchester are

²² For further details on the methodology and outputs of the accelerated growth scenario, see Oxford Economics (October 2015) *An accelerated growth scenario for Greater Manchester*

²³ Scenario 5 applies the average annual internal and international migration flows from the period 2002-2012, as identified in the ONS mid-year estimates, to each year of the projection period 2012-2035, but uses the same birth and death rates as in the ONS 2012-based sub-national population projections

²⁴ Scenario 6 takes a similar approach to scenario 5, but assumes that the unattributed population change between the last two censuses in the mid-year estimates was the result of unrecorded international migration, and adjusts the international migration flows averages accordingly

²⁵ HM Government (8 January 2015) *Long term economic plan for the north-west set out by Prime Minister and Chancellor* - <https://www.gov.uk/government/news/long-term-economic-plan-for-the-north-west-set-out-by-prime-minister-and-chancellor>

allocated to residents and in-commuters using Census commuting data, with 88% of jobs in Greater Manchester being held by Greater Manchester residents. Similarly, some of the jobs created elsewhere in the North West will be filled by Greater Manchester residents, and it is assumed that this is 5% based on the Census. The remaining additional jobs in Greater Manchester not taken by in-commuters will be filled by local residents, some of whom will currently not be participating in the labour market or are unemployed. Consequently, the resident employment rate is an output of other assumptions and relationships rather than an assumption fed into the model.

Experian

- 4.12 The GMFM and AGS have been specifically commissioned by AGMA, but other economic forecasts are also available. It is unrealistic to analyse every available forecast, but the UK Local Market Forecasts from Experian have been considered given that they have been referred to by some of those commenting on the Greater Manchester Spatial Framework (GMSF). The last consultation identified that the forecast job increases from Experian were significantly higher than those in the GMFM and from another independent forecaster, Cambridge Econometrics. The Experian forecasts therefore provide a useful reality check whilst recognising that the previous analysis indicated that they may be towards the top end of the forecasting range, at least in terms of employment growth. They are produced quarterly, and the June 2015 version is referred to here.
- 4.13 The methodology used in the Experian forecasts is set out in the associated data guide²⁶. However, it is important to note that they are baseline forecasts, and are therefore more akin to the GMFM than the AGS. The Experian forecasts utilise the ONS 2012-based sub-national population projections as an input, spliced onto the ONS 2013 mid-year estimates, rather than involving any separate forecasting of population change. This is a higher level of population growth than is forecast in the 2014 GMFM.

‘Game changers’

- 4.14 The various forecasts do not make any separate allowance for any specific major proposed schemes, which are sometimes referred to as ‘game changers’. It is often argued that a particular development will transform the economy, and therefore that a separate allowance needs to be made for it when considering future growth prospects.
- 4.15 However, in practice, the past trends that feed into the forecasts will themselves include many such developments. For example, the office trends for Greater Manchester will include very large developments at Spinningfields in Manchester and MediaCityUK at Salford Quays, and so assuming that future major office schemes would be additional to forecast growth would be likely to lead to double-counting. Similarly, major developments such as at

²⁶ Experian (June 2015) *Data Guide: UK Regional Planning Service*

Kingsway in Rochdale will have fed into the industrial and warehousing forecasts.

- 4.16 Consequently, it is not considered appropriate to seek to calculate and add the impacts of individual proposed developments, and such developments will actually be part of the way in which the forecast levels of growth will be delivered.

Key forecasting outputs for Greater Manchester

- 4.17 The outputs from the forecasting produced by Oxford Economics and Experian differ, including in terms of scope, detail and definition. This section seeks to provide a comparison between the forecasts, but there may be some variation in the precise definitions, and differences in terminology are highlighted where relevant.

Population

- 4.18 The first table compares the population figures associated with the various forecasts, as the level of population growth is one of the key reasons behind the different economic outputs due to the impact that population levels have on certain economic sectors. Population is an output of the 2014 GMFM, but an input for the other forecasts.

Forecast	Comparison of population figures for Greater Manchester from forecasts 2014-2035			
	Total population		Change 2014-2035	
	2014	2035	Absolute change	Average % change pa
2014 GMFM	2,729,065	2,943,704	214,639	0.36
AGS-SNPP	2,729,065	3,030,100	301,035	0.50
AGS-High	2,729,065	3,142,674	413,609	0.67
AGS-Higher	2,729,065	3,266,188	537,123	0.86
Experian	2,731,200	3,028,690	297,490	0.49

- 4.19 The 2014 GMFM forecasts the lowest population change, which is partly a result of it assuming lower net international migration to the UK than the ONS projections. The AGS-SNPP and Experian have very similar population figures as they are both based on the ONS 2012-based sub-national population projections, but use slightly different methodologies for applying them to the forecasts. The AGS-High and AGS-Higher involve far greater levels of population growth, based on the Popgroup modelling described in the separate report on the objectively assessed need for housing.

Gross value added (GVA)

- 4.20 Gross value added (GVA) provides an overall indication of the forecast scale of economic growth. It is a measure of the value added by economic activity, equal to the outputs of each industry minus the inputs to that industry, and is similar to the gross domestic product (GDP) measure used for the country as

a whole. All of the forecasts measure GVA according to 2011 basic prices, so that results are comparable across years.

Forecast	Comparison of GVA forecasts for Greater Manchester 2014-2035 (2011 prices)			
	Total GVA (£ millions)		Change 2014-2035	
	2014	2035	Absolute change	Average % change pa
2014 GMFM	54,745	91,198	36,453	2.5
AGS-SNPP	54,745	98,242	43,497	2.8
AGS-High	54,745	103,130	48,385	3.1
AGS-Higher	54,745	107,657	52,912	3.3
Experian	57,335	91,399	34,065	2.2

- 4.21 Care needs to be taken when comparing GVA forecasts from different forecasts given the range of assumptions involved, and so the focus here is on the various forecasts produced by Oxford Economics.
- 4.22 The 2014 GMFM forecast rate of GVA growth for Greater Manchester of 2.5% per annum is broadly the same as Oxford Economics' forecast growth rate for the UK as a whole, and above the baseline forecast for the North West of 2.3%.
- 4.23 The AGS-SNPP assumes a more positive economic outlook than the baseline position, and is specifically designed to achieve the aspirations in the long term economic plan for the north west, as well as incorporating higher population growth. It forecasts a higher GVA growth rate of 2.8% per annum for Greater Manchester (and 2.5% for the North West), which is above the national figure but below the rate for London of 3.0% per annum that has been forecast by Oxford Economics.
- 4.24 Both the AGS-High and AGS-Higher scenarios forecast growth rates above London over a period of two decades, which would appear extremely ambitious and optimistic given the inherent strengths of London and its position as one of a handful of genuinely global cities in the world. It is therefore questionable whether the growth rates forecast in the AGS-High and AGS-Higher scenarios could be realised in practice.
- 4.25 The next table compares the spatial distribution of GVA growth within Greater Manchester that is forecast in the 2014 GMFM and the Experian June 2015 forecasts. District figures have not been produced for the three AGS forecasts, but it would be likely that the districts with the highest forecast growth in the baseline forecast would capture more of the additional growth due to the underlying methodology that has been used.
- 4.26 It should be noted that the ONS estimates of sub-regional productivity that feed into economic forecasts are quite volatile due to small survey size, and

can be subject to correction and revision²⁷. Consequently, any forecasts of GVA change, particularly at district level, should be treated with caution.

District	Forecast spatial distribution of GVA growth in Greater Manchester 2014-2035			
	2014 GMFM		Experian June 2015	
	Average % change pa	% of GM change	Average % change pa	% of GM change
Bolton	2.4	8.3	2.1	5.2
Bury	2.3	4.6	2.1	3.0
Manchester	2.8	33.8	2.4	43.6
Oldham	2.1	4.8	2.1	3.8
Rochdale	1.9	4.1	2.0	3.3
Salford	2.8	12.4	2.4	6.8
Stockport	2.5	10.2	2.1	13.4
Tameside	1.9	4.1	2.1	3.2
Trafford	2.4	11.8	2.3	12.7
Wigan	2.0	5.9	2.1	4.9

4.27 All districts are expected to see growth and contribute to the expansion of the Greater Manchester economy. The highest GVA growth rates in both forecasts are for Manchester and Salford. There is little difference in Experian's forecast growth rates for the other eight districts, with them all being 2.1% except for Trafford at 2.3% and Rochdale at 2.0%. There is more variation in the 2014 GMFM forecasts. Stockport is the only district other than Manchester and Salford that is expected to match the sub-regional growth rate, with Bolton and Trafford slightly below. Rochdale and Tameside are forecast to see the lowest growth rates.

4.28 Manchester is expected to make by far the largest contribution to GVA growth in Greater Manchester, at more than one-third in the 2014 GMFM and more than two-fifths in the Experian forecast. Salford, Stockport and Trafford are each forecast to provide more than 10% of Greater Manchester's GVA growth in the 2014 GMFM, but Salford is forecast to make much less of a contribution by Experian. Bury, Oldham, Rochdale and Tameside are forecast to make the smallest contributions to GVA growth in Greater Manchester in both forecasts, but these differences are in significant part due to the relative size of the existing economies of the districts.

Employment

4.29 The following table compares the total employment forecasts for Greater Manchester. This includes both employees and the self-employed, and relates to the total number of jobs rather than the total number of people employed, with some people potentially having more than one job. Experian uses the output 'workforce jobs', but this is essentially the same as the 'total employment' output from the Oxford Economics forecasts. The employment change in Greater Manchester that is estimated for the period 1997-2014 is

²⁷ See for example Office for National Statistics (February 2015) *Subregional Productivity – February 2015*

also included to enable a comparison between past and forecast growth, with the start date of this period having been chosen as it is the first date for which Experian publishes figures (those in the 2014 GMFM extend back to 1991), as well as the figures for 2004-2014.

Forecast	Comparison of employment forecasts for Greater Manchester 2014-2035					
	Total employment		Change 2014-2035		Average % change pa	
	2014	2035	Absolute change	Average % change pa	1997-2014	2004-2014
2014 GMFM	1,392,011	1,547,625	155,614	0.51	0.70	0.50
AGS-SNPP	1,391,952	1,613,395	221,443	0.71	0.70	0.50
AGS-High	1,391,952	1,693,682	301,730	0.94	0.70	0.50
AGS-Higher	1,391,952	1,768,024	376,073	1.15	0.70	0.50
Experian	1,402,080	1,605,180	203,100	0.65	0.81	0.63

4.30 The 2014 GMFM and Experian forecasts essentially seek to provide a baseline position, rather than seeking to accelerate growth compared to past trends. However, the Experian forecasts are based on a higher population increase, which partly explains the fact that they are forecasting a higher rate of employment growth than the 2014 GMFM. Both of these figures are marginally above the historic rate of employment growth seen over the previous decade, but below the rate identified in the respective forecasts for the longer period of 1997-2014 and by a similar amount in each case.

4.31 The more optimistic economic assumptions underpinning the AGS-SNPP, which has similar population growth to the Experian forecasts, results in a further uplift in the rate of forecast job growth, bringing it slightly above the long-term historic rate of employment growth identified in the 2014 GMFM. Much more rapid increases in employment are forecast in the AGS-High and AGS-Higher, associated with the far larger populations, with the latter being 142% higher than the 2014 GMFM and 85% higher than the Experian forecast.

4.32 The next table sets out the forecast rate of change of total employment in each Greater Manchester district over the period 2014-2035, with comparative figures for 1997-2014 and 2004-2014, from the 2014 GMFM and Experian.

District	Past and forecast rates of employment change across Greater Manchester							
	2014 GMFM				Experian			
	2014-2035		% change pa		2014-2035		% change pa	
	Average % change pa	% of GM change	1997-2014	2004-2014	Average % change pa	% of GM change	1997-2014	2004-2014
Bolton	0.57	10.16	0.41	0.41	0.56	7.35	0.10	0.00
Bury	0.48	5.25	0.60	0.62	0.54	4.46	0.90	0.88
Manchester	0.74	41.29	1.47	1.32	0.76	36.29	1.44	1.21
Oldham	0.20	2.43	0.01	-0.27	0.58	5.64	0.04	-0.11
Rochdale	0.06	0.62	-0.09	-0.60	0.44	4.03	0.29	0.03
Salford	0.89	18.00	0.68	0.87	0.91	13.50	0.99	0.82

District	Past and forecast rates of employment change across Greater Manchester							
	2014 GMFM				Experian			
	2014-2035		% change pa		2014-2035		% change pa	
	Average % change pa	% of GM change	1997-2014	2004-2014	Average % change pa	% of GM change	1997-2014	2004-2014
Stockport	0.51	10.15	0.31	0.22	0.50	7.92	0.79	0.67
Tameside	0.08	0.86	-0.36	-0.94	0.47	3.93	0.12	-0.28
Trafford	0.40	8.84	1.34	0.55	0.64	9.51	0.95	0.80
Wigan	0.15	2.40	0.44	0.33	0.58	7.38	0.55	0.26

4.33 Both forecasts anticipate that Manchester will make by far the largest contribution to employment growth in Greater Manchester over the period 2014-2035, followed by Salford, although in both cases it is forecast that Salford will see the highest rate of employment growth followed by Manchester. The two forecasts also foresee the lowest rates of growth being in Rochdale and Tameside.

4.34 When compared to their estimate of past employment change, both forecasts anticipate that Manchester will see total employment grow at a considerably slower rate than in the past. In contrast, Oldham, Rochdale and Tameside are expected to see improved employment growth. Consequently, the forecasts envisage smaller differences between the growth rates of the districts than in the past, although this may be a function of the forecasting methodologies with the potential for outliers from that narrower range of future growth rates being significant.

Residence-based employment

4.35 Residence-based employment is a measure of the number of people in an area who are in employment (as opposed to workplace-based employment, which is the number of employed people who work in a particular area). The table below provides similar data for Greater Manchester to the earlier table on total employment. As described earlier, each forecast involves different levels of population growth, for example with the additional working age population in each of the AGS scenarios helping to provide the labour required to deliver the forecast residence-based employment levels.

Forecast	Comparison of residence-based employment forecasts for Greater Manchester 2014-2035					
	Total residence-based employment		Change 2014-2035		Average % change pa	
	2014	2035	Absolute change	Average % change pa	1997-2014	2004-2014
2014 GMFM	1,291,369	1,410,984	119,615	0.42	1.30	1.25
AGS-SNPP	1,291,321	1,476,666	185,344	0.64	1.30	1.25
AGS-High	1,291,321	1,550,149	258,828	0.87	1.30	1.25
AGS-Higher	1,291,321	1,618,191	326,869	1.08	1.30	1.25
Experian	1,261,800	1,426,460	164,660	0.59	0.77	0.56

- 4.36 The relative positions of the forecasts is similar to that for total employment, with the Experian forecast between the 2014 GMFM and AGS-SNPP, though closer to the latter, and the AGS-High and AGS-Higher showing much higher rates of growth. However, there are very significant differences in the past trends from the two forecasters. Those from the Experian forecasts are much lower, and more akin to the forecast changes in the future. The Oxford Economics' figures are far higher for the two past periods, above even the highest of the growth forecasts, and more than double the Experian rates for 2004-2014. It is likely that at least part of this difference is due to the commuting data that has been used to translate workplace-based employment into residence-based employment. The GMFM and AGS forecasts use a commuting matrix from the 2001 Census, which is adjusted for Manchester to avoid underestimating the proportion of jobs in Manchester that are taken up by Manchester residents, whereas the Experian forecasts use the 2011 Annual Population Survey commuting results. This demonstrates how a seemingly small difference in methodology can result in quite large deviations in outputs.
- 4.37 The relevant district rates of change in residence-based employment are shown below. The percentage increases in the Experian forecasts will typically be higher than the 2014 GMFM forecasts due to the larger overall increase in total employment in Greater Manchester forecast by Experian.

District	Past and forecast rates of residence-based employment change in Greater Manchester							
	2014 GMFM				Experian			
	2014-2035		% change pa		2014-2035		% change pa	
	Average % change pa	% of GM change	1997-2014	2004-2014	Average % change pa	% of GM change	1997-2014	2004-2014
Bolton	0.35	8.30	1.03	0.80	0.60	9.95	0.32	-0.38
Bury	0.54	9.55	0.51	0.90	0.51	6.16	-0.07	-0.07
Manchester	0.47	20.45	3.61	3.15	0.61	20.68	2.91	3.31
Oldham	0.24	4.27	0.82	0.61	0.50	6.37	0.34	-0.47
Rochdale	0.27	4.47	0.45	-0.32	0.49	5.63	-0.41	-0.85
Salford	0.79	17.54	2.23	2.66	0.78	11.65	1.60	1.35
Stockport	0.51	13.49	0.16	0.48	0.52	10.31	-0.03	-0.20
Tameside	0.35	6.83	0.76	0.72	0.54	7.37	-0.02	-0.16
Trafford	0.58	12.96	0.84	1.32	0.63	9.45	0.34	0.69
Wigan	0.08	2.13	1.39	0.80	0.61	12.41	0.95	0.01

- 4.38 Salford is expected to see the highest rate of residence-based employment growth in both forecasts, although Manchester should see the highest absolute rise accounting for just over one-fifth of the sub-regional increase. The 2014 GMFM identifies a particularly low growth rate for Wigan, whereas that district has one of the higher growth rates in the Experian forecasts. Oldham and Rochdale are expected to see the lowest rates of increase in both forecasts. As might be expected from the Greater Manchester figures discussed above, there are significant deviations in the past rates of change in residence-based employment identified by the two forecasters.

Workplace-based employment

4.39 The table below sets out the forecast rates of change in workplace-based employment, and once again shows a similar picture to that for total employment. However, there is clearly a significant difference between the way in which Oxford Economics and Experian calculate or define workplace-based employment, as shown by the difference in the figures for 2014.

	Comparison of workplace-based employment forecasts for Greater Manchester 2014-2035			
	Total workplace-based employment		Change 2014-2035	
	2014	2035	Absolute change	Average % change pa
2014 GMFM	1,352,970	1,472,631	119,661	0.40
AGS-SNPP	1,352,913	1,535,214	182,301	0.60
AGS-High	1,352,913	1,611,611	258,698	0.84
AGS-Higher	1,352,913	1,682,350	329,438	1.04
Experian	1,233,200	1,377,140	143,940	0.53

Unemployment

4.40 The forecasts also provide estimates of changes in unemployment. However, their outputs are expressed very differently, with the Oxford Economics figures relating to the claimant count and the Experian figures relating to all unemployment.

	Comparison of unemployment forecasts for Greater Manchester 2014-2035					
	Total unemployment		Change 2014-2035		Average % change pa	
	2014	2035	Absolute change	Average % change pa	1997-2014	2004-2014
2014 GMFM	59,222	45,965	-13,257	-1.20	-0.90	4.63
AGS-SNPP	59,231	47,700	-11,532	-1.03	-0.90	4.63
AGS-High	59,231	50,101	-9,130	-0.79	-0.90	4.63
AGS-Higher	59,231	52,224	-7,007	-0.60	-0.90	4.63
Experian	100,780	76,860	-23,920	-1.28	0.47	5.29

4.41 Despite the differences in what they are representing, all of the forecasts are anticipating a gradual reduction in unemployment levels/claimant counts. Although there would be more employed people under the three AGS forecasts, the larger working-age population overall would mean that the number of unemployed people would also be higher, although the unemployment rates would be slightly lower.

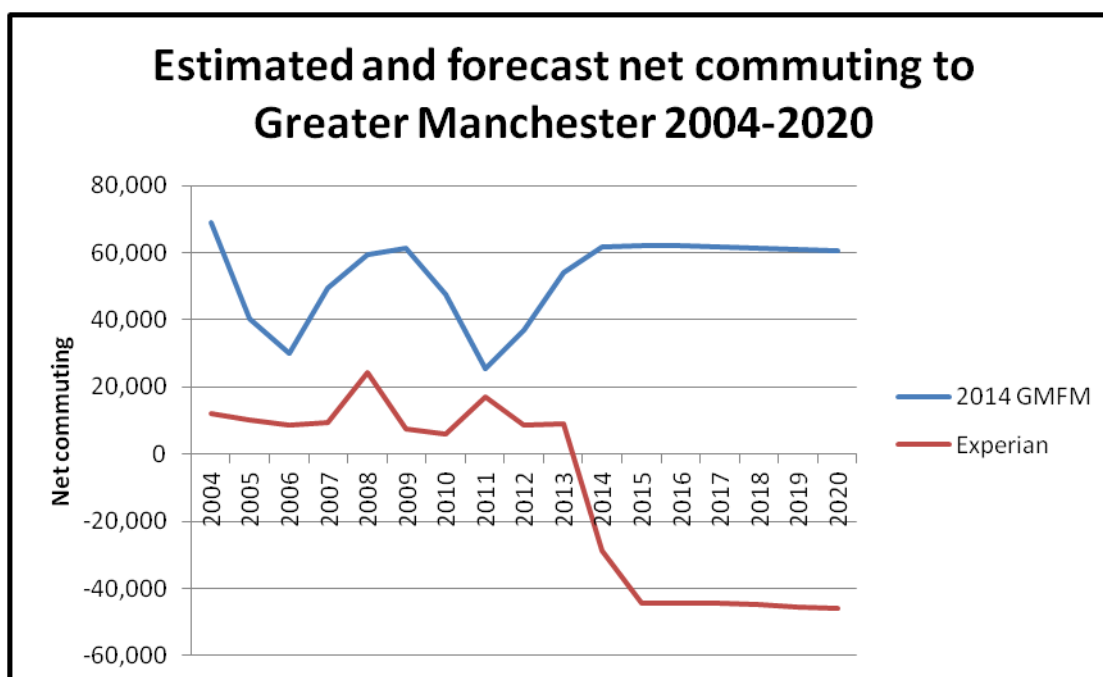
Commuting

4.42 Both the Oxford Economics and Experian models make assumptions about commuting relationships in order to translate workplace-based employment into residence-based employment. As noted above, the 2014 GMFM and AGS use a commuting matrix based on the 2001 Census, whereas Experian's

approach utilises the 2011 Annual Population Survey. Experian's UK Local Market Forecasts do not specifically provide figures for net commuting, but they can be calculated by deducting residence-based employment from workplace-based employment for an area. The net commuting figures from the various forecasts are shown below.

	Comparison of estimated and forecast commuting			
	Net commuting to Greater Manchester			Change 2014-2035
	2011	2014	2035	
2014 GMFM	25,433	61,601	61,647	46
AGS-SNPP	25,433	61,591	58,548	-3,043
AGS-High	25,433	61,591	61,462	-129
AGS-Higher	25,433	61,591	64,160	2,568
Experian	16,900	-28,600	-49,320	-20,720

- 4.43 The forecasts estimated reasonably similar levels of net commuting into Greater Manchester in 2011, although all were below the figure of 27,686 from the 2011 Census. The Oxford Economics and Experian forecasts then move in opposite directions, with the former anticipating a significant increase in net commuting by 2014 after which it is expected to remain broadly at the same level, whereas Experian forecasts a significant reduction so that there is considerable net out-commuting by 2014 which then almost doubles in magnitude by 2035. For the period 2014-2035, the four Oxford Economics forecasts foresee very little change in the overall scale of net in-commuting in Greater Manchester, but Experian forecasts an increasing level of net out-commuting over time. The Experian forecasts therefore suggest that there would be insufficient employment to accommodate the growing working age population, and so people would increasingly need to look outside Greater Manchester for work, which would seem potentially at odds with the vision of a strong sub-regional economy and could in practice dampen migration into Greater Manchester.
- 4.44 The graph below compares the net commuting figures from the 2014 GMFM and Experian forecasts for the period 2004-2020, which enables a better appreciation of the trends involved both before and in the first part of the GMSF period.



- 4.45 Over the last decade, the 2014 GMFM estimate of net commuting to Greater Manchester has been consistently higher than that of Experian, but both identified net commuting into rather than out of Greater Manchester. Whereas the 2014 GMFM forecast indicates a continuation of the higher levels of net in-commuting in the future, Experian identifies a quite sudden switch to net out-commuting.

Sector-based outputs

- 4.46 In addition to the outputs discussed above, the various forecasts also provide detailed estimates of employment growth for individual sectors. These are important in helping to understand how the economy of Greater Manchester and its constituent districts could change over the next few decades, and how this compares to their past evolution.
- 4.47 The Oxford Economics and Experian forecasts use different sector categories for their outputs, which makes precise comparisons difficult. However, there is sufficient overlap to enable composite sectors to be compared. The table below shows the highest level of sector disaggregation that it is considered is possible for such a comparison, based on the SIC (standard industrial classification) code definitions for the various sectors. The 2014 GMFM forecast does not specifically include SIC codes 97-99, which relate to activities of households as employers (97-98) and activities of extraterritorial organisations and bodies (99). Not all numbers between 1 and 99 have a SIC code.

Aggregated sector	Aggregation of sectors from GMFM and Experian			
	2014 GMFM		Experian June 2015	
	SIC codes	Description	SIC codes	Description
Agriculture, forestry & fishing	01-03	Agriculture, forestry & fishing	01-03	Agriculture, Forestry & Fishing

Aggregated sector	Aggregation of sectors from GMFM and Experian			
	2014 GMFM		Experian June 2015	
	SIC codes	Description	SIC codes	Description
Mining & quarrying	05-09	Mining & quarrying	05-09	Extraction & Mining
Food, drink and tobacco	10-12	Food products, beverages and tobacco	10-12	Food, Drink & Tobacco (manufacture of)
Textiles and clothing	13-15	Textiles, wearing apparel & leather products	13-15	Textiles & Clothing (manufacture of)
Wood and paper	16-18	Wood, paper products and printing	16-17	Wood & Paper (manufacture of)
			18	Printing and Recorded Media (manufacture of)
Refined petroleum, chemical & pharmaceutical products	19-21	Refined petroleum, chemical & pharmaceutical products	19	Fuel Refining
			20	Chemicals (manufacture of)
			21	Pharmaceuticals (manufacture of)
Manufacture of non-metallic products	22-23	Rubber, plastic and other non-metallic mineral products	22-23	Non-Metallic Products (manufacture of)
Metal products	24-25	Basic metals and metal products	24-25	Metal Products (manufacture of)
Computer, electronics and electrical equipment	26-27	Computer, electronics and electrical equipment	26-27	Computer & Electronic Products (manufacture of)
Machinery and transport equipment	28-30	Machinery and transport equipment	28-30	Machinery & Equipment (manufacture of)
			Unspecified	Transport Equipment (manufacture of)
Other machinery and repair	31-33	Other machinery and repair	31-33	Other Manufacturing
Utilities	35	Electricity, gas, steam and air conditioning supply	35-39	Utilities
	36-39	Water supply, sewerage, waste management and remediation activities		
Construction	41-43	Construction	41	Construction of Buildings
			42	Civil Engineering
			43	Specialised Construction Activities
Wholesale	45-46	Wholesale trade and repair of motor vehicles and motorcycles	45-46	Wholesale
Retail	47	Retail trade, except of motor vehicles and motorcycles	47	Retail
Land transport, storage & post	49	Land transport and transport via pipelines	49, 52 and 53	Land Transport, Storage & Post
	52	Warehousing and support activities for transportation		
	53	Postal and courier activities		
Water & air transport	50-51	Water & air transport	50-51	Air & Water Transport

Aggregated sector	Aggregation of sectors from GMFM and Experian			
	2014 GMFM		Experian June 2015	
	SIC codes	Description	SIC codes	Description
Accommodation & food services	55	Accommodation	55-56	Accommodation & Food Services
	56	Food and beverage service activities		
Media activities	58-60	Publishing & broadcasting activities	58-60	Media Activities
Telecommunications	61	Telecommunications	61	Telecoms
Computer related activities	62- 63	Computer related activities	62-63	Computing & Information Services
Finance	64	Financial service activities, except insurance and pension funding	64 and 66	Finance
	66	Activities auxiliary to financial services and insurance activities		
Insurance and pensions	65	Insurance, reinsurance and pension funding, except compulsory social security	65	Insurance & Pensions
Real estate	68	Real estate activities	68	Real Estate
Professional services	69	Legal and accounting activities	69-75	Professional Services
	70	Activities of head offices; management consultancy activities		
	71	Architectural and engineering activities; technical testing and analysis		
	72	Scientific research and development		
	73	Advertising and market research		
	74	Other professional, scientific and technical activities		
	75	Veterinary activities		
Administrative and support services	77	Rental and leasing activities	77-82	Administrative & Supportive Services
	78	Employment activities		
	79	Travel agency, tour operator and other reservation service and related activities		
	80	Security and investigation activities		
	81	Services to buildings and landscape activities		
	82	Office administrative, office support and other business support activities		
Public admin and defence	84	Public administration and defence; compulsory social	84 and 99	Public Administration & Defence

Aggregated sector	Aggregation of sectors from GMFM and Experian			
	2014 GMFM		Experian June 2015	
	SIC codes	Description	SIC codes	Description
		security		
Education	85	Education	85	Education
Health	86	Human health activities	86	Health
Residential care & social work	87	Residential care activities	87-88	Residential Care & Social Work
	88	Social work activities without accommodation		
Recreation	90-92	Other arts and recreation	90-93	Recreation
	93	Sports activities and amusement and recreation activities		
Other service activities	94-96	Other service activities	94-98	Other Private Services

4.48 The table below uses these combined sectors to compare the employment forecasts for Greater Manchester from the 2014 GMFM and Experian over the period 2014-2035.

Sector	Comparison of forecast Greater Manchester employment change by sectors 2014-2035							
	Total employment				Employment change 2014-2035			
	2014		2035		Absolute change		% pa change	
	GMFM	Experian	GMFM	Experian	GMFM	Experian	GMFM	Experian
Agriculture, forestry & fishing	3,991	2,510	3,475	2,870	-517	360	-0.66	0.64
Mining & quarrying	176	140	99	140	-78	0	-2.72	0.00
Food, drink and tobacco	20,136	20,110	16,293	17,430	-3,843	-2,680	-1.00	-0.68
Textiles and clothing	13,913	10,590	8,430	4,750	-5,483	-5,840	-2.36	-3.75
Wood and paper	11,622	11,670	8,616	7,170	-3,006	-4,500	-1.42	-2.29
Refined petroleum, chemical & pharmaceutical products	9,292	10,070	6,638	7,180	-2,654	-2,890	-1.59	-1.60
Manufacture of non-metallic products	10,779	11,030	7,756	8,340	-3,023	-2,690	-1.55	-1.32
Metal products	11,377	12,030	8,267	9,450	-3,110	-2,580	-1.51	-1.14
Computer, electronics and electrical equipment	6,605	7,890	4,371	5,490	-2,235	-2,400	-1.95	-1.71
Machinery and transport equipment	12,471	12,080	8,930	7,800	-3,541	-4,280	-1.58	-2.06
Other machinery and repair	13,835	14,420	10,160	13,330	-3,675	-1,090	-1.46	-0.37
Utilities	16,121	17,380	13,298	20,990	-2,823	3,610	-0.91	0.90
Construction	81,876	83,350	103,997	107,320	22,121	23,970	1.15	1.21
Wholesale	83,981	81,880	89,318	88,180	5,338	6,300	0.29	0.35
Retail	133,810	127,740	142,638	137,880	8,829	10,140	0.30	0.36
Land transport, storage & post	69,881	75,320	78,151	85,090	8,270	9,770	0.53	0.58
Water & air transport	6,573	6,240	7,357	6,520	784	280	0.54	0.21
Accommodation & food services	72,203	79,960	82,027	102,120	9,825	22,160	0.61	1.17
Media activities	8,877	9,910	10,943	12,260	2,066	2,350	1.00	1.02
Telecommunications	7,924	8,850	9,419	8,980	1,495	130	0.83	0.07
Computer related activities	19,599	19,620	25,252	20,760	5,654	1,140	1.21	0.27
Finance	45,888	46,540	50,586	56,380	4,698	9,840	0.47	0.92

Sector	Comparison of forecast Greater Manchester employment change by sectors 2014-2035							
	Total employment				Employment change 2014-2035			
	2014		2035		Absolute change		% pa change	
	GMFM	Experian	GMFM	Experian	GMFM	Experian	GMFM	Experian
Insurance and pensions	6,914	6,150	6,637	6,670	-277	520	-0.19	0.39
Real estate	31,390	29,750	42,844	39,280	11,454	9,530	1.49	1.33
Professional services	137,253	148,020	182,818	185,340	45,565	37,320	1.37	1.08
Administrative and support services	142,786	134,120	182,147	161,510	39,361	27,390	1.17	0.89
Public admin and defence	53,022	54,140	45,929	47,100	-7,093	-7,040	-0.68	-0.66
Education	116,136	115,640	112,973	127,920	-3,163	12,280	-0.13	0.48
Health	105,316	106,030	112,352	127,030	7,036	21,000	0.31	0.86
Residential care & social work	71,250	71,750	78,407	96,110	7,157	24,360	0.46	1.40
Recreation	31,023	33,780	41,277	39,060	10,254	5,280	1.37	0.69
Other service activities	35,932	33,620	42,315	35,830	6,382	2,210	0.78	0.30

- 4.49 These figures highlight the differences in some of the inputs to the forecasting models, as well as in the way they interpret trends, with some significant variation in the base figures for 2014. The two forecasts anticipate reasonably similar levels of employment change for many of the sectors, but a significant number deviate quite substantially even where they start from a very similar base.
- 4.50 For example, the two forecasts have very similar figures for the residential care and social work sector in 2014, but the Experian forecasts identify more than three times the growth by 2035 than does the 2014 GMFM. A very similar picture is seen for the health sector, and the 2014 GMFM forecasts a decline in education employment whereas Experian foresees a moderate increase. Experian also forecasts significantly higher growth in employment in the accommodation and food services sector, although it also starts from a base that is more than 10% higher.
- 4.51 The 2014 GMFM forecasts higher growth in professional services and administrative and support services, collectively providing around 20,000 more additional jobs over the period 2014-2035 than in the Experian forecast, although Experian also indicates a relatively high growth rate for these sectors and is more optimistic in terms of the finance sector. The 2014 GMFM also foresees considerably higher growth rates than Experian for computer-related activities and recreation.
- 4.52 Despite these differences, the forecasts agree that high growth rates can be expected in construction, media activities, real estate and professional services, exceeding 1% per annum in both forecasts. They also agree that a continued decline across the manufacturing sectors is expected, exceeding 1% in almost all sectors, and a reduction in employment in public administration and defence. This highlights the changing composition of the economy, and clearly has implications for the type of employment floorspace that is required in the future.

4.53 Although it is useful to consider the forecasts at this level of sectoral detail, some of the broader patterns are easier to compare when the sectors are aggregated to a smaller number. The table below identifies broad sectors and their relevant SIC codes, together with the more detailed sectors from the previous table that they combine.

Broad sector	SIC code	More detailed sector	SIC code
Agriculture, forestry & fishing (A)	01-03	Agriculture, forestry & fishing	01-03
Mining, quarrying & utilities (B, D and E)	05-09 and 35-39	Mining & quarrying	05-09
		Utilities	35-39
Manufacturing (C)	10-33	Food, drink and tobacco	10-12
		Textiles and clothing	13-15
		Wood and paper	16-18
		Refined petroleum, chemical & pharmaceutical products	19-21
		Manufacture of non-metallic products	22-23
		Metal products	24-25
		Computer, electronics and electrical equipment	26-27
		Machinery and transport equipment	28-30
		Other machinery and repair	31-33
Construction (F)	41-43	Construction	41-43
Retail, wholesale & motor trades (G)	45-47	Wholesale	45-46
		Retail	47
Transport & storage (H)	49-53	Land transport, storage & post	49 and 52-53
		Water & air transport	50-51
Accommodation & food services (I)	55-56	Accommodation & food services	55-56
Information & communication (J)	58-63	Media activities	58-60
		Telecommunications	61
		Computer related activities	62-63
Financial & insurance (K)	64-66	Finance	64 and 66
		Insurance and pensions	65
Property (L)	68	Real estate	68
Professional, scientific & technical (M)	69-75	Professional services	69-75
Business, administration & support services (N)	77-82	Administrative and support services	77-82
Public administration & defence (O)	84	Public admin and defence	84
Education (P)	85	Education	85
Health (Q)	86-88	Health	86
		Residential care & social work	87-88
Arts, entertainment, recreation & other services (R, S, T and U)	90-99	Recreation	90-93
		Other service activities	94-96

4.54 The next table compares the outputs from the 2014 GMFM and Experian forecasts for these sectors over the period 2014-2035.

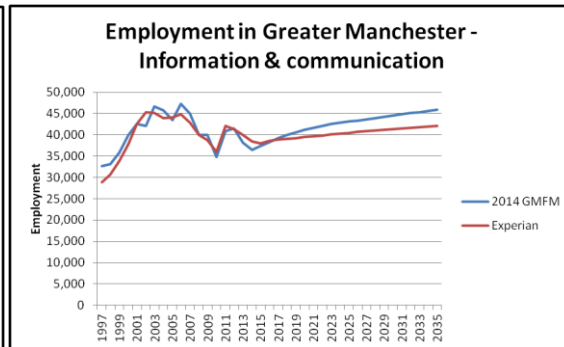
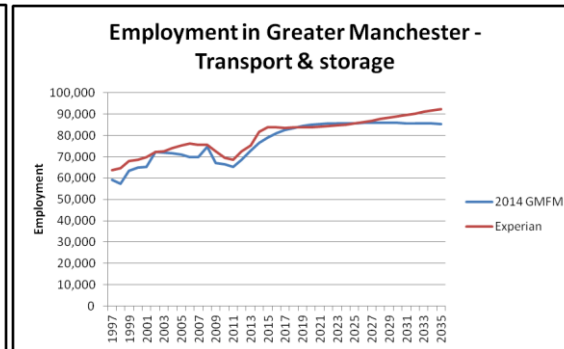
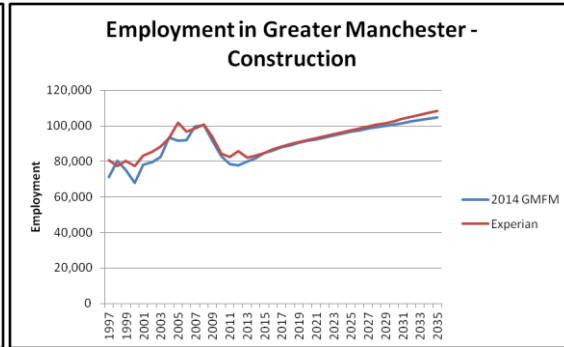
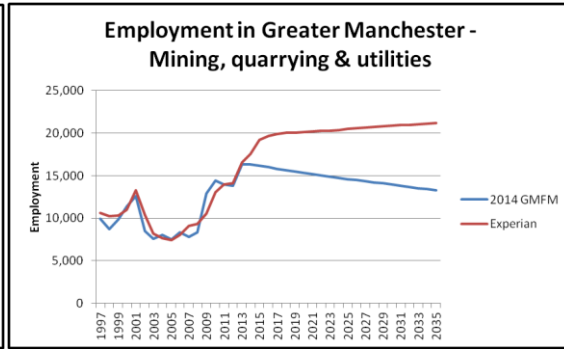
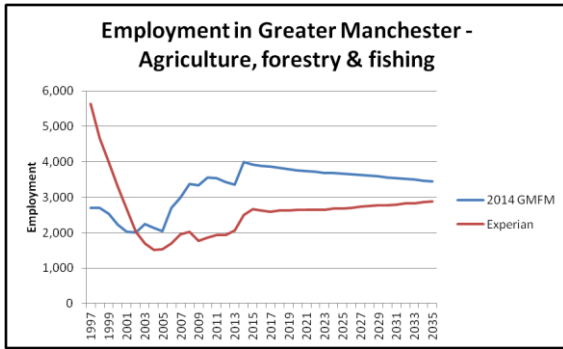
Broad sector	Comparison of employment forecasts by broad sector 2014-2035								
	2014 GMFM				Experian				Difference in change 2014-35
	Total employment		Change 2014-35		Total employment		Change 2014-35		
	2014	2035	Total	% pa	2014	2035	Total	% pa	
Agriculture, forestry & fishing (A)	3,991	3,452	-540	-0.69	2,510	2,890	380	0.67	920
Mining, quarrying & utilities (B, D and E)	16,297	13,260	-3,038	-0.98	17,520	21,200	3,680	0.91	6,718
Manufacturing (C)	110,030	78,038	-31,992	-1.62	109,890	79,530	-30,360	-1.53	1,632
Construction (F)	81,876	104,801	22,925	1.18	83,350	108,470	25,120	1.26	2,195
Retail, wholesale & motor trades (G)	217,790	232,117	14,327	0.30	209,620	226,850	17,230	0.38	2,903
Transport & storage (H)	76,454	85,419	8,964	0.53	81,560	92,230	10,670	0.59	1,706
Accommodation & food services (I)	72,203	82,100	9,898	0.61	79,960	102,960	23,000	1.21	13,102
Information & communication (J)	36,400	45,883	9,484	1.11	38,380	42,150	3,770	0.45	-5,714
Financial & insurance (K)	52,802	57,387	4,585	0.40	52,690	63,370	10,680	0.88	6,095
Property (L)	31,390	43,237	11,847	1.54	29,750	39,610	9,860	1.37	-1,987
Professional, scientific & technical (M)	137,253	184,159	46,906	1.41	148,020	186,940	38,920	1.12	-7,986
Business, administration & support services (N)	142,786	183,075	40,288	1.19	134,120	162,800	28,680	0.93	-11,608
Public administration & defence (O)	53,022	45,846	-7,176	-0.69	54,140	47,160	-6,980	-0.66	196
Education (P)	116,136	112,988	-3,148	-0.13	115,640	128,650	13,010	0.51	16,158
Health (Q)	176,566	191,737	15,171	0.39	177,780	225,170	47,390	1.13	32,219
Arts, entertainment, recreation & other services (R,S, T and U)	66,956	84,068	17,112	1.09	67,400	75,230	7,830	0.52	-9,282
Total	1,391,952	1,547,567	155,615	0.51	1,402,330	1,605,210	202,880	0.65	47,265

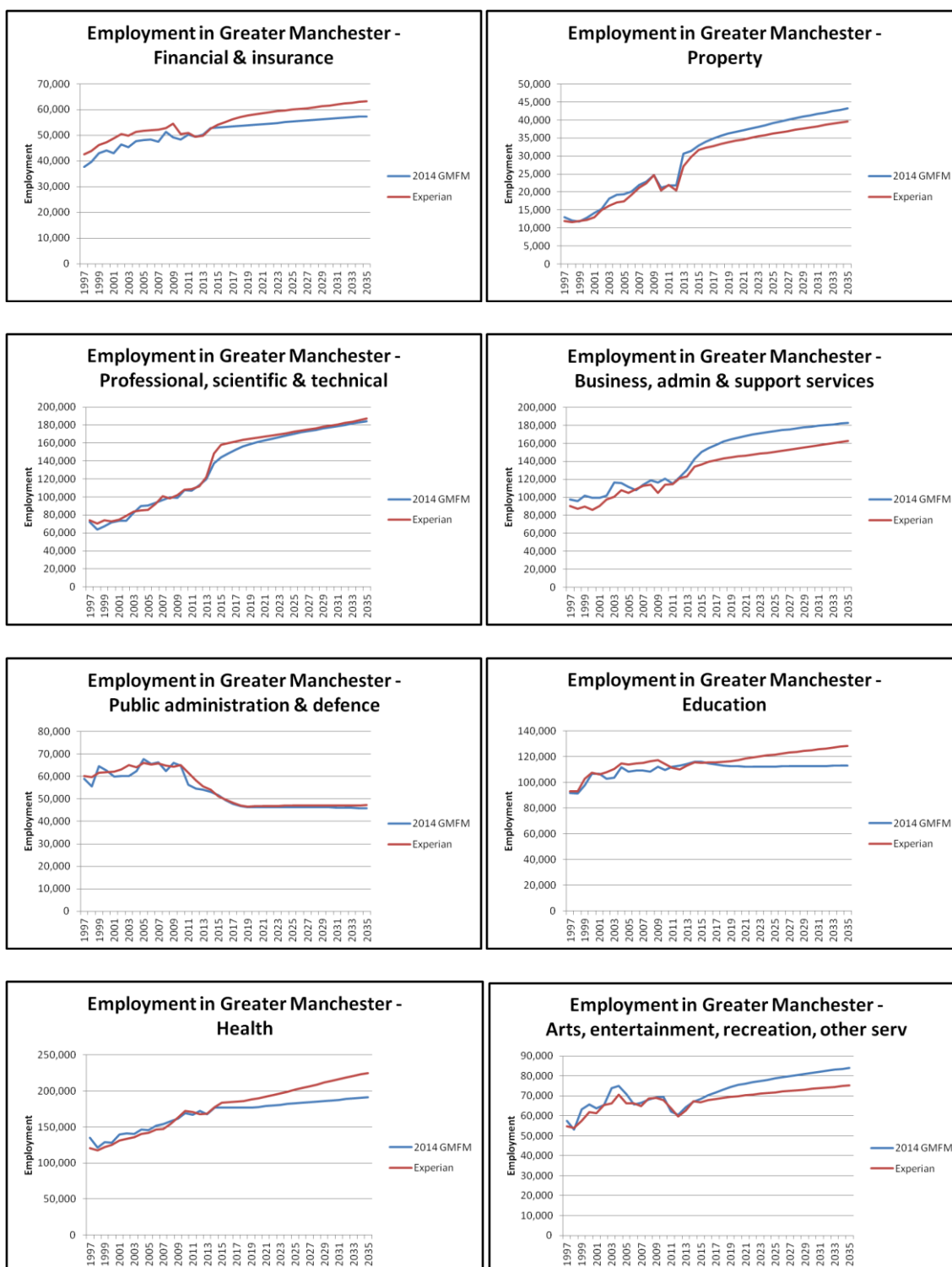
- 4.55 The largest absolute differences in the scale of employment change in individual broad sectors are in health (Q) and education (P), with Experian forecasting much higher growth, and together these exceed the difference between the total employment growth in the two forecasts. This may partly reflect the additional population growth in the Experian forecast compared to the 2014 GMFM, as employment levels in the education and health sectors are very much related to population levels, but may also reflect assumptions around available expenditure in the public sector.
- 4.56 The Experian forecasts also identify significantly higher employment growth in accommodation and food services (I), mining, quarrying and utilities (B, D and E), and financial and insurance (K). Although total employment growth is lower in the 2014 GMFM, it forecasts higher levels of growth than Experian in some broad sectors, including some which might typically be expected to occupy office floorspace such as business, administration and support services (N), arts, entertainment, recreation and other services (R, S, T and U), professional, scientific and technical (M), and information and communication (J). Two of these sectors, professional, scientific and technical (M) and business, administration and support services (N), account for more than half of the net increase in total employment forecast in the 2014 GMFM. Although they are also important in the Experian forecasts, they see less growth than health (Q) and they are closer to the absolute growth levels in construction (F) and accommodation and food services (I).

- 4.57 Both forecasts identify very similar scales of employment loss in manufacturing (C) and public administration and defence (O), and gains in sectors such as construction (F), retail, wholesale and motor trades (G), transport and storage (H), property (L).
- 4.58 Overall, the two forecasts foresee slightly alternative shifts in the economic structure of Greater Manchester by 2035, with some similarities but also quite significant differences in particular sectors.
- 4.59 The next table compares the outputs from the three accelerated growth scenarios with those from the 2014 GMFM, in terms of the change in employment over the period 2014-2035. As the population increases from the 2014 GMFM through to the AGS-Higher scenario, the employment growth in each sector increases (or the decline reduces). However, even in the highest population growth scenario, the AGS-Higher, the scale of employment growth in accommodation and food services (I), education (P) and health (Q) remains below that forecast by Experian, indicating the different sectoral spread of employment growth from the two forecast sources.

	Change in employment in Greater Manchester by broad sector 2014-2035							
	Absolute change				% change per annum			
	2014 GMFM	AGS-SNPP	AGS-High	AGS-Higher	2014 GMFM	AGS-SNPP	AGS-High	AGS-Higher
Agriculture, forestry & fishing (A)	-540	-419	-241	-77	-0.69	-0.53	-0.30	-0.09
Mining, quarrying & utilities (B, D and E)	-3,038	-2,570	-1,887	-1,254	-0.98	-0.81	-0.58	-0.38
Manufacturing (C)	-31,992	-29,327	-25,311	-21,592	-1.62	-1.47	-1.24	-1.03
Construction (F)	22,925	27,228	32,657	37,685	1.18	1.38	1.61	1.82
Retail, wholesale & motor trades (G)	14,327	23,429	35,433	46,548	0.30	0.49	0.72	0.93
Transport & storage (H)	8,964	12,648	17,082	21,187	0.53	0.73	0.96	1.17
Accommodation & food services (I)	9,898	13,328	17,584	21,525	0.61	0.81	1.04	1.25
Information & communication (J)	9,484	11,852	14,253	16,476	1.11	1.35	1.59	1.79
Financial & insurance (K)	4,585	7,208	10,194	12,959	0.40	0.61	0.84	1.05
Property (L)	11,847	13,733	15,978	18,058	1.54	1.74	1.98	2.19
Professional, scientific & technical (M)	46,906	57,283	66,964	75,928	1.41	1.67	1.91	2.12
Business, administration & support services (N)	40,288	49,707	59,286	68,156	1.19	1.43	1.67	1.88
Public administration & defence (O)	-7,176	-5,865	-3,519	-1,346	-0.69	-0.56	-0.33	-0.12
Education (P)	-3,148	-110	5,664	11,010	-0.13	0.00	0.23	0.43
Health (Q)	15,171	23,021	32,953	42,150	0.39	0.59	0.82	1.02
Arts, entertainment, recreation & other services (R,S, T and U)	17,112	20,297	24,638	28,659	1.09	1.27	1.50	1.71
Total	155,615	221,443	301,730	376,073	0.51	0.71	0.94	1.15

- 4.60 The next set of graphs compares the two forecasts for the longer time period of 1997-2035. This enables an appreciation of how the past trends have informed the forecasts of future employment change, and how differences in estimated past employment levels by sector may partly explain some of the variation between the two forecasts.





4.61 The graphs for the 2014 GMFM and Experian are very similar for some sectors, particularly manufacturing (C), construction (F), and public administration and defence (O). Some other graphs are quite similar in terms of the past estimates, but then deviate in the future, which may partly relate to the way in which a trend has been applied to the past data. This can be seen for example with mining, quarrying and utilities (B, D and E), accommodation and food services (I), information and communication (J) and property (L). A small number of sectors can be seen to have quite significant differences in

the past data from the two forecasts, which appears to feed into varying forecasts, such as for agriculture, forestry and fishing (A), retail, wholesale and motor trades (G), and financial and insurance (K).

- 4.62 It is not possible to conclude that one forecast is likely to be more accurate than the other in terms of the sectoral growth, and so it is important to appreciate the differences between the forecasts and the potential for different economic trajectories for Greater Manchester. Which trajectory is followed could be significantly influenced by actions that are taken to attract and retain certain sectors, including through the provision of appropriate sites and premises.
- 4.63 The following series of tables summarises the 2014 GMFM and Experian forecasts by broad sector for each district in Greater Manchester, and each is discussed in turn. The three accelerated growth scenarios have been produced at the Greater Manchester level, and so figures are not available for individual districts. It would be expected that any additional growth would have the same broad distribution as shown in the tables below for the 2014 GMFM, if the forecasting methodology remained constant. However, in practice, for sectors not specifically tied to population increases, Greater Manchester will be competing with other locations for the additional growth and some districts may be in a better position to attract such investment than others.

	Agriculture, forestry and fishing (A) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	314	273	-41	-0.67	330	340	10	0.14
Bury	326	275	-51	-0.81	200	180	-20	-0.50
Manchester	251	214	-37	-0.76	290	400	110	1.54
Oldham	253	217	-36	-0.72	230	290	60	1.11
Rochdale	301	262	-39	-0.66	190	170	-20	-0.53
Salford	324	254	-70	-1.15	180	100	-80	-2.76
Stockport	616	532	-84	-0.69	250	330	80	1.33
Tameside	363	315	-48	-0.67	140	240	100	2.60
Trafford	258	220	-37	-0.74	250	250	0	0.00
Wigan	986	890	-96	-0.49	440	580	140	1.32
Greater Manchester	3,991	3,452	-540	-0.69	2,510	2,890	380	0.67

- 4.64 There are low levels of employment in agriculture, forestry and fishing across Greater Manchester, with the highest numbers being in Wigan and Stockport. The Experian forecasts are much more positive for this sector than the 2014 GMFM, and they differ widely on the relative growth rates of individual districts, though agree that Salford will see the most rapid reduction in employment in this sector.

	Mining, quarrying and utilities (B, D and E) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	972	648	-324	-1.91	900	720	-180	-1.06
Bury	974	937	-37	-0.19	1,420	1,580	160	0.51

	Mining, quarrying and utilities (B, D and E) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Manchester	1,383	759	-624	-2.81	1,060	730	-330	-1.76
Oldham	1,059	925	-135	-0.65	1,210	1,710	500	1.66
Rochdale	486	322	-164	-1.95	480	510	30	0.29
Salford	1,905	1,472	-433	-1.22	1,580	1,770	190	0.54
Stockport	4,394	3,807	-587	-0.68	5,820	7,510	1,690	1.22
Tameside	1,285	1,035	-250	-1.03	1,270	1,400	130	0.47
Trafford	3,069	2,689	-380	-0.63	2,910	4,250	1,340	1.82
Wigan	770	666	-103	-0.68	850	1,030	180	0.92
Greater Manchester	16,297	13,260	-3,038	-0.98	17,520	21,200	3,680	0.91

4.65 As with the previous sector, Experian forecasts quite significant growth in this sector whereas the 2014 GMFM foresees a similar rate of decline across Greater Manchester. Stockport has the largest number of jobs in this sector, followed by Trafford, and it is these two districts that Experian expects employment growth to be focused in. The lowest numbers in this sector are in Rochdale, Wigan and Bolton, and no significant growth is expected in any of them.

	Manufacturing (C) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	12,641	9,017	-3,624	-1.60	13,010	11,100	-1,910	-0.75
Bury	7,580	5,447	-2,132	-1.56	7,440	5,240	-2,200	-1.66
Manchester	13,904	9,856	-4,048	-1.63	15,090	10,980	-4,110	-1.50
Oldham	10,517	7,596	-2,921	-1.54	10,520	6,220	-4,300	-2.47
Rochdale	11,539	8,221	-3,318	-1.60	11,500	8,520	-2,980	-1.42
Salford	7,918	5,075	-2,843	-2.10	7,260	4,890	-2,370	-1.86
Stockport	10,733	7,785	-2,948	-1.52	11,200	7,500	-3,700	-1.89
Tameside	11,242	8,003	-3,238	-1.60	11,980	8,920	-3,060	-1.39
Trafford	10,652	7,884	-2,768	-1.42	8,890	5,990	-2,900	-1.86
Wigan	13,305	9,153	-4,152	-1.77	13,060	10,120	-2,940	-1.21
Greater Manchester	110,030	78,038	-31,992	-1.62	109,890	79,530	-30,360	-1.53

4.66 Both forecasts anticipate a decline in manufacturing employment in every district. Although Wigan and Manchester are forecast to have the highest absolute decline in manufacturing employment in the 2014 GMFM, Salford has the highest rate of decline in those forecasts and a relatively high figure in the Experian forecasts. Oldham is expected by Experian to see the highest absolute and relative decline, with Manchester having the second highest absolute loss of manufacturing employment.

	Construction (F) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	9,092	12,048	2,956	1.35	8,780	11,910	3,130	1.46
Bury	4,665	6,002	1,337	1.21	4,380	5,540	1,160	1.13
Manchester	10,409	13,135	2,727	1.11	11,700	14,740	3,040	1.11

	Construction (F) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Oldham	7,767	9,973	2,207	1.20	7,560	10,080	2,520	1.38
Rochdale	6,773	7,921	1,148	0.75	6,880	9,550	2,670	1.57
Salford	9,171	13,597	4,426	1.89	9,030	11,070	2,040	0.97
Stockport	8,253	10,919	2,666	1.34	10,030	12,750	2,720	1.15
Tameside	5,728	6,804	1,076	0.82	5,370	7,410	2,040	1.55
Trafford	9,478	12,277	2,799	1.24	9,240	11,930	2,690	1.22
Wigan	10,542	12,125	1,582	0.67	10,390	13,470	3,080	1.24
Greater Manchester	81,876	104,801	22,925	1.18	83,350	108,470	25,120	1.26

4.67 Both forecasts anticipate relatively high rates of growth in construction employment in Greater Manchester, although they differ in the pattern of growth within the sub-region. The highest current numbers are in Manchester and Wigan, and the lowest in Bury and Tameside.

	Retail, wholesale and motor trades (G) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	22,395	24,548	2,152	0.44	21,390	23,110	1,720	0.37
Bury	13,358	14,734	1,376	0.47	12,460	12,910	450	0.17
Manchester	45,881	49,439	3,558	0.36	46,960	49,880	2,920	0.29
Oldham	16,634	15,824	-810	-0.24	16,270	16,540	270	0.08
Rochdale	12,336	12,524	188	0.07	12,270	12,770	500	0.19
Salford	19,501	23,155	3,654	0.82	17,860	20,640	2,780	0.69
Stockport	24,355	25,813	1,458	0.28	23,650	23,360	-290	-0.06
Tameside	15,863	16,536	672	0.20	15,610	19,670	4,060	1.11
Trafford	28,875	30,648	1,774	0.28	23,930	26,360	2,430	0.46
Wigan	18,592	18,897	305	0.08	19,210	21,600	2,390	0.56
Greater Manchester	217,790	232,117	14,327	0.30	209,620	226,850	17,230	0.38

4.68 The highest levels of employment in the retail, wholesale and motor trade sector are currently in Manchester, with above average levels also in Trafford, Stockport and Bolton, with the lowest numbers in Rochdale and Bury. As with construction, the overall growth rates are reasonably similar between the two forecasts, though much more modest in the 2014 GMFM, but there are considerable differences in the pattern of change across Greater Manchester. However, they agree that Salford will see a high rate of growth, although this is exceeded in the Experian forecast by Tameside, whereas that district sees quite low growth in the 2014 GMFM.

	Transport and storage (H) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	6,420	7,300	880	0.61	6,890	8,130	1,240	0.79
Bury	2,806	3,278	472	0.74	2,760	3,190	430	0.69
Manchester	28,207	32,384	4,177	0.66	32,740	35,380	2,640	0.37
Oldham	4,947	5,432	485	0.45	5,340	6,170	830	0.69
Rochdale	7,579	7,740	161	0.10	7,540	8,410	870	0.52

	Transport and storage (H) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Salford	4,335	5,059	724	0.74	4,440	5,120	680	0.68
Stockport	4,205	4,488	283	0.31	4,680	5,200	520	0.50
Tameside	2,974	3,029	54	0.09	2,840	3,110	270	0.43
Trafford	8,294	9,365	1,071	0.58	7,020	8,280	1,260	0.79
Wigan	6,685	7,343	658	0.45	7,310	9,220	1,910	1.11
Greater Manchester	76,454	85,419	8,964	0.53	81,560	92,230	10,670	0.59

4.69 Manchester has by far the highest levels of employment in the transport and storage sector, with Bury and Tameside having the lowest. Once again, the forecasts are reasonably similar in terms of the overall scale of employment growth in this sector across Greater Manchester, but disagree on the spatial pattern of change within the sub-region although Manchester has the highest absolute growth in both.

	Accommodation and food services (I) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	5,135	5,749	614	0.54	5,610	7,460	1,850	1.37
Bury	4,142	4,643	502	0.55	4,300	5,400	1,100	1.09
Manchester	28,236	33,270	5,034	0.78	33,040	44,150	11,110	1.39
Oldham	3,905	4,124	219	0.26	4,100	5,020	920	0.97
Rochdale	3,084	3,247	163	0.25	3,460	4,280	820	1.02
Salford	6,389	7,604	1,216	0.83	8,040	10,710	2,670	1.37
Stockport	5,724	6,792	1,067	0.82	6,000	7,150	1,150	0.84
Tameside	3,398	3,653	254	0.34	3,400	4,010	610	0.79
Trafford	6,976	7,519	544	0.36	6,250	7,850	1,600	1.09
Wigan	5,213	5,500	286	0.25	5,770	6,950	1,180	0.89
Greater Manchester	72,203	82,100	9,898	0.61	79,960	102,960	23,000	1.21

4.70 The major concentration of accommodation and food services employment is in Manchester, which is expected to see by far the highest absolute employment growth in both forecasts followed by Salford. The forecasts also agree that the lowest absolute growth will be in Rochdale, Oldham and Tameside, which will continue to have the lowest levels of employment in this sector.

	Information and communication (J) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	2,159	2,787	628	1.22	2,140	2,400	260	0.55
Bury	1,757	2,234	477	1.15	2,210	2,800	590	1.13
Manchester	10,826	13,776	2,950	1.15	12,870	12,940	70	0.03
Oldham	1,394	1,789	395	1.20	1,460	1,890	430	1.24
Rochdale	1,377	1,727	349	1.08	1,390	1,950	560	1.63
Salford	6,890	8,656	1,766	1.09	6,330	8,380	2,050	1.34
Stockport	4,830	6,202	1,372	1.20	5,040	4,990	-50	-0.05
Tameside	943	1,191	249	1.12	970	740	-230	-1.28

	Information and communication (J) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Trafford	4,739	5,638	899	0.83	4,450	4,380	-70	-0.08
Wigan	1,484	1,882	398	1.14	1,520	1,640	120	0.36
Greater Manchester	36,400	45,883	9,484	1.11	38,380	42,150	3,770	0.45

4.71 Manchester accounts for around one-third of Greater Manchester employment in information and communications, with the next highest levels in Salford, Stockport and Trafford. Tameside, Rochdale, Oldham and Wigan have comparatively very low numbers employed in this sector. There are quite significant differences between the two forecasts in terms of the scale and distribution of employment growth. The 2014 GMFM foresees the highest absolute growth in Manchester, Salford and Stockport, but, although Salford has the largest increase in the Experian forecast, Manchester and Stockport have minimal change. Tameside has the smallest absolute increase in the 2014 GMFM, and the largest reduction in the Experian forecast.

	Financial and insurance (K) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	3,746	4,057	312	0.38	3,630	4,770	1,140	1.31
Bury	1,265	1,319	54	0.20	1,140	1,010	-130	-0.57
Manchester	25,421	27,784	2,363	0.42	27,970	32,800	4,830	0.76
Oldham	679	710	31	0.21	840	550	-290	-2.00
Rochdale	1,141	1,236	95	0.38	1,060	1,070	10	0.04
Salford	6,455	6,855	400	0.29	6,290	8,880	2,590	1.66
Stockport	6,575	7,159	583	0.41	6,000	9,030	3,030	1.97
Tameside	937	999	62	0.31	790	420	-370	-2.96
Trafford	5,173	5,792	619	0.54	3,690	3,910	220	0.28
Wigan	1,410	1,475	65	0.22	1,290	940	-350	-1.50
Greater Manchester	52,802	57,387	4,585	0.40	52,690	63,370	10,680	0.88

4.72 Around half of employment in the financial and insurance sector is in Manchester, and, as with the information and communication, the next highest levels are in Salford, Stockport and Trafford. Manchester, Salford and Stockport all see significant absolute employment growth in the Experian forecast, whereas growth is largely dominated by Manchester in the 2014 GMFM. Oldham and Tameside have the lowest current levels of employment in this sector, followed by Rochdale, Bury and Wigan, and these five districts are expected to see negligible employment growth or decline in both forecasts.

	Property (L) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	3,345	4,631	1,286	1.56	3,120	3,860	740	1.02
Bury	1,644	2,275	631	1.56	1,430	2,050	620	1.73
Manchester	9,228	13,171	3,943	1.71	9,970	13,990	4,020	1.63

	Property (L) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Oldham	2,551	3,532	981	1.56	2,070	2,950	880	1.70
Rochdale	1,276	1,766	490	1.56	1,420	1,970	550	1.57
Salford	3,087	4,275	1,189	1.56	2,860	3,630	770	1.14
Stockport	2,516	3,483	967	1.56	2,170	2,530	360	0.73
Tameside	1,373	1,725	352	1.09	1,240	1,590	350	1.19
Trafford	4,048	5,165	1,116	1.17	3,370	4,530	1,160	1.42
Wigan	2,322	3,214	892	1.56	2,100	2,500	400	0.83
Greater Manchester	31,390	43,237	11,847	1.54	29,750	39,610	9,860	1.37

4.73 The highest current and forecast absolute increases in property employment are in Manchester. Bolton, Oldham, Salford and Trafford have the next highest levels of absolute employment growth in both forecasts, but the expected growth in Stockport and Wigan is much more significant in the 2014 GMFM than the Experian forecast.

	Professional, scientific and technical (M) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	12,512	18,057	5,545	1.76	10,540	12,360	1,820	0.76
Bury	5,985	8,009	2,025	1.40	6,260	8,480	2,220	1.46
Manchester	49,718	71,285	21,567	1.73	62,440	82,540	20,100	1.34
Oldham	4,632	5,854	1,222	1.12	4,800	6,460	1,660	1.42
Rochdale	4,429	5,629	1,200	1.15	6,590	8,580	1,990	1.26
Salford	11,217	16,441	5,224	1.84	10,500	12,570	2,070	0.86
Stockport	13,030	16,796	3,766	1.22	14,140	15,640	1,500	0.48
Tameside	5,347	6,567	1,220	0.98	5,320	6,460	1,140	0.93
Trafford	23,497	27,791	4,294	0.80	20,430	25,960	5,530	1.15
Wigan	6,885	7,729	844	0.55	7,010	7,880	870	0.56
Greater Manchester	137,253	184,159	46,906	1.41	148,020	186,940	38,920	1.12

4.74 Manchester has by far the largest concentration in Greater Manchester of employment in the professional, scientific and technical sector, and is forecast to see the largest absolute growth. The two forecasts agree that Trafford has the second highest current levels of employment and will see significant growth to 2035, but this increase is exceeded by Bolton and Salford in the 2014 GMFM. Both forecasts envisage the lowest growth in employment being in Wigan.

	Business, administration and support services (N) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	9,754	13,226	3,472	1.46	8,780	9,670	890	0.46
Bury	3,896	5,098	1,202	1.29	3,810	4,430	620	0.72
Manchester	44,404	59,989	15,586	1.44	42,280	49,480	7,200	0.75
Oldham	5,373	6,663	1,290	1.03	5,040	6,340	1,300	1.10
Rochdale	6,735	7,518	783	0.53	6,570	7,350	780	0.54
Salford	20,081	28,722	8,642	1.72	19,160	24,810	5,650	1.24

	Business, administration and support services (N) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Stockport	14,013	18,027	4,013	1.21	14,280	19,560	5,280	1.51
Tameside	3,573	4,273	701	0.86	3,580	3,740	160	0.21
Trafford	23,112	25,104	1,992	0.39	19,090	21,560	2,470	0.58
Wigan	11,846	14,453	2,608	0.95	11,530	15,870	4,340	1.53
Greater Manchester	142,786	183,075	40,288	1.19	134,120	162,800	28,680	0.93

4.75 Similar to many of the other sectors, the main concentration of employment in business, administration and support services is in Manchester, with relatively high levels in Salford and Trafford. It is also Manchester that is expected to see the largest increases in employment, but with the next highest being in Salford and Stockport, with much lower levels in Trafford given its current size. Tameside has the lowest employment numbers and absolute increases in both forecasts. Wigan has the highest rate of growth in the Experian forecast, but more modest levels in the 2014 GMFM.

	Public administration and defence (O) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	4,162	3,343	-819	-1.04	4,380	4,210	-170	-0.19
Bury	2,083	1,809	-273	-0.67	2,130	1,900	-230	-0.54
Manchester	15,620	13,835	-1,785	-0.58	18,620	14,190	-4,430	-1.29
Oldham	2,559	2,154	-405	-0.82	2,610	2,430	-180	-0.34
Rochdale	2,623	2,202	-421	-0.83	3,520	3,270	-250	-0.35
Salford	7,645	7,195	-451	-0.29	5,840	5,930	90	0.07
Stockport	4,260	3,719	-542	-0.65	4,830	4,270	-560	-0.59
Tameside	3,280	2,807	-473	-0.74	3,520	3,060	-460	-0.66
Trafford	4,903	4,268	-635	-0.66	4,340	4,020	-320	-0.36
Wigan	5,886	4,513	-1,373	-1.26	4,350	3,860	-490	-0.57
Greater Manchester	53,022	45,846	-7,176	-0.69	54,140	47,160	-6,980	-0.66

4.76 The two forecasts broadly agree on the scale of employment loss that can be expected across Greater Manchester in the public administration and defence sector, but whereas the Experian forecast expects this to be concentrated largely in Manchester it is more evenly spread in the 2014 GMFM, though Manchester still has the largest decline followed by Wigan. Bury and Oldham are expected to continue to have the lowest numbers employed in this sector.

	Education (P) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	10,398	10,108	-290	-0.13	10,140	11,220	1,080	0.48
Bury	7,769	7,702	-67	-0.04	7,240	8,080	840	0.52
Manchester	36,241	36,172	-69	-0.01	40,120	45,390	5,270	0.59
Oldham	8,765	8,217	-549	-0.31	8,380	9,480	1,100	0.59
Rochdale	7,552	7,051	-500	-0.33	6,970	7,850	880	0.57
Salford	10,863	11,087	224	0.10	10,080	11,320	1,240	0.55
Stockport	9,934	9,645	-289	-0.14	10,090	10,930	840	0.38

	Education (P) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Tameside	7,193	6,382	-811	-0.57	6,940	7,300	360	0.24
Trafford	7,968	7,796	-172	-0.10	6,380	7,120	740	0.52
Wigan	9,452	8,828	-624	-0.32	9,280	9,950	670	0.33
Greater Manchester	116,136	112,988	-3,148	-0.13	115,640	128,650	13,010	0.51

4.77 The two forecasts identify very different trajectories for Greater Manchester employment in the education sector, with a decline in the 2014 GMFM and a significant increase in the Experian forecast. The 2014 GMFM identifies Tameside as having the highest rate and absolute decline with the lowest reductions in Bury and Manchester, and Salford being the only district to see an increase. In contrast, the Experian forecast points to a considerable increase in education employment in Manchester, with Salford, Oldham and Bolton also seeing an increase of more than 1,000.

	Health (Q) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	15,569	16,930	1,361	0.40	15,320	17,910	2,590	0.75
Bury	14,661	16,346	1,685	0.52	14,470	17,520	3,050	0.91
Manchester	48,469	52,391	3,922	0.37	54,130	72,050	17,920	1.37
Oldham	14,618	15,707	1,089	0.34	14,310	19,860	5,550	1.57
Rochdale	10,226	10,249	23	0.01	10,700	12,180	1,480	0.62
Salford	16,939	19,854	2,915	0.76	15,980	22,100	6,120	1.56
Stockport	18,734	20,503	1,769	0.43	18,230	21,070	2,840	0.69
Tameside	11,713	12,456	743	0.29	11,110	14,140	3,030	1.16
Trafford	10,737	11,567	831	0.36	8,180	10,060	1,880	0.99
Wigan	14,901	15,734	833	0.26	15,340	18,290	2,950	0.84
Greater Manchester	176,566	191,737	15,171	0.39	177,780	225,170	47,390	1.13

4.78 Experian forecasts more than three times the level of growth in health employment in Greater Manchester than does the 2014 GMFM. Manchester is expected to see the highest absolute increase in both forecasts, followed by Salford. Rochdale has the lowest absolute and proportionate increase in both.

	Arts, entertainment, recreation & other services (R,S, T and U) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Bolton	6,694	8,399	1,704	1.09	6,150	6,920	770	0.56
Bury	3,615	4,580	965	1.13	3,590	3,840	250	0.32
Manchester	16,809	21,800	4,991	1.25	19,470	22,840	3,370	0.76
Oldham	4,369	5,087	718	0.73	4,020	4,410	390	0.44
Rochdale	4,067	4,867	800	0.86	3,730	3,840	110	0.14
Salford	5,015	6,449	1,435	1.21	4,660	5,250	590	0.57
Stockport	8,414	10,719	2,305	1.16	8,510	9,100	590	0.32
Tameside	4,159	4,930	771	0.81	3,650	3,700	50	0.06
Trafford	6,682	8,490	1,808	1.15	6,750	7,910	1,160	0.76

	Arts, entertainment, recreation & other services (R,S, T and U) employment forecasts 2014-2035							
	2014 GMFM				Experian June 2015			
	Total employment		Change 2014-2035		Total employment		Change 2014-2035	
	2014	2035	Total	% pa	2014	2035	Total	% pa
Wigan	7,132	8,748	1,616	0.98	6,880	7,410	530	0.35
Greater Manchester	66,956	84,068	17,112	1.09	67,400	75,230	7,830	0.52

- 4.79 Both the largest concentration and highest absolute increase in employment in the arts, entertainment, recreation and other services sector is in Manchester. The two forecasts vary more in relation to the other districts, although Tameside, Rochdale, Oldham and Bury have the lowest absolute increases in both, reinforcing their position as having the lowest numbers employed in this sector.
- 4.80 It is difficult to draw any firm conclusions from this analysis of the sectoral forecasts at a district level. The dominant position of Manchester is regularly seen both in existing levels of employment, and forecast absolute growth, although other districts often match or exceed it in terms of the rate of increase. Salford, Stockport and Trafford also perform relatively well on several sectors, whereas Tameside, Oldham, Rochdale and Bury are often at the lower end of current employment numbers and forecast growth. This suggests some spatial pattern to current economic performance and future growth, with the centre/south reinforcing its position, as may be expected in forecasts that are based on past trends, and the north/east seeing less employment growth, with the north-west often somewhere in the middle. However, the two forecast sources also demonstrate the uncertainty inherent in any estimates of future employment growth, particularly when looking at individual sectors and/or districts, and there is often significant variation between the forecasts in the scale and pattern of change across Greater Manchester.
- 4.81 Consequently, the forecasts provide a starting point for considering the scale and nature of economic growth, rather than a definitive picture of Greater Manchester's future. This uncertainty, and the potential for policy to influence the pattern of economic change, needs to be taken into account when determining the appropriate distribution of employment floorspace requirements. The ongoing 'Deep Dives' work described in the introduction of this report may also identify additional demands and opportunities.

5. Demand for employment floorspace

Forecast net change in floorspace

- 5.1 The Greater Manchester Forecasting Model (GMFM) includes an employment floorspace module, which estimates the amount of industrial, warehousing and office floorspace that would be required to accommodate the forecast number of workers in particular sectors. This is based on a series of assumptions about the proportion of jobs in each sector that would utilise these different types of floorspace, and the amount of floorspace per worker that they would require. The accelerated growth scenarios also take the same approach.
- 5.2 These floorspace figures from the Oxford Economics forecasts effectively relate to occupied floorspace, as they identify the amount of floorspace required to accommodate a particular number of workers. A vacancy rate of around 10% would typically be expected in employment floorspace, with an employment land report for Greater Manchester suggesting that “10% is widely acknowledged to represent a standard vacancy rate in a healthy property market”²⁸. The change in floorspace identified over time is a net figure, and so if some existing floorspace was demolished or converted to other uses then the gross requirement would be higher. A large number of employees will work in types of premises other than industrial, warehousing and office floorspace, such as shops, schools and hospitals, and so the floorspace identified only addresses part of the needs of the economy.
- 5.3 The tables below summarise the estimated floorspace requirements from the various Oxford Economics forecasts for the three floorspace types. The last column of each table for the change in total floorspace assumes that there is a 10% vacancy rate in each type of floorspace. The rate of change in total floorspace is the same as that for occupied floorspace. The figures relate to net change, and so significant levels of new floorspace provision may be expected even if an overall net loss is forecast.

	Forecast net change in industrial floorspace 2014-2035				
	Occupied industrial floorspace (m ²)		Change in occupied floorspace 2014-35		Change in total floorspace 2014-35
	2014	2035	Total	% pa	
2014 GMFM	5,589,876	4,933,415	-656,461	-0.59	-729,401
AGS-SNPP	5,589,876	5,122,090	-467,785	-0.42	-519,762
AGS-High	5,589,876	5,376,981	-212,895	-0.18	-236,550
AGS-Higher	5,589,876	5,612,997	23,121	0.02	25,690

	Forecast net change in warehousing floorspace 2014-2035				
	Occupied warehousing floorspace (m ²)		Change in occupied floorspace 2014-35		Change in total floorspace 2014-35
	2014	2035	Total	% pa	

²⁸ Nathaniel Lichfield and Partners (2009) *Greater Manchester Employment Land Position Statement*, paragraph 4.21

	Forecast net change in warehousing floorspace 2014-2035				
	Occupied warehousing floorspace (m ²)		Change in occupied floorspace 2014-35		Change in total floorspace 2014-35
	2014	2035	Total	% pa	
2014 GMFM	5,923,865	6,341,347	417,482	0.32	463,869
AGS-SNPP	5,923,865	6,610,976	687,111	0.52	763,457
AGS-High	5,923,865	6,939,958	1,016,093	0.76	1,128,992
AGS-Higher	5,923,865	7,244,579	1,320,714	0.96	1,467,460

	Forecast net change in office floorspace 2014-2035				
	Occupied office floorspace (m ²)		Change in occupied floorspace 2014-35		Change in total floorspace 2014-35
	2014	2035	Total	% pa	
2014 GMFM	5,061,047	6,097,558	1,036,511	0.89	1,151,679
AGS-SNPP	5,061,047	6,410,851	1,349,804	1.13	1,499,783
AGS-High	5,061,047	6,729,874	1,668,827	1.37	1,854,253
AGS-Higher	5,061,047	7,025,274	1,964,227	1.57	2,182,474

5.4 The four forecasts lead to quite significant differences in the estimated change in employment floorspace. For both warehousing and offices, around 1 millions square metres more floorspace would be required in the AGS-Higher scenario than under the 2014 GMFM forecast. The office floorspace figures show a relatively high rate of increase in floorspace, exceeding 1.5% per annum in the AGS-Higher forecast. The 2014 GMFM envisages a significant reduction in industrial floorspace, but this scale of loss reduces in the AGS-SNPP and AGS-High scenarios, and a small increase is foreseen in the AGS-High forecast.

5.5 Land supply details usually combine industrial and warehousing floorspace, as premises often change between the two uses and they have similar site requirements. The first two tables above are combined below to show the figures for industrial and warehousing floorspace together. It can be seen that the warehousing gains more than offset the industrial losses except in the 2014 GMFM forecast.

	Forecast net change in industrial/warehousing floorspace 2014-2035				
	Occupied industrial/warehousing floorspace (m ²)		Change in occupied floorspace 2014-35		Change in total floorspace 2014-35
	2014	2035	Total	% pa	
2014 GMFM	11,513,741	11,274,762	-238,979	-0.10	-265,532
AGS-SNPP	11,513,741	11,733,067	219,326	0.09	243,695
AGS-High	11,513,741	12,316,939	803,198	0.32	892,442
AGS-Higher	11,513,741	12,857,576	1,343,835	0.53	1,493,150

5.6 The Experian forecast does not include floorspace outputs, and there is insufficient sectoral detail to apply the same methodology that is used in the GMFM to that forecast. Nevertheless, a general indication of comparative levels of employment in sectors that would require industrial, warehousing and office floorspace can be gained from the Experian forecast by using similar assumptions to the GMFM in terms of the relationship between sectors

and type of floorspace, but without making assumptions about job densities (floorspace per worker). The tables below compare the resulting figures based on the Experian forecast with those from the 2014 GMFM for the three types of floorspace.

	Total jobs requiring industrial floorspace 2014-2034			
	Number of jobs		Change in jobs 2014-2034	
	2014	2034	Total	% change pa
2014 GMFM	136,361	106,877	-29,484	-1.21
Experian	136,388	110,567	-25,821	-1.04

	Total jobs requiring warehousing floorspace 2014-2034			
	Number of jobs		Change in jobs 2014-2034	
	2014	2034	Total	% change pa
2014 GMFM	88,088	95,771	7,683	0.42
Experian	88,660	96,392	7,731	0.42

	Total jobs requiring office floorspace 2014-2034			
	Number of jobs		Change in jobs 2014-2034	
	2014	2034	Total	% change pa
2014 GMFM	420,335	523,556	103,222	1.10
Experian	421,923	504,287	82,365	0.90

5.7 Although the Experian forecast is underpinned by a higher level of population growth, and forecasts a higher increase in employment overall, the two forecasts involve the same rate of growth in jobs that would be expected to occupy warehousing floorspace. As may be expected from the discussion of sectoral change in the previous section, the 2014 GMFM actually forecasts a higher rate of growth in jobs requiring office floorspace, whereas the Experian forecast gives a lower rate of decline in jobs that would be expected to be based in industrial premises. Despite these differences in magnitude, the overall direction of change in floorspace needs is very similar in the two forecasts.

5.8 The next table shows the distribution of floorspace change across Greater Manchester, assuming that 10% of all floorspace is vacant, as forecast in the 2014 GMFM.

	Forecast net change in floorspace in Greater Manchester 2014-2034 (2014 GMFM)			
	Industrial/warehousing		Offices	
	Total	% pa	Total	% pa
Bolton	-30,407	-0.12	105,446	1.14
Bury	-30,578	-0.25	39,898	0.97
Manchester	113,293	0.21	490,342	1.12
Oldham	-79,996	-0.43	31,558	0.78
Rochdale	-99,578	-0.49	19,382	0.51
Salford	127,172	0.43	208,935	1.25
Stockport	-37,502	-0.15	97,738	0.77

	Forecast net change in floorspace in Greater Manchester 2014-2034 (2014 GMFM)			
	Industrial/warehousing		Offices	
	Total	% pa	Total	% pa
Tameside	-86,988	-0.51	20,616	0.53
Trafford	630	0.00	73,486	0.43
Wigan	-102,213	-0.48	32,231	0.44
Greater Manchester	-226,166	-0.09	1,119,633	0.91

- 5.9 Salford has the highest absolute and rate of growth in industrial/warehousing floorspace, and Manchester is also forecast to see an increase of more than 100,000m² of such floorspace. Aside from Trafford, which is expected to see negligible change, the other districts are all forecast to see a reduction in industrial/warehousing floorspace, with the largest decreases seen in Wigan, Rochdale, Tameside and Oldham.
- 5.10 Salford is also forecast to see the fastest rate of growth in office floorspace, although it is exceeded considerably in terms of absolute increase by Manchester, and together the two cities are forecast to account for 62% of office floorspace growth in Greater Manchester. Bolton's forecast increase in office floorspace also exceeds 100,000m², at a growth rate slightly faster than Manchester's. Rochdale, Oldham, Tameside and Wigan are forecast to see the lowest increases in absolute terms, as was the case for industrial/warehousing floorspace.
- 5.11 The sectors that would be accommodated within industrial/warehousing or office floorspace are probably less reliant on local population levels than some of the other sectors, such as retail, education and health, although there are some relationships for example with warehousing demand increasing as retail activity increases. Consequently, these industrial/warehousing and office sectors may provide a better indication of the relative underlying economic strength of the districts than total employment, assuming that past trends continue into the future. The spatial distribution of forecast floorspace growth/decline may therefore provide some indication of where economic opportunities may be concentrated and where some actions may be required to improve district contributions to the economic growth of Greater Manchester. Using this data, Manchester and Salford appear to be in the strongest position, and the north-east (Oldham, Rochdale and Tameside) once again performs less well but is now also joined by Wigan. However, this situation is not static, and the relative attractiveness of areas could evolve over time, for example due to major transport investment, enhanced site provision and increasing average skill levels. Improved economic growth in adjoining areas outside Greater Manchester could also impact on the prospects of different parts of the sub-region.

Past trends in floorspace development

- 5.12 District monitoring of employment floorspace completions over the period 2004-2014 is summarised in the table below. Whereas the figures discussed above relate to net change, the completions monitoring is of gross additions. Comprehensive data on gross losses is not currently available. Salford switched its monitoring from calendar to financial years in 2005, and so its figures cover a slightly longer 10.25 year period than those for the other districts.

	Gross employment floorspace additions 2004-2014					
	Total (m ²)		Average per annum (m ²)		% of Greater Manchester total	
	Industrial/ warehousing	Offices	Industrial/ warehousing	Offices	Industrial/ warehousing	Offices
Bolton	86,110	107,934	8,611	10,793	5.70	10.26
Bury	60,948	32,206	6,095	3,221	4.04	3.06
Manchester	144,737	420,704	14,474	42,070	9.59	39.98
Oldham	126,434	42,171	12,643	4,217	8.37	4.01
Rochdale	295,036	35,513	29,504	3,551	19.54	3.37
Salford	109,002	172,088	10,634	16,789	7.04	15.95
Stockport	102,252	81,257	10,225	8,126	6.77	7.72
Tameside	128,813	28,079	12,881	2,808	8.53	2.67
Trafford	309,220	73,861	30,922	7,386	20.48	7.02
Wigan	150,114	62,783	15,011	6,278	9.94	5.97
Greater Manchester	1,512,666	1,056,596	151,001	105,240	100.00	100.00

- 5.13 The main concentrations of industrial/warehousing development have been in Trafford and Rochdale, which together accommodated 40% of the Greater Manchester total. Both Bury and Bolton delivered an average of less than 10,000m² per annum.
- 5.14 Manchester alone accounted for 40% of office floorspace completions, with significant provision also seen in Salford and Bolton. Tameside, Bury, Rochdale and Oldham all had averages below 5,000m² per annum.
- 5.15 The table below shows what the gross employment floorspace requirement in each district would be if it was simply based on a continuation of the past average rates from the period 2004-2014. This is a very simplistic approach, and takes no account of demand and supply parameters. For example, the best opportunities for future floorspace provision and business growth may be in different locations to the past. However, it provides a general indication of the scale of development that would be required if trends over the last decade were replicated.

	Gross employment floorspace requirements for 2014-2035 if based purely on the continuation of past development rates over the period 2004-2014 (m ²)	
	Industrial/warehousing	Offices
Bolton	180,830	226,662
Bury	127,991	67,633
Manchester	303,948	883,478
Oldham	265,512	88,559
Rochdale	619,576	74,577
Salford	223,321	352,571
Stockport	214,729	170,640
Tameside	270,507	58,966
Trafford	649,362	155,108
Wigan	315,239	131,844
Greater Manchester	3,171,015	2,210,038

5.16 The next table compares the estimated net change in occupied employment floorspace over the period 2004-2014, as identified in the 2014 GMFM, with the forecast net change for the period 2014-2035 from the 2014 GMFM and the three accelerated growth scenarios.

	Estimated past and forecast future change per annum in occupied employment floorspace in Greater Manchester				
	2004-2014 (GMFM)	2014-2035			
		2014 GMFM	AGS-SNPP	AGS-High	AGS-Higher
Industry	-157,169	-31,260	-22,275	-10,138	1,101
Warehousing	25,412	19,880	32,720	48,385	62,891
Offices	95,629	49,358	64,276	79,468	93,535
Industry/warehousing	-131,757	-11,380	10,444	38,248	63,992

5.17 A very significant rate of loss per annum of occupied industrial floorspace was estimated over the period 2004-2014. Much lower net losses are expected in the future, with a marginal increase under the AGS-Higher forecast. Thus, all scenarios point towards a considerable reduction in the amount of existing floorspace that will be lost each year, though there is still likely to be significant renewal and redevelopment of premises, but they may also involve an increased demand for new floorspace as occupiers seek more modern premises.

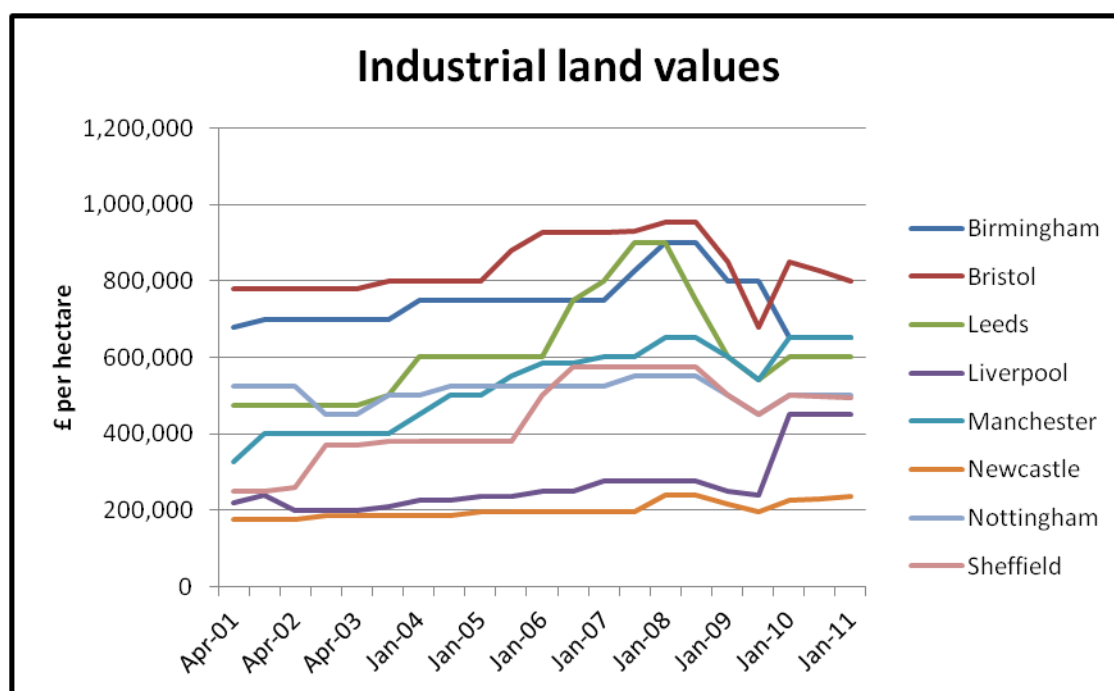
5.18 The forecast rate of increase in occupied warehousing floorspace is higher in the three accelerated growth scenarios than the average for the period 2004-2014, whereas the 2014 GMFM forecasts a reduction in the growth rate. When combined together, the large reduction in industrial and warehousing floorspace seen in recent years is expected to reduce significantly under the 2014 GMFM forecast and transform into an increase under the other three scenarios.

- 5.19 None of the scenarios forecasts a rate of growth in occupied office floorspace as high as that seen over the period 2004-2014, although the AGS-Higher is only slightly lower. However, the past average is somewhat skewed by the last two years (2012-2014) when there was an estimated increase of more than 630,000m². For example, the past average falls from around 95,600m² per annum to about 77,400m² per annum if the period 2002-2012 is used rather than 2004-2014. The comparison of past and future changes therefore needs to be treated with caution.

6. Market analysis

Market signals

- 6.1 There is now very little data on land values and rents that is published by the government or its agencies. The Valuation Office Agency (VOA) previously produced property market reports that provided some information on rents for both industry and offices, and land values for the former only, but these were discontinued in 2011. Furthermore, changes in definitions make comparison of some of their later data problematic.
- 6.2 The graph below displays the VOA property market report data on industrial land values for selected cities. The data from January 2010 used a slightly different definition, which may serve to underplay the impacts of the recession when plotted together with the data prior to that date. With this proviso, Manchester can be seen to have had a reasonably consistent growth in industrial land values from a relatively low base, overtaking both Leeds and Nottingham by 2011.



- 6.3 At the end of last year, CoStar reported that GVA had identified that a lack of available land was driving up UK industrial land values²⁹. However, values in some cities, including Manchester, were unchanged. The figure of £300,000 per acre in Manchester quoted in the report equates to around £740,000 per hectare, which would suggest a continued increase from the figures in the above graph. This compares with quoted per acre figures of £200,000 for Newcastle, £250,000 for Sheffield, £275,000 for Leeds and £400,000 for

²⁹ Norman, Paul (10 November 2014) *Land values soar as industrial space race heats up*, CoStar (<http://www.costar.co.uk/en/assets/news/2014/November/Land-values-soar-as-industrial-space-race-heats-up/>)

Bristol, which maintains the relative positions of these cities seen in the graph, but with a widening gap between Manchester and Bristol.

- 6.4 Consistent data on industrial rents is only available from the VOA reports up to 2008, with definitional changes making comparison with later VOA data likely to be misleading. The table below compares industrial rental values in parts of Greater Manchester with those in other major competitor cities in the North and Midlands, but the dated nature of the information needs to be recognised. It indicates that Manchester saw relatively high industrial rent inflation in the period preceding the recession, although rental levels were still relatively low compared to Leeds and Birmingham. These relative trajectories bear some similarities to those seen in the graph on industrial land values above. The rate of rental growth in other parts of Greater Manchester was lower than in Manchester, with Stockport having higher rents than other areas in 2008.

Area ³⁰	Industrial unit rents (£ per square metre)		% increase (April 2001-July 2008)
	April 2001	July 2008	
Industrial units 150-200m²			
Manchester	42	63	50
Bolton	48	58	21
Rochdale	47	55	17
Salford	56	60	7
Stockport	55	65	18
Liverpool	40	44	10
Leeds	60	68	13
Birmingham	62	70	13
Industrial units ~1,000m²			
Manchester	39	55	41
Bolton	48	53	10
Rochdale	39	50	28
Salford	41	50	22
Stockport	42	55	31
Liverpool	30	37	23
Leeds	48	52	8
Birmingham	60	63	5

- 6.5 The following table provides similar VOA data for office suites, although comparative information is available for some areas up to the start of 2011 rather than to just mid 2008. Manchester rental levels were similar to Leeds and Birmingham in January 2011. However, the VOA data suggests that there had been significant inflation up to 2008, at which point the rental levels were higher than in the other sub-regions, but then rents fell back in the period to 2011. Rents in other parts of Greater Manchester outside Manchester were comparatively low, with the highest figures being for Altrincham although it saw very little rental inflation between 2001 and 2008.

³⁰ The reports do not provide a clear spatial definition of each area.

	Office unit rents (£ per square metre) (self-contained 1,000m ² suite)			% change	
	April 2001	July 2008	January 2011	April 2001 to July 2008	April 2001 to January 2011
Manchester	215	310	250	44	16
Bolton	75	115	-	53	-
Oldham	80	110	-	38	-
Altrincham	155	160	-	3	-
Stockport	78	120	-	54	-
Wigan	90	110	-	22	-
Liverpool	100	180	175	80	75
Leeds	220	230	240	5	9
Birmingham	275	280	260	2	-5

6.6 Further discussion of rents and land values is included in the following sub-section on market commentaries.

Market commentaries

6.7 A wide variety of market commentaries are published by various media outlets and property agents. When read in combination with information on development activity and discussions with developers, it is possible to draw some general conclusions as to the current state of the market for employment sites and premises across Greater Manchester and how this might change over time. Specific quotations and data in this section are typically taken from Estates Gazette, as it is an independent publication that covers the property market as a whole, but the messages within are generally indicative of the market commentaries provided by individual property agents.

6.8 It needs to be recognised that the commentaries provide a particular perspective on the property market. They tend to focus on short-term issues rather than the long-term demand for new employment floorspace, and there is generally a greater consideration of newly constructed or newly refurbished floorspace despite this accounting for a relatively small proportion of total demand. The strong emphasis on the investment market means that wider issues of occupier demand are not always possible to discern. The commentaries produced by agents are also likely to be skewed to some extent by the type and number of deals that they are involved in, rather than providing a full market analysis. It is therefore important to see these commentaries as a partial snapshot of market conditions at a particular point in time.

6.9 Probably the most important conclusion that emerges from analysing the various commentaries is the nature of the relationship between short-term demand and long-term supply. The level of short-term demand for employment floorspace from investors and developers can change very

quickly in response to supply dynamics, seemingly shifting from a shortage to an oversupply and back again in a very short space of time. This was apparent in a recent article on office floorspace in Manchester called 'famine then feast', published in *Estates Gazette*, which suggested an existing supply shortage but a potential oversupply in the next year, after which there could be a return to an undersupply.

"With 1 St Peter's Square completed and still with 140,000 sq ft available; Mosley Street Ventures' 161,113 sq ft 2 St Peter's Square under way, on the back of partial prelet to Ernst & Young; Allied London on-site with Cotton House at Spinningfields, prompted by a prelet to Shoemiths, plus Tristan Capital's partnership with ASK at 101 The Embankment, One New Bailey, Manchester has no shortage of new development. Perhaps too much, says Savill's James Evans. 'My concern is two years ago we had one building coming out of the ground in the form of 1 St Peter's Square and that's now completed. Then we had a pregnant pause where we could have six buildings delivered within 12-18 months. That's getting towards unsustainable. It feels like maybe one building too many.' 'I suspect we won't see any other major schemes kick off speculatively in the CBD in the next 12 months,' says Canning O'Neill's Conrad O'Neill."³¹

- 6.10 This highlights the fact that the property market often does not provide a smooth and measured response to rebalancing the demand/supply equation, and perceptions of where that balance lies may be influenced by investor demand as well as occupier needs. This results in the 'tap' of new floorspace being switched on and off, rather than providing a steady and continuous flow of development, which inevitably leads to periods of perceived shortfall followed by an apparent oversupply that then dampens development activity. When combined with the ups and downs of the wider economy, this provides little assistance in quantifying long-term demand, as the identification of a shortage or oversupply of new floorspace could be a short-term phenomenon.
- 6.11 Particular care is required when considering the impact of investment activity on market signals such as rents, land prices and development values. Although strengthening occupier demand may be one cause of increases in such indicators, the search from investors for potentially profitable assets can also have a significant impact, and reports of increased capital flows into cities outside London point towards the perception of an overheated market within the capital complemented by low interest rates and the relative attractiveness of the property market overall compared to other asset classes. As a result, part of any perceived shortage in supply may be due to the lack of high quality assets for investment capital, rather than necessarily unmet occupier demand.
- 6.12 In terms of a land-use planning response, this all points towards the need to ensure the continuous supply of development opportunities attractive to occupiers, developers and investors, which are available when demand dictates, but with no guarantee that such demand will manifest. It also suggests that the scale of the long-term supply needs to be constantly

³¹ *Estates Gazette* (7 March 2015) *Focus inside Manchester*, p.120

revisited in light of the speed with which development opportunities are taken up.

Industrial and warehousing premises

- 6.13 As with the UK more generally, there are some concerns that a lack of speculative development has led to a shortage of availability in the North West, particularly of grade A floorspace, and that this could be hindering economic growth. The causes of the shortage may vary between different parts of the country, but underlying economic conditions are likely to be responsible to some degree.
- 6.14 Despite these concerns, the market is not necessarily in a position to respond, with Estates Gazette explaining: “Speak to major developers and they will say the same thing: while they have plenty of serviced land ready to come forward, they are not expecting to press the button on a heady spec-build programme any time soon.”³² This is reiterated and partly explained in the following two quotes from the same publication, which suggest a more cautious approach from developers than in the past.
- “There was a time, a rather uneducated time, when everybody was piling into the back of an already saturated market, but developers are being far more cautious about where and at what scale they build. We all have memories of the peak of the last cycle and how quickly that fell off a cliff. I don’t think that will be repeated.”³³
- “It wasn’t that long since we built too much, so I suspect developers will be a lot more cautious this time round.”³⁴
- 6.15 The differing nature of demand across the country has also been highlighted:
- “Most large developers will be building only in the diamond between Nottingham and Kent, taking in the Midlands, the Home Counties and Greater London. ‘These are the core drivers of demand,’ says Charles Crossland, UK logistics MD of Goodman. But Mike Walker, development director of Chancerygate, believes there is also potential for speculative development of mid-sized schemes in the North West. ‘We’re seeing a lot of requirements for between 20,000 and 50,000 sq ft for those whom existing stock doesn’t work,’ he says.”³⁵
- 6.16 As with many parts of the country, the focus within Greater Manchester currently appears to be on pre-lets and design and build, rather than speculative development, and this has been seen on major sites within the sub-region such as Logistics North and Port Salford. However, a few

³² Estates Gazette (30 May 2015) *Industrial: The Market in Focus*, p.40

³³ Ibid, p.12 (Nigel Godfrey from IDI Gazeley quoted)

³⁴ Ibid, p.37 (Jon Sleeman from JLL quoted)

³⁵ Ibid, p.40

speculative schemes are now becoming to come forward, including at Logistics North and Kingsway. The comparatively low levels of speculative development do not therefore appear to be a good indicator of overall demand, and instead suggest that demand is being met in different ways. A reliance on pre-lets means that sites must be available that enable developers to respond quickly to occupier demand, typically within 12-18 months, otherwise that demand may be diverted to other sub-regions.

- 6.17 At the national level, there is some evidence that the rental gap and yield are closing between grade A and higher quality secondary accommodation, with a possible explanation being that the limited availability of grade A floorspace is driving up prices in the secondary stock. This message is reinforced by the reduction or even withdrawal of tenant incentives, as the balance of power in rent negotiations moves from occupiers to landlords, linked to the availability of supply in the right locations. Although prime rents within Greater Manchester are comparable with other UK regional cities, there is mixed data in terms of the direction of travel, with some sources suggesting that supply pressures are impacting on rental levels whilst others point towards a flatter market. For example, an investor guide published by Estates Gazette explains that: “Low supply [in Manchester] has meant there has been competition between investors for any prime stock brought to the market”, but the quoted prime rents in the same article, summarised in the table below, could suggest that this has manifested in declining yields rather than rental inflation³⁶. Recent deals at Logistics North are quoting rents of £6 per sq ft, which indicates that there may be some upward pressures on rents, at least on prime sites.

City	Industrial/logistics floorspace			
	Prime rent (per sq ft)		Prime yield	
	2013	2014	2013	2014
Birmingham	£5.25	£5.75	6.00%	5.75%
Bristol	£6.10	£6.25	6.25%	5.75%
Edinburgh	£6.50	£6.75	7.00%	6.75%
Glasgow	£6.00	£6.50	7.00%	6.75%
Leeds	£5.00	£5.75	7.00%	6.25%
Manchester	£5.50	£5.50	6.00%	5.75%

Source: Estates Gazette/ GVA - UK Cities Investor Guide Spring 2015

- 6.18 There is a perception that Greater Manchester may have missed out on some major potential investment opportunities because of a lack of large, readily developable sites in suitable locations, and an over-reliance on small sites and existing premises in secondary locations. A regional or pan-regional investment can only locate in one sub-region, so it is inevitable that many locations will miss out, but it is important to ensure that Greater Manchester is in a position to compete for such investment. The recent deals for Aldi at Logistics North and Culina at Port Salford demonstrate that Greater Manchester is considered to be an attractive location when the right sites are available.

³⁶ Estates Gazette (Spring 2015) *UK Cities investor guide: Where best to invest*, p.41

- 6.19 One of the key messages in recent years has been that large, available sites in Greater Manchester tend to be developed quite quickly, even where they may not meet all of the theoretically ideal characteristics for industrial and warehousing sites, although inevitably there are exceptions to this where sites have been unable to attract investment despite being available. This speed of delivery was seen particularly just before the recession, but there is some evidence that the trend may be returning on well-located sites, as demonstrated by the high levels of interest in major sites such as Port Salford, Airport City, Logistics North and, just outside the sub-region in Warrington, Omega. It will therefore be important to ensure a continued supply of such opportunities in the long-term.
- 6.20 A common concern, particularly in employment land reviews, is the continued suitability of existing premises for industrial and warehousing occupiers. The location, size, quality and adaptability of buildings, limited plot sizes, complex land ownerships, access to the strategic highway network and proximity to housing are major constraints for many existing employment areas. Consequently, a high supply of second hand premises does not necessarily translate into an ability to meet occupier demand. The renewal of the industrial and warehousing stock, both in terms of the provision of new high quality floorspace and the release of some existing sites for redevelopment to other uses such as housing, will therefore be essential in maintaining Greater Manchester's competitiveness. However, the importance for many businesses of retaining a good supply of low cost premises in secondary locations should not be underestimated, and will also be vital to competitiveness. Indeed, shortages in the amount of available stock, together with concerns relating to the loss of employment land to housing and other uses, has led the British Property Federation to set up a dedicated industrial committee³⁷.
- 6.21 The availability of investment capital for new development projects is expected to increase, not simply as a result of the economic recovery but also as investors increasingly become priced out of the London/South East area and look towards other locations such as Greater Manchester in search of higher yields. In order to take advantage of this opportunity, Greater Manchester will need to be able to offer high quality sites of sufficient size in locations with good transport connections, which are available, remediated, serviced and able to deliver new buildings within 12-18 months of development enquiries. However, as discussed earlier, given the cyclical nature of investment and developer demand, it will be important not to extrapolate short-term peaks in interest over the long-term.
- 6.22 It is impossible to accurately predict exactly what occupiers will require over the next two decades, and how changes in the industrial, warehousing and distribution sectors will influence this. Technological change, increasing globalisation, varying energy and commodity prices, innovations in logistics and supply chains, changes in manufacturing practices, etc, will all influence the location and type of accommodation that may be sought at any particular

³⁷ Estates Gazette (30 May 2015) *Industrial: The Market in Focus*, p.34

point in time. There may be some opportunities for ‘reshoring’ of activities, as has been seen to some degree in Greater Manchester in the textiles sector. Demand is unlikely to be consistent, and there may be significant peaks and troughs in interest in certain types of sites and premises which are not directly linked to overall levels of economic growth.

- 6.23 Rather than seeking to forecast precisely how such factors may manifest over a prolonged period, it would seem more appropriate to focus on providing a range of sites that enables Greater Manchester to respond flexibly to the investment opportunities that present themselves. A built environment that is able to adapt to changing occupier needs would place the sub-region in a very strong position, but delivering this in practice and in a way that is sustainable and financially viable will be challenging, particularly in terms of prioritising any public funding that is required for associated infrastructure improvements.
- 6.24 This is not necessarily just about the availability of new sites. The ability of major employment estates such as Trafford Park to continually adapt and reinvent themselves will be vital to ensuring that Greater Manchester remains a competitive location for industrial, warehousing and distribution uses, and increasing demand for customer fulfilment centres and last-mile delivery may require the retention and enhancement of employment areas close to major population centres.
- 6.25 One of the key questions for Greater Manchester will be the extent to which it wants to attempt to attract regional and pan-regional activities in competition with other sub-regions, some of which may not necessarily generate large numbers of jobs, or whether it sees its main focus as being to accommodate primarily local and sub-regional functions.

Office premises

- 6.26 There is a general perception in the various market commentaries that Manchester (including Salford Quays and South Manchester, as well as the City Centre) has started to pull away from the other regional cities as the stand out office market in the UK outside London. In Estates Gazette’s UK Cities 2014 publication it was described that:
- “Of all UK regional cities, Manchester is the one most like London. It’s large (2.5m people), wealthy (£46bn gross value added) and its property market is busier and bigger and many times more competitive than its regional rivals. Only London surpasses it.”³⁸
- 6.27 Manchester’s pre-eminent position amongst regional UK cities is reflected in current and forecast prime rents and yields, high take-up in recent years, and the levels of interest from both institutional investors and occupiers, including a significant element of inward moves. This is reflected in the data set out in the following table, using data published in Estates Gazette.

³⁸ Thame, David (11 October 2014) *Manchester*, Estates Gazette UK Cities: The City in Focus, p.11

City	Office headline data for regional cities					
	Prime rent (per sq ft)		Prime yield		Grade A take up 2014 (sq ft)	Investment volumes 2014 (£m)
	2013	2014	2013	2014		
Birmingham	£28.50	£29.50	5.75%	5.25%	228,000	789.2
Bristol	£27.00	£28.50	6.00%	5.75%	166,041	548.2
Cardiff	-	£21.50	-	-	128,625	-
Edinburgh	£29.50	£31.00	6.00%	5.50%	333,351	417.2
Glasgow	£28.50	£29.00	6.50%	5.75%	278,922	499.2
Leeds	£25.00	£26.00	6.25%	5.50%	274,192	350.9
Liverpool	-	£21.00	-	-	168,213	-
Manchester	£29.50	£32.00	6.00%	5.00%	401,406	1,553.3
Newcastle	-	£21.50	-	-	64,000	-

Source: Estates Gazette/ GVA - UK Cities Investor Guide Spring 2015

- 6.28 Manchester now has the highest prime rents and lowest prime yields of the regional cities, and saw the highest take-up and investment volumes in 2014. The demand for space and the immediate lack of grade A availability are expected to result in increased prime office rents in Manchester over the next few years, continuing to exceed other regional cities. However, there is a risk that these recent increases in values in the Manchester market may impact on development potential in the longer term. Estates Gazette reports that: “DTZ’s latest Fair Value Index says Manchester offices are the most overpriced UK market after London West End retail, with yield compression taking yields down 0.75% to levels last seen in the boom year of 2006”³⁹, and that the high take-up last year was underpinned by deals below £26 per sq ft rather than at the headline rate of £32 sq ft⁴⁰. High values may therefore drive increased development and investment in the short-term, but this could fall off if there are insufficient occupiers prepared to pay these prices.
- 6.29 Notwithstanding these concerns, Manchester appears to be in a good position to secure further investment in new office floorspace, but it will need to be constantly enhancing its relative attractiveness in order to consolidate rather than lose its primary status outside London, with Birmingham probably in the best position to challenge it. This will not just require the provision of high quality floorspace in locations attractive to the market, but also improvements to the working and living environment, facilities, transport and labour supply.
- 6.30 Investment in office property from UK funds and foreign investors is an increasing element of the market and interest is moving northwards from London in search of higher returns. Manchester is in a very good position to capture such investment and significant interest is apparent. A recent article in Estates Gazette explains that:

³⁹ Estates Gazette (7 March 2015) *Focus inside Manchester*, p.111

⁴⁰ Ibid, p.117

“Until now, the argument goes, Manchester has been seen as a Tier 2 city. Now, it’s a Tier 1 city, just a smaller one than London. So if Manchester is competing for investment then it is competing with Berlin, Hamburg, Paris or Helsinki, and not so much with Birmingham or, still less, with Leeds or Nottingham.”⁴¹

- 6.31 This enhanced investment position could clearly be very beneficial for Greater Manchester, supporting increased delivery of new office floorspace. At present there is little evidence of an accompanying step-change in the scale and type of occupiers that are being attracted, but wider perceptions of the sub-region as being in competition with major cities across Europe could begin to support this. Equally, if the investment market starts to become detached from the realities of occupier demand then there is a risk of a property bubble that could eventually lead to a sudden drop-off in new office development. Manchester will therefore need to work hard to maintain this positive competitive position.
- 6.32 The availability of prime office space has been falling in all of the main UK regional office markets over the last few years, with increasing concerns being expressed about the ability to meet the needs of a growing economy. This has been particularly apparent in the supply of grade A floorspace, as a result of very limited new build stock following the recession, which may reflect the impact of economic conditions on investment decisions as much as actual levels of demand. The table below summarises data published in Estates Gazette relating to office floorspace take-up and current/future availability.

City	Grade A office floorspace			
	Take up 2014* (sq ft)	Immediately available – end 2014 (sq ft)	Under construction (sq ft)**	Years supply***
Birmingham	228,000	243,000	86,000	1.21
Bristol	166,041	250,000	77,347	1.74
Cardiff	128,625	30,000	232,100	2.15
Edinburgh	333,351	320,000	220,600	2.47
Glasgow	278,922	282,000	380,883	2.64
Leeds	274,192	250,000	455,178	2.84
Liverpool	168,213	224,467	95,164	1.82
Manchester	401,406	275,500	614,000	3.56
Newcastle	64,000	164,000	34,000	2.42

* Includes pre-lets

** Speculative development only

*** Currently available and speculative space under construction against 10-year average take-up

Source: Estates Gazette/ GVA - UK Cities Investor Guide Spring 2015

- 6.33 Thus, Manchester appears to be in the strongest position of the UK regional cities in terms of the short-term supply of grade A office floorspace, although this is partly due to the large amount of floorspace under construction. In relation to supply, Estates Gazette reports that concerns remain of a shortfall in grade A accommodation in Manchester, however the number of schemes

⁴¹ *ibid*, p.110

recently completed or under construction could result in a temporary hold on further speculative office development having left “developers without oven-ready schemes, anticipating when this next wave will be absorbed and when will be the best time to deliver product”⁴². In the longer term in Greater Manchester, there is a very good supply of potential office sites in locations likely to be attractive to the market, particularly within the city centre, many of which have extant planning permission. Site availability is therefore unlikely to be the cause of any immediate limited supply of office floorspace, which is most probably due to developer and investor responses to economic conditions since the recession, and nor is it likely to be a significant future constraint. The challenge is to translate that healthy site availability into a steady supply of new grade A floorspace that is balanced with occupier demand.

- 6.34 The lack of new grade A floorspace over recent years has placed an increased focus on grade B stock, leading to newly refurbished buildings coming onto the market in Manchester. Grade B floorspace has consequently constituted a significant proportion of recent office take-up. This is likely to have been driven as much by occupiers seeking better value as it is by the overall availability of quality floorspace in an appropriate location and the reluctance of developers to bring forward new-build office developments without guaranteed pre-lets. However, second hand floorspace has constituted a particularly high proportion of recent take-up in Manchester compared to other major cities, despite some availability of new floorspace, and there remains a large amount of available second hand floorspace reflecting the overall size of the sub-region’s office market.
- 6.35 This scale of availability may explain a report that “the difference between top rents and average grade B is around £16-18 per sq ft – the historic norm is more like £13 per sq ft and was £10 per sq ft 10 years ago”⁴³. Depending on the quality and location of that second hand stock, and the level of interest in converting it to other uses such as apartments, this strong supply of cheaper grade B floorspace could potentially act as a downward pressure on the demand for more costly grade A floorspace and thus impact on the speed with which new office floorspace comes forward, although it is possible that the better second hand premises have already been refurbished and re-let. Equally, continued rent inflation in grade A offices is likely to drive some developers and occupiers to seek lower cost accommodation within the secondary market. In terms of the overall impact on new office development, much will depend on the precise requirements of occupiers and the relative costs within the cities with which Manchester is competing.
- 6.36 Many businesses have been rationalising their space to reduce costs, and such pressures are likely to continue. There has also been some reduction in productivity levels during the recession, which could mean that increased investment and business results in more productive use of existing staff rather than an increased demand for staff and consequently office floorspace. Whilst

⁴² Ibid, p.120

⁴³ Ibid

this rationalisation of space may impact on the demand for space from existing businesses in regional markets, it also has the potential to increase interest from businesses located in the south east looking to reduce overheads by moving back office functions away from the capital and those which are 're-shoring' activities such as call centres from abroad. There are also increasing moves towards providing modern workplaces that help to attract and retain staff, which could increase both the quality and quantity of space requirements.

- 6.37 Technology, media and telecommunications and finance and professional services are particularly active in the Manchester office market, and forecasts suggest this will continue, however the sectoral profile of demand can change quite rapidly and, together with the demand from occupiers and investors, it would seem more appropriate for Greater Manchester to seek to provide a diverse office offer that can attract all sectors/investors rather than focus on specific segments of the market that are particularly active at the current time. One of the strengths of the Manchester market is its ability to cater for a variety of needs, including second hand as well as newer grade A floorspace, and this diversity should be reinforced in the future.
- 6.38 Overall, therefore, Greater Manchester appears to be in a strong position in terms of its office market. With appropriate investment, it should be possible not only to continue this, but to further enhance its pre-eminence amongst UK regional cities, which could potentially have benefits for other economic sectors in the sub-region. However, the achievement of significantly increased levels of new office floorspace compared to past development rates will be dependent on the ability to find a way of delivering a high quality product at a value that both attracts investment in search of higher yields than are available in London and also promotes major growth in occupier demand. Furthermore, maintaining and enhancing Greater Manchester's competitiveness as an office location will not just depend on the availability of high quality sites and floorspace, but will also be heavily influenced by factors such as the availability of skilled workers, the quality and reliability of internal and external transport links, provision of high quality telecommunications, good place marketing, and good places to market.

Logistics study

- 6.39 A logistics study for Greater Manchester was published towards the end of 2014, which provides detailed consideration of this particular sector which will be a key source of demand within the industrial and warehousing property sector⁴⁴.
- 6.40 The study identifies the potential for sites in Greater Manchester to compete for national distribution centres, but only if they are very large and have rail and/or water connections, otherwise their role is limited to regional distribution centres or more local facilities. The potential of existing warehousing sites is

⁴⁴ MDS Transmodal (September 2014) *Greater Manchester Logistics Study: Technical Report*

much more limited, as they are often too small and are unlikely to have rail or water connections. Consequently, the opportunities for increasing Greater Manchester's logistics role depend very much on the availability of suitable sites of sufficient size and with multi-modal potential.

6.41 The logistics study sets out two scenarios for expanding Greater Manchester's logistics role, which are described as follows:

- **Moderate Growth Scenario:** the North West is able to accommodate organic growth in the regional market for logistics space and secure 10% of the East and West Midlands market up to 2033 by capturing some of the requirement for national distribution centres (NDCs) through offering immediate access to rail and water connected sites. Greater Manchester is assumed able to accommodate its current share of space within the North-West (38%) using some recycled land on existing distribution parks (50% of the total requirement) and finding sufficient land for a new tri-modal site and strategic rail freight interchanges (SRFIs) for the remaining 50%.
- **High Growth Scenario:** the North West as a whole is able to accommodate organic growth in the regional market and secure a higher share (15% rather than 10%) of the East and West Midlands market up to 2033 by capturing 15% of the requirement for NDCs rather than the 10% assumed in the Moderate Growth Scenario. Greater Manchester accommodates the same share of the North West market (i.e. 38%), but is only able to locate 25% of additional capacity on existing distribution parks, while being able to find sufficient land for a new tri-modal site and rail-connected sites for the remaining 75%.

6.42 In this context, it is worth noting that 'moderate growth' is effectively a moderate increase compared to maintaining the current position of the North West and Greater Manchester, rather than a moderate overall level of logistics activity.

6.43 The study assumes throughout that Greater Manchester's share of the North West's logistics activity remains constant at 38%. It estimates that there will be a need to replace 4,270,000m² of logistics floorspace across the North West region over the period 2013-2033, and a further 610,000m² of floorspace will be required to accommodate market growth. This effectively gives a baseline position of needing 4,880,000m² of new logistics floorspace, with Greater Manchester's share being 1,854,400m².

6.44 By capturing some of the Midlands market, the study considers that the North West could attract an additional 620,000m² of new logistics floorspace compared to the above position under the moderate growth scenario, and an extra 920,000m² under the high growth scenario. Again assuming a 38% share of the regional total, Greater Manchester could therefore potentially attract an additional 235,600m² under the moderate growth scenario, and 349,600m² under the high growth scenario. In total, this would point towards 2,090,000m² of new logistics floorspace in Greater Manchester over the

period 2013-2033 under the moderate growth scenario, and 2,204,000m² under the high growth scenario.

6.45 These figures are summarised below.

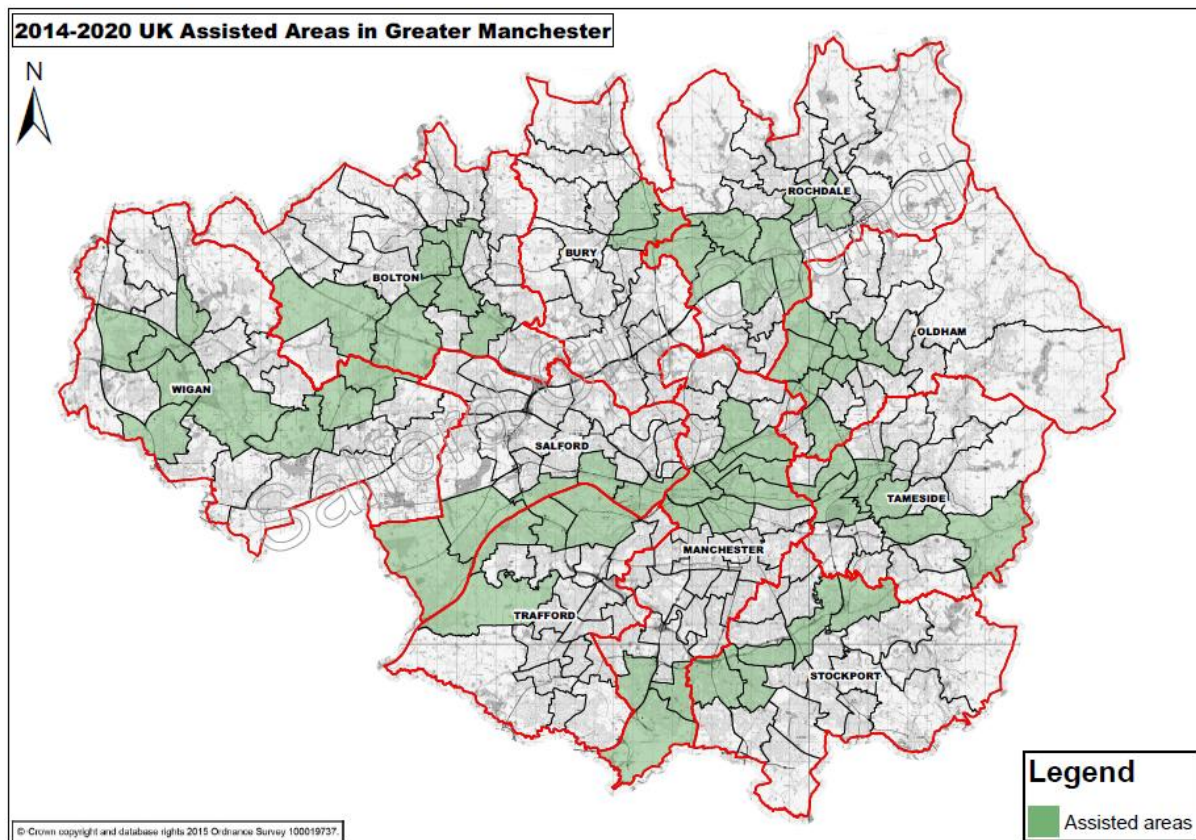
Scenario	New logistics floorspace in Greater Manchester 2013-2033 (square metres)	Extra logistics growth that could potentially be sought (square metres)
Replacement provision and forecast market growth	1,854,400	0
Moderate growth	2,090,000	235,600
High growth	2,204,000	349,600

7. Site characteristics

- 7.1 As discussed in the previous section, it is potentially dangerous to attempt to be overly prescriptive in terms of the type of sites and premises that need to be brought forward for employment uses. Occupier requirements are likely to evolve over time, sometimes very considerably, and Greater Manchester's site portfolio needs to be able to adapt and respond to this.
- 7.2 Nevertheless, there are a relatively small number of characteristics that can be identified that could helpfully inform the overall employment land strategy for Greater Manchester. Some of these are general to all uses, and others are specific to industry/warehousing or offices. Inevitably, certain characteristics will be more important than others for individual occupiers, some of whom may have additional requirements that are not generally applicable.
- 7.3 These common characteristics are set out below, and are informed by various studies, market commentaries and developer discussions. Some of those pertaining to industry and warehousing are similar to those for offices, but there are nuances between them and so are considered separately for each use.

General site characteristics

- 7.4 Value for money
- As with any investment decision, value for money will always be a key consideration for the development of employment sites
 - Occupiers may be prepared to forego some of the other ideal characteristics to secure cheaper accommodation
 - In this regard, it will be important to recognise that Greater Manchester may be competing for investment not just with nearby locations, but also with the rest of the country and potentially internationally in some cases
 - The avoidance, where possible, of significant/disproportionate abnormal costs will therefore be important, which could for example relate to site assembly, ground conditions, infrastructure requirements, planning obligations or the community infrastructure levy
 - There will be a tension between value for money and some of the other characteristics, as those sites that best meet such criteria are likely to command higher values, and so what constitutes value for money will very much depend on occupier requirements and comparisons with alternative locations
 - Relatively large parts of Greater Manchester benefit from Assisted Area status, as shown in the map below, which enables businesses within them to access regional aid



7.5 Certainty and speed of delivery

- There have been suggestions that Greater Manchester may have lost out on potential occupiers because of a lack of immediately available accommodation, or long lead-in times on the development of sites and uncertainties over when they may be ready
- The availability of sites for development without any significant delay is therefore important in ensuring that investment opportunities are captured
- Ideally this requires:
 - Clarity that a site is appropriate in planning terms, ideally with outline planning permission or a development plan allocation
 - A single land ownership, with no issues of covenants or ransom strips
 - Land preparation complete, for example in terms of a flat and remediated site
 - Infrastructure required to support the site's development in place, including in terms of transport and utilities, or there is committed funding and a firm timescale for such improvements
- In order to achieve these requirements, some front-funding by public agencies may be necessary
- When looking over the long-term to 2035, not all sites will need to be immediately available, but it will be important to ensure that there is a continuous flow and choice of sites that are ready for development within a short timescale

- Challenges in terms of immediate availability may vary in nature depending on the type of floorspace, with the provision of new infrastructure often a major issue for industry/warehousing whereas many office developments will be located where there is already high quality infrastructure but demolition of existing buildings is required

Industrial and warehousing site characteristics

7.6 Transport connections

- Good transport connections are essential, not just for logistics uses but also many manufacturing businesses, particularly those moving large numbers of components and/or finished products or involved in 'just-in-time' production where a rapid response to customer demand is required
- The benefits of proximity to transport connections can be compromised by congestion and the impact that this has on the length and reliability of journey times, both on the key route network and connections to it. This may require investment to improve capacity and tackle pinch points, but the scale of private sector contributions to this will be heavily influenced by the 'value for money' consideration discussed above
- For some uses, multi-modal opportunities will be important, providing a range of transport options depending on the source and market of goods, and the relative costs of the different modes
- Greater Manchester has some excellent road, rail, air and water connections that could help to attract investment, including an extensive motorway network, Manchester Airport and the Manchester Ship Canal, with particular opportunities where these routes converge

7.7 Access to suppliers and customers

- Although this is strongly linked to the previous characteristic of transport accessibility, some well-connected locations will be preferable to others due to the better access they provide to key markets and/or supply chains
- Issues such as transport costs and the impact of the Work Time Directive on haulage journey lengths can make geographical proximity an important consideration, and the ability to serve multiple markets can increase the attractiveness of a site
- For some uses, a location next to existing clusters of activity, either generally or in particular sectors, may be beneficial in terms of the ability to develop business links and take advantage of existing investment in infrastructure and facilities that support business development
- In general, proximity to major conurbations and easy access to strategic transport infrastructure are likely to be particularly important, but locations that have quick access to the M60, M62 and M6 are likely

to be most attractive, especially if they enable businesses to serve multiple major markets such as those of Leeds, Liverpool and Preston as well as Greater Manchester

7.8 Access to labour

- An accessible workforce with the right skills is often highlighted as a key issue for industrial and warehousing occupiers
- Some businesses will have very specialist requirements, which often leads to the clustering of firms in some sectors in locations where particular skills have developed and are now prevalent, but for most occupiers good proximity to major concentrations of population is likely to be sufficient to meet their labour requirements

7.9 Scale of site

- Large sites normally have the benefit of being able to provide flexibility in terms of the size, layout and design of individual plots and buildings, and so can respond to a wide variety of developer and occupier needs, including the very largest requirements
- Large sites typically also have the benefit of being able to accommodate a wide variety of different uses, with fewer limitations on operations
- There is still an important role for smaller sites, and these will make a vital contribution to Greater Manchester's employment land requirements, but ensuring a good supply of large sites in strategic locations would help Greater Manchester to maximise investment in industrial and warehousing activities

7.10 Profile

- In order to minimise risk, developers, occupiers and particularly investors will sometimes prefer established locations with a good reputation
- Sites that are able to take advantage of pre-existing positive perceptions of a location may therefore have a competitive advantage over sites in new locations that are not yet established or those in existing areas that are unknown beyond the immediate vicinity
- In less well-established locations, very large sites are more likely to be able to create their own market than smaller ones, although it may take some time for momentum to develop unless a few major occupiers can be secured at an early stage

Office site characteristics

7.11 Transport connections

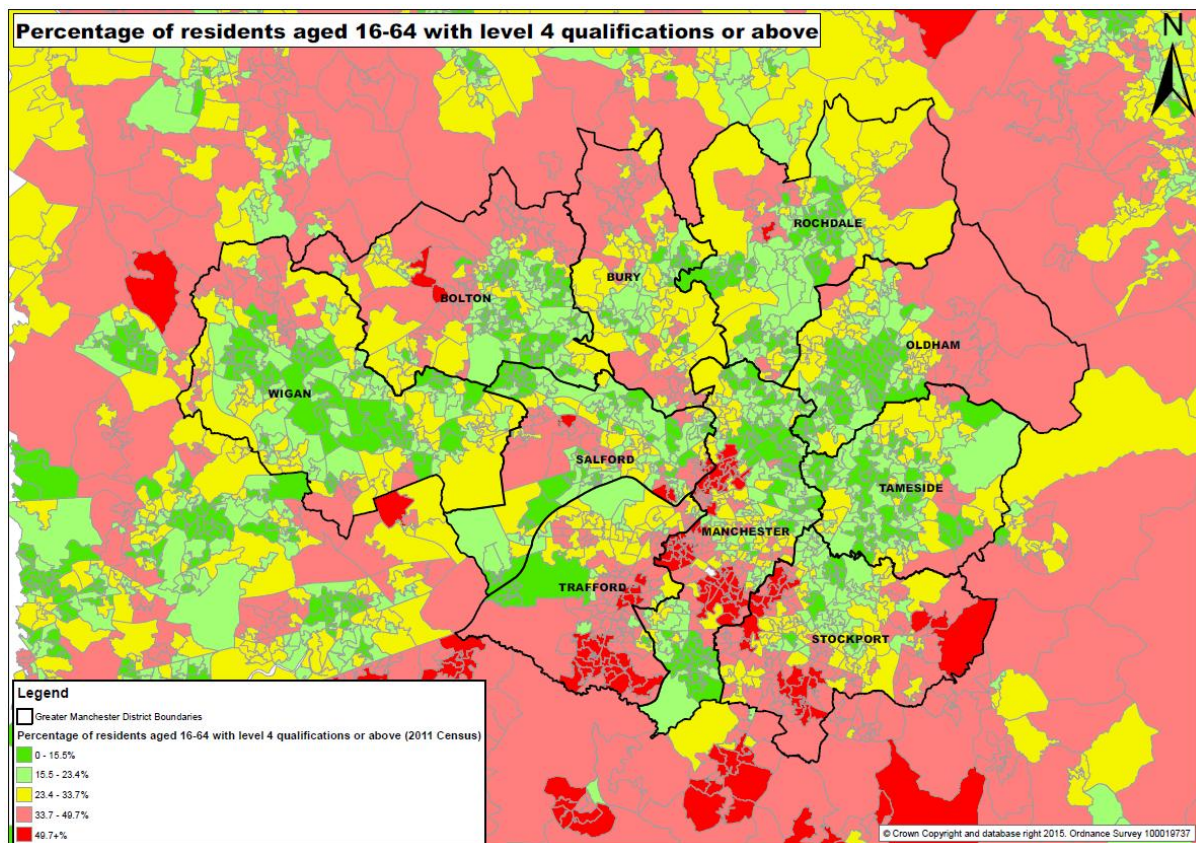
- Excellent transport connections are required to ensure that premises are accessible to both employees and clients
- Office uses often draw workers from a wider area than industrial and warehousing uses, and so a good range of high quality transport links may be required
- The precise type of connections that are needed may vary significantly between occupiers, with some relying on high quality public transport provision whereas others may require plentiful parking and good motorway accessibility, and certain occupiers a mixture
 - There may be a tension between the demands of some occupiers for high quantities of parking and wider sustainability objectives to reduce reliance on the private car for commuting
- Some businesses will also value very good international connections, although in many cases fast and frequent services to Manchester Airport may be sufficient, such as those available from the city centre, rather than necessitating a site in immediate proximity to the airport
- Numerous locations within Greater Manchester could therefore be attractive to at least some occupiers:
 - The city centre is likely to have the widest appeal, given the quality, frequency and varied destinations of its public transport
 - The unrivalled combination of air, rail, Metrolink and motorway access at Manchester Airport, together with the proposed High Speed 2 station, make this location potentially very attractive to many occupiers
 - The major town centres are also likely to have considerable potential resulting from their transport connections. The location of Wigan Town Centre on the West Coast Mainline and the direct rail services from Stockport to London may give them some advantages over the other major town centres, and there are also reasonably fast services to London from Altrincham, Ashton-under-Lyne and Bolton
 - The combination of a rail station and motorway access may partly explain the recent success of Middlebrook in Bolton in attracting office uses, particularly call centres, and there are several other locations within Greater Manchester that combine good motorway and rail (train and/or Metrolink) access

7.12 Digital connectivity

- Digital connections are becoming as important as transport connections for some occupiers, and the standards required are continually increasing
- Sectors for which this will be particularly important include creative/media, ICT/digital, environmental technologies and healthcare/biotech, although most businesses will increasingly require a minimum standard of digital connectivity

7.13 Access to labour

- Easy access to a large pool of skilled labour is generally considered to be important for most office occupiers
- In many cases, a location within a major conurbation may be sufficient, but some occupiers may require a significant concentration of people with high level qualifications which could give preference to sites within or with direct access from certain parts of Greater Manchester
- The emphasis on a knowledge economy may lead to locations close to research establishments such as universities and hospitals being seen as particularly attractive, not just because of the potential labour supply but also the opportunities for collaboration on, and exploitation of, research activity
 - The Corridor in Manchester, focused around Oxford Road in the southern part of the city centre, is particularly significant in this regard given the very large concentration of knowledge-based activity
 - There may also be potential associated with the University of Salford, both around Salford Crescent Station and at Salford Quays, and the University of Bolton, near Bolton Station and the town centre
- The map below shows the proportion of working age residents in each Census output area with a qualification at level 4 or above, using data from the 2011 Census
 - There is a clear hotspot within the city centre and Salford Quays
 - There is an extensive area with high proportions of well-qualified residents in the south of the conurbation extending through Trafford, Manchester and Stockport, and into north Cheshire
 - Hotspots can also be seen around west Bolton and north Bury, and some other locations on the edge of Greater Manchester, stretching into adjoining districts outside the sub-region



7.14 High quality environment

- High quality environments with good access to a range of retail and leisure opportunities for employees are identified as an important requirement for many occupiers
- These issues are likely to be most important for more footloose firms that have a wide choice of potential locations and need to be able to compete for skilled labour with other major cities, which are the type of business that Greater Manchester will need to attract if it is to deliver high levels of economic growth and drive forward the Northern Powerhouse
- The city centre is most likely to be able to provide this type of environment, as may the main town centres on a smaller scale
- For some occupiers, close proximity to major out-of-centre facilities such as the Trafford Centre and Middlebrook may be acceptable, particularly those looking for lower cost accommodation with high levels of car parking

7.15 Profile

- Ideally, occupiers will often seek locations in areas that give them a degree of 'presence', supporting their corporate image
- The city centre will often provide the best such opportunities, but some occupiers may seek other central or gateway sites in well-known office locations, and Manchester Airport may increasingly be seen as providing the opportunity for a high profile

- Greater Manchester is normally recognised as having three major office markets (the city centre, Salford Quays and south Manchester, with the latter extending beyond the local authority area of Manchester), and investors and occupiers are likely to perceive these as much lower risks than locations with a lower market profile that may be seen as having a much more local function and market

7.16 Clustering

- Clustering can be important for companies requiring very high-level or specialist skills, facilitating knowledge transfer and business opportunities
- Once a cluster has established, it can considerably enhance the relative attractiveness of a location for associated sectors, making it the first option for many related businesses
- Clustering tends to be more significant for some sectors, such as creative/media, than others
- Establishing significant clusters from scratch can be difficult, unless there are major anchors around which related uses can congregate
- High profile clusters in Greater Manchester include:
 - Business, finance and professional services within the city centre
 - Creative and digital uses within the city centre and Salford Quays
 - Health innovation and education within the Corridor in Manchester

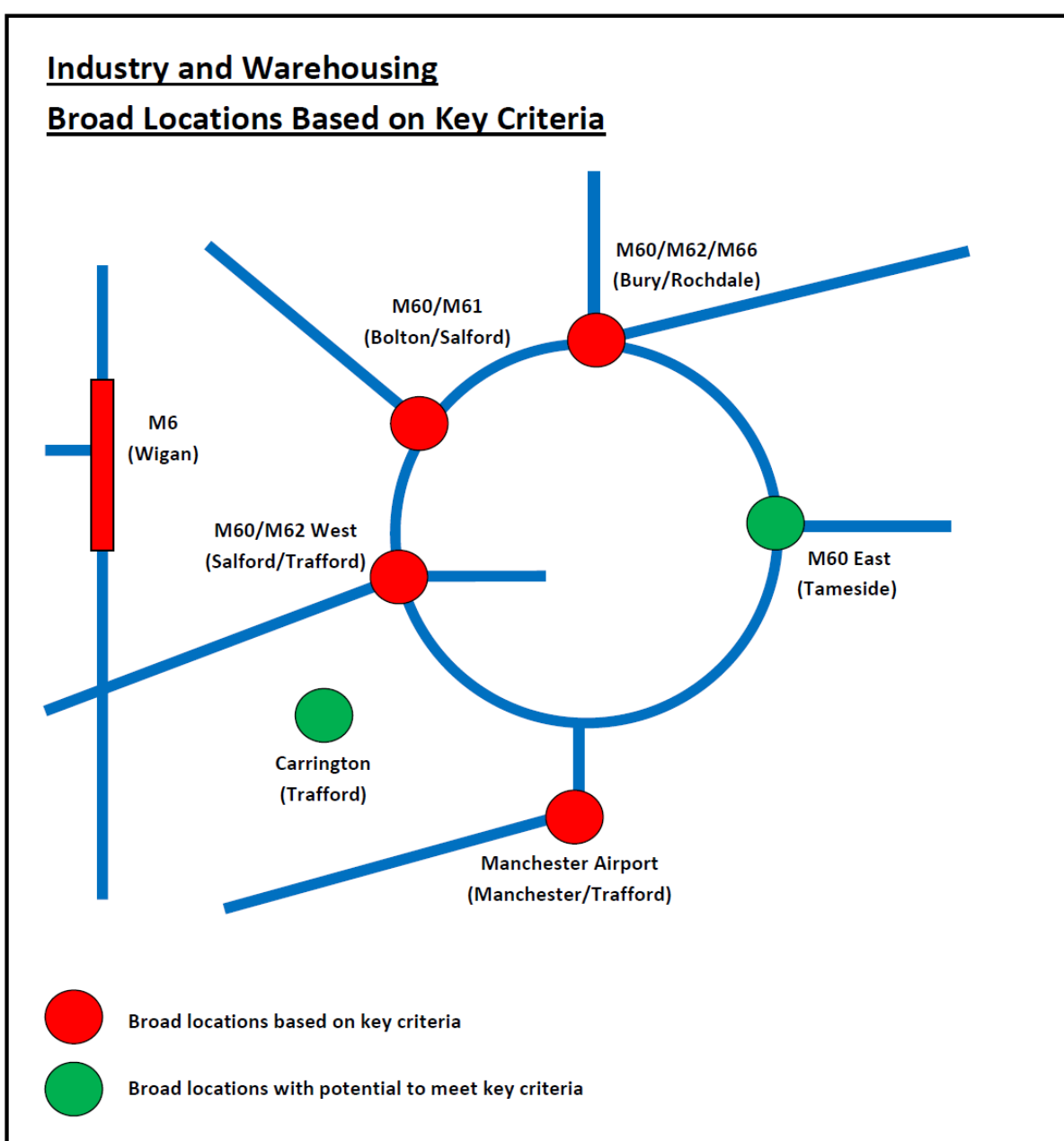
Locations in Greater Manchester meeting the site characteristics

- 7.17 Having regard to the various characteristics discussed above, it is possible to identify broad locations within Greater Manchester that may have the greatest potential to attract new investment and support economic growth. It will be important to investigate the potential for bringing forward additional sites in these locations, although most if not all would require major investment in infrastructure to support any new employment floorspace.
- 7.18 This should in no way be seen as suggesting that other areas do not have an important role to play, and it will be the combination of attractive sites across the sub-region that will help to secure a prosperous and successful future for Greater Manchester and its individual neighbourhoods. It may be appropriate to consider how other locations can be made to perform better against the site characteristics, so that more areas can contribute to and benefit from economic growth.
- 7.19 The sites below may be best placed to draw in additional economic activity to Greater Manchester, in light of the ideal site characteristics discussed above. They have differing attributes, and so some may have greater potential than others to enhance sub-regional competitiveness, but all have established developer interest. Further work is required to identify whether there are

sustainable opportunities within these locations which would offer the necessary scale and deliverability whilst also being consistent with wider policy objectives.

- 7.20 Although they may not always meet the ideal site characteristics, many existing employment areas will continue to play a vital role in supporting economic growth, providing established commercial locations with a recognised profile, established business links and easy access to a significant labour force and markets. Consideration will need to be given to how their role can be protected and enhanced, and new employment floorspace brought forward within them.

Industry and warehousing



M60/M62 west (within Salford and Trafford)

7.21 Key attributes of the area:

- Excellent highway connections, at the junction of the M60, M62 and M602 motorways
 - The location next to the M60 ensures good access to the Greater Manchester market, with the M602 providing access directly to the core of the conurbation
 - The location within the M62 corridor enables businesses to serve other large sub-regions such as Leeds and Liverpool
- Port Salford under development, which will provide:
 - Port facilities on the Manchester Ship Canal, with direct links to the new post-Panamax facility at the Port of Liverpool which is currently being constructed
 - Rail connections via the Manchester-Liverpool line, which is currently being electrified and connects to the West Coast Main Line
 - Improved highway access, which should have wider network benefits
 - A high profile multi-modal centre for logistics, which could help to attract associated uses to Greater Manchester, particularly on nearby sites
- Includes City Airport & Heliport (Barton Aerodrome), which may provide small-scale opportunities for air-borne freight
- Good proximity to major residential areas, providing easy access to labour
- Adjacent to Trafford Park, which is one of the largest employment areas in the country and has a very strong market profile, offering the potential to create an enormous, high quality area of industrial and warehousing activity, and thus major opportunities for clustering and business links
- Potential for further significant improvements to the area's highway and public transport accessibility, for example through the provision of a new junction on the M62 and the completion and extension of the proposed Trafford Park Metrolink line

Manchester Airport (within Manchester and Trafford)

7.22 Key attributes of the area:

- Very good highway connections, with the M56 motorway providing direct links to the M60 and M6
 - Highway accessibility will be enhanced further over the next few years with improvements to the A556 to the west, and the SEMMS scheme linking to the A6 to the east
- International connections via Manchester Airport, which are unrivalled in the UK outside London
- Close proximity to major residential areas, with excellent public transport links by rail and Metrolink, providing easy access to labour, including a large concentration of residents with high level qualifications

- Very high profile location, with the potential to develop a very distinctive offer not seen in many competing cities
 - The 'Airport City Manchester' brand provides an internationally recognised investment opportunity, and a basis for attracting further activity
- Enterprise Zone status offers further incentives for businesses to locate in this area
- May be some potential for rail-served activities in the longer-term, given the proximity of existing infrastructure

M60/M62/M66 (within Rochdale and Bury)

7.23 Key attributes of the area:

- Excellent highway connections, at the junction of the M60, M62 and M66 motorways
 - The location next to the M60 ensures good access to the Greater Manchester market, with the M66 also providing easy access to Bury Town Centre
 - The location within the M62 corridor enables businesses to serve other large sub-regions such as Leeds and Liverpool
- Good proximity to major residential areas, providing easy access to labour
- Established location with a good reputation within the key M62 corridor, particularly around Heywood, which has already demonstrated its ability to attract significant investment
 - Potential to form a larger cluster of activity with adjacent locations such as Kingsway and Stakehill in Rochdale
- May be some potential for rail-served activities in the longer-term, given the proximity of existing infrastructure, to further diversify the businesses for which it could prove an attractive location

M6 corridor (within Wigan)

7.24 Key attributes of the area:

- Very good highway connections from the M6 motorway
 - M6 provides excellent north-south access, providing opportunities to accommodate businesses with a national coverage
 - Easy access to key west-east connections such as the M62 and East Lancashire Road, providing good links to both the Greater Manchester and Merseyside markets, though it is less central to either than some competing locations
 - M58 further enhances access to the west, providing good links to the Port of Liverpool and therefore international connections
 - Funding has been agreed through the Greater Manchester Growth Deal for a link road eastwards from Junction 26 of the M6
- Potential for improved rail connections to provide multi-modal sites
 - Wigan-Kirby line is being upgraded to provide W9 loading gauge to the West Coast Main Line
 - Proximity to other rail lines may offer further opportunities for enhanced rail access

- Along with the M1 motorway, the M6 is seen as a stronghold for logistics investment
 - The combination of the M6 and the West Coast Main Line provides the potential to develop a strong profile for sites in this location, building on the good reputation of this nationally significant corridor
- Labour supply is more dispersed than for some competing locations discussed here, but still reasonably good access to a range of population centres in the west of Greater Manchester, east Merseyside and West Lancashire

M60/M61 (within Bolton and Salford)

7.25 Key attributes of the area:

- Good highway connections, near the junction of the M60 and M61 motorways
 - The location next to the M60 ensures good access to the Greater Manchester market, and links to the important M62 corridor, although this is constrained to some extent by high levels of congestion
 - The M61 provides good access to large markets to the north, such as Preston, and a direct connection to the key M6 corridor
- Good proximity to major residential areas, providing easy access to labour
- A positive profile is being established with the ongoing development of Logistics North next to junction 4 of the M61
 - Immediately available following major investment in site preparation and infrastructure, and able to accommodate a wide range of needs
 - The site was granted outline planning permission in December 2013, and three units totalling over 800,000ft² should be occupied by early 2016, including Aldi's regional distribution centre, with a reserved matters application submitted for a further two units
 - This suggests that the location is able to attract a significant level of interest, and is likely to be developed relatively quickly, although the committed occupiers are relocations from within the north of Greater Manchester rather than new businesses to the sub-region
 - Large country park surrounding the site will provide a high quality environment for employees

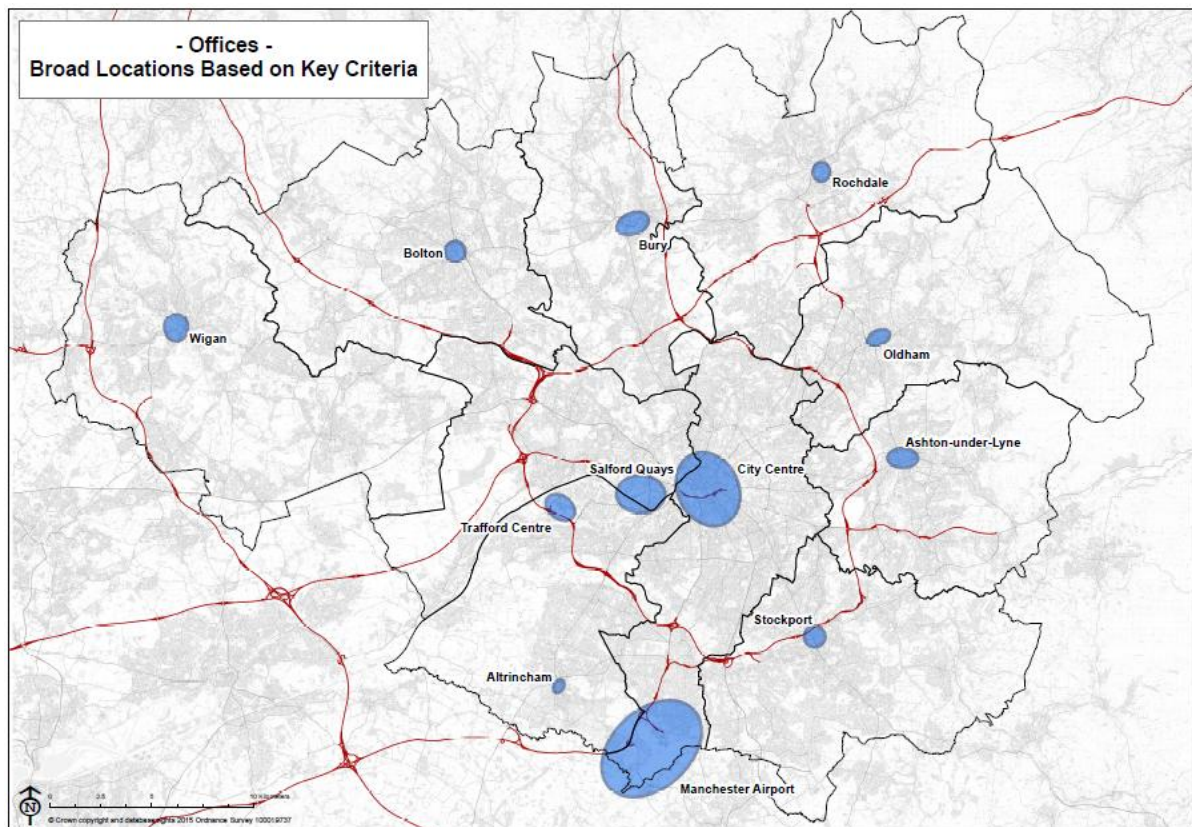
Other locations

7.26 In addition to the five broad locations identified above, other areas may also be able to make a significant contribution to the provision of new industrial and warehousing accommodation, but they may require significant transport infrastructure investment in order to better meet occupier requirements and compete with sites outside Greater Manchester. Large, flat sites adjacent to the motorway network or major roads linking to them will have the greatest potential. Two examples are:

- Carrington (within Trafford)
 - Transport links to the site are relatively poor at present, impacting on its potential to attract occupiers and tap into Greater Manchester's labour pool
 - However, it is relatively close to the centre of the sub-region, and key transport infrastructure such as the M60 motorway and the Manchester Ship Canal
 - Major investment in road and rail infrastructure would be required to maximise the competitiveness of this location

- M60 east (primarily within Tameside)
 - Any location with a direct connection to a junction on the M60 motorway will provide good access to the wider Greater Manchester market and the sub-region's labour supply
 - However, the area does not currently benefit from the confluence of major highway links to other sub-regions in the same way as the areas discussed above, although the M60 provides a connection to them
 - The Northern Transport Strategy refers to exploring the potential for a major new road link under the Pennines between Manchester and Sheffield, and if built this could significantly enhance the attractiveness of this eastern side of the M60 as a business location, enabling it to better compete for industrial and warehousing occupiers

Offices



City Centre (within Manchester and Salford)

7.27 Key attributes of the area:

- Has now emerged as the strongest office market in the UK outside London, with an international profile that enables it to attract a wide variety of businesses
- The scale of activity in the city centre provides agglomeration economies that many other locations cannot compete with, and offers significant opportunities for clustering
 - Existing clusters of key sectors include profession, financial and business services, medical innovation and education, which provide a strong basis for attracting additional activity
- Very high levels of accessibility, particularly by public transport, with good rail links to major cities across the country including London
 - Further major improvements are proposed, including a High Speed 2 station
 - Capacity enhancements will be required to maintain this strong position as the city centre continues to grow
- The central location and excellent accessibility mean that it has a very large labour pool from which to draw
- Very large concentration of knowledge resources, particularly within The Corridor, including three major universities
- High quality environment and distinctive character, with a very wide range of facilities, make it an attractive location for workers

Salford Quays (within Salford and Trafford)

7.28 Key attributes of the area:

- Established office location with a strong market profile
- Diverse range of occupiers, but with an internationally significant cluster of media-related uses focused around the MediaCityUK brand
- High quality environment with an attractive waterside setting
 - Range of retail, leisure and food/drink facilities, though not at the scale of many competing locations
- Reasonably good transport accessibility, but transport infrastructure has been identified as a limiting factor on the area's growth unless major investment in road and public transport connections is secured
 - Good motorway connections via the M602
 - A Metrolink line through the area provides direct access to the city centre offering clustering opportunities across this wider 'regional centre' area
 - Proposed new Trafford Park Metrolink line will enhance public transport access to the south of the area
- Central location enables good access to a large skilled labour pool
- Developing concentration of education uses, including the University of Salford media campus

Manchester Airport (within Manchester and Trafford)

7.29 Key attributes of the area:

- See description above in relation to its attributes as an industrial and warehousing location
- Established office location, forming a key part of the popular South Manchester market
- Lacks the 'town centre' environment and facilities of other key office locations

Major town centres (Altrincham, Ashton-under-Lyne, Bolton, Bury, Oldham, Rochdale, Stockport and Wigan)

7.30 All of the major town centres generally benefit from:

- A wide range of retail and leisure facilities that provide a positive working environment for employees
- Good public transport accessibility, although this is often focused on a relatively local catchment, and direct connections to the major office market in the city centre
- A central location relative to a local labour market, although skill levels of surrounding populations vary significantly between centres
- A strong profile within the local area, though more limited beyond the sub-region

7.31 There are certain attributes that may enable some town centres to better meet the needs of some occupiers. In particular, Stockport Town Centre benefits from a combination of direct mainline rail connections to London, a location immediately adjacent to the M60 motorway, easy access to a large concentration of skilled labour, close proximity to Manchester Airport, and forms part of the established South Manchester office market.

Trafford Centre

7.32 Key attributes of the area:

- Good motorway access via the M60, with local highway improvements underway
- Improving public transport accessibility, with a dedicated bus station and proposed Metrolink connection
- One of the country's largest retail and leisure areas, providing the potential for a high quality environment for workers
- Significant national profile, though not currently for offices, but potential to tap into the adjoining South Manchester market
- Close to a large concentration of highly skilled residents

Other locations

7.33 Although there is a planning policy preference for locating office developments within existing city centres and town centres, there is often also market demand for what might be considered out-of-centre locations. Consideration will need to be given to whether it is appropriate to identify a small number of such locations for additional office development in order to attract a segment of the market that might otherwise not come to Greater Manchester.

- 7.34 An example of where this product has already been successfully developed over recent years within Greater Manchester is at Middlebrook at Bolton, which benefits from good public transport accessibility, direct motorway access, a large retail and leisure park, and a location on the edge of one of the larger clusters of skilled workers in the north of Greater Manchester. Further work is required to identify whether there are other locations that may have similar characteristics, and which could therefore potentially provide an office product to complement that found within the city centre and town centres.

8. Identifying employment floorspace requirements

Identifying an appropriate scale of future economic growth

8.1 Section 4 of this report discussed the following five different economic forecasts, the first four of which are produced by Oxford Economics:

- 2014 GMFM (Greater Manchester Forecasting Model), which is a baseline economic and demographic forecast
- AGS-SNPP, which takes the ONS 2012-based sub-national population projections as an input and assumes that the key aspirations of the Government's long-term economic plan for the North West will be achieved
- AGS-High, which uses the same economic assumptions as the AGS-SNPP but with a higher population input
- AGS-Higher, which again uses the same economic assumptions as the AGS-SNPP but with an even higher population input
- Experian UK local market forecasts from June 2015, which is a baseline economic forecast using the ONS 2012-based sub-national population projections as an input

8.2 Some of the key outputs of these forecasts for the period 2014-2035 are summarised in the table below.

Output	Economic forecast				
	2014 GMFM	AGS-SNPP	AGS-High	AGS-Higher	Experian June 2015
GVA (2011 prices)					
- Absolute change (£ millions)	36,453	43,497	48,385	52,912	34,065
- % pa change	2.5	2.8	3.1	3.3	2.2
Total employment					
- Absolute change	155,614	221,443	301,730	376,073	203,100
- % pa change	0.51	0.71	0.94	1.15	0.65
Net change in employment floorspace					
- Industry	-729,401	-519,762	-236,550	25,690	N/A
- Warehousing	463,869	763,457	1,128,992	1,467,460	N/A
- Offices	1,151,679	1,499,783	1,854,253	2,182,474	N/A

8.3 Section 3 of this report considered some of the strategic growth opportunities for Greater Manchester. The combination of the ambitions associated with the Northern Powerhouse concept and set out in the Government's long-term economic plan for the North West, coupled with the economic opportunities associated with devolution and the competitive advantages of the sub-region, suggests that simply seeking to meet the growth levels identified in one of the

baseline economic forecasts (i.e. 2014 GMFM or Experian) may underplay the potential of Greater Manchester. Given the ambitious vision for Greater Manchester to be one of the world's leading sub-regions, driving sustainable growth across a thriving North of England, it would seem appropriate to aspire to higher levels of economic growth than identified in the baseline forecasts.

- 8.4 The three accelerated growth scenarios produced by Oxford Economics seek to do this, and are specifically tied to two of the key elements of the Government's long-term economic plan for the North West, namely that the long term growth rate and the employment rate for the region increase to at least the UK average. The forecast methodology for these scenarios assumes that Greater Manchester takes a leading role in achieving these improvements for the North West. Consequently, the accelerated growth scenarios are considered to be an appropriate starting point for identifying the scale of economic growth for which Greater Manchester should be planning.
- 8.5 The separate report on the objectively assessed need for housing considers a wide range of population scenarios, including the three that are used as inputs to the respective three accelerated growth scenarios. That report concludes that the objectively assessed need (OAN) for housing is 217,350 net additional dwellings over the period 2014-2035. The population scenario that underpins this is based on the ONS 2012-based sub-national population projections, but assumes a higher rate of international net in-migration to Greater Manchester up to 2023. The table below compares the population increase in that scenario over the period 2012-2035 with each of those underpinning the three accelerated growth scenarios. The figure for 2014 is taken from the 2014 GMFM rather than the individual population forecasts to ensure that they are comparable.

Scenario	Forecast population change 2014-2035			
	Total population		Change 2014-2035	
	2014	2035	Total change	% change pa
AGS-SNPP	2,729,065	3,030,100	301,035	0.50
AGS-High	2,729,065	3,142,674	413,609	0.67
AGS-Higher	2,729,065	3,266,188	537,123	0.86
Housing OAN	2,729,065	3,039,360	310,295	0.51

- 8.6 The population growth associated with the objectively assessed need for housing lies between those used for the AGS-SNPP and the AGS-High, but is much closer to the former, with the forecast population growth being about 3% higher. A separate version of the accelerated growth scenario based on the housing OAN has not been produced, given the similarities with the AGS-SNPP scenario, but the tables below provide a broad indication of the key outputs that would be expected given the scale of underlying population growth compared to the levels in the AGS-SNPP and the AGS-High forecasts. They assume that the housing OAN output always lies in the same position relative to the AGS-SNPP and AGS-High outputs as it does for population; that is, that it is at a point where the gap between the AGS-SNPP and the

housing OAN outputs is 8.2% of the gap between the AGS-SNPP and AGS-High outputs. The floorspace estimates/forecasts assume a 10% vacancy rate.

Scenario	GVA forecasts/estimates 2014-2035 (2011 prices)			
	Total GVA (£ millions)		Change 2014-2035	
	2014	2035	Absolute	% pa
AGS-SNPP	54,745	98,242	43,497	2.8
AGS-High	54,745	103,130	48,385	3.1
Housing OAN estimate	54,745	98,644	43,899	2.8

Scenario	Employment forecasts/estimates 2014-2035			
	Total employment		Change 2014-2035	
	2014	2035	Absolute	% pa
AGS-SNPP	1,391,952	1,613,395	221,443	0.71
AGS-High	1,391,952	1,693,682	301,730	0.94
Housing OAN estimate	1,391,952	1,620,000	228,048	0.73

Scenario	Industrial floorspace forecasts/estimates 2014-2035			
	Total floorspace		Change 2014-2035	
	2014	2035	Absolute	% pa
AGS-SNPP	6,210,973	5,691,212	-519,762	-0.42
AGS-High	6,210,973	5,974,423	-236,550	-0.18
Housing OAN estimate	6,210,973	5,714,509	-496,464	-0.40

Scenario	Warehousing floorspace forecasts/estimates 2014-2035			
	Total floorspace		Change 2014-2035	
	2014	2035	Absolute	% pa
AGS-SNPP	6,582,072	7,345,529	763,457	0.52
AGS-High	6,582,072	7,711,064	1,128,992	0.76
Housing OAN estimate	6,582,072	7,375,598	793,526	0.54

Scenario	Office floorspace forecasts/estimates 2014-2035			
	Total floorspace		Change 2014-2035	
	2014	2035	Absolute	% pa
AGS-SNPP	5,623,385	7,123,168	1,499,783	1.13
AGS-High	5,623,385	7,477,638	1,854,253	1.37
Housing OAN estimate	5,623,385	7,152,327	1,528,942	1.15

- 8.7 The estimated GVA growth rate of 2.8% per annum associated with the housing OAN would be well above Oxford Economics' forecast rate of 2.5% for the UK as a whole, and only slightly behind their forecast of 3.0% for London. Given the strength of the capital's economy, maintaining this level of growth in Greater Manchester over a prolonged period would appear very ambitious but, provided appropriate delivery mechanisms are in place, could be considered realistic given the strategic growth opportunities identified for the sub-region. Under the housing OAN, the Greater Manchester economy would be approximately 8.2% larger in 2035 than in the 2014 GMFM forecast.

- 8.8 The estimated rise in total employment of 228,000 associated with the housing OAN would represent a 16% increase over the period 2014-2035. It is 12% higher than the employment increase identified in the Experian forecast, and 47% above that forecast by the 2014 GMFM, and so once again would appear ambitious.
- 8.9 Based on the housing OAN and accelerated growth scenario assumptions, the estimated net change in employment floorspace in Greater Manchester that it is considered appropriate to plan for is therefore approximately (rounding to the nearest 1,000m²):
- **A net increase of 297,000m² of industrial/warehousing floorspace**
 - **A net increase of 1,529,000m² of office floorspace**

Potential implications for districts

- 8.10 The accelerated growth scenarios have been produced at the Greater Manchester level and do not provide figures for individual districts. The above approach to estimating the implications of the housing OAN cannot therefore be replicated for individual districts. A broad indication for total employment can be gained by applying the spatial distribution of growth in the 2014 GMFM to the Greater Manchester figure identified above. This effectively assumes that the proportion of growth in each district remains constant, meaning that districts forecast to see high growth in the 2014 GMFM will see a large absolute difference in forecast employment growth between the housing OAN and the 2014 GMFM, whereas those forecast to see low growth will see little further increase under the housing OAN. An alternative approach is to assume that the proportion of Greater Manchester's total employment in 2035 is the same under the housing OAN as in the 2014 GMFM. Both approaches are shown in the table below.

	Estimated change in total employment 2014-2035					
	2014 GMFM outputs		Spatial distribution of housing OAN growth if same as for 2014 GMFM		Spatial distribution of total employment in 2035 same as for 2014 GMFM	
	Total employment in 2035	Forecast change 2014-35	Estimated change for housing OAN	Difference between housing OAN and 2014 GMFM	Estimated change for housing OAN	Difference between housing OAN and 2014 GMFM
Bolton	141,120	15,812	23,171	7,360	22,417	6,605
Bury	84,690	8,165	11,965	3,800	12,128	3,964
Manchester	449,263	64,254	94,162	29,908	85,282	21,027
Oldham	93,805	3,781	5,541	1,760	8,171	4,390
Rochdale	82,482	959	1,405	446	4,819	3,861
Salford	165,752	28,017	41,058	13,041	35,775	7,758
Stockport	156,387	15,801	23,156	7,355	23,121	7,320
Tameside	80,705	1,333	1,954	621	5,111	3,777
Trafford	172,213	13,754	20,156	6,402	21,814	8,060
Wigan	121,151	3,739	5,479	1,740	9,409	5,670

	Estimated change in total employment 2014-2035					
	2014 GMFM outputs		Spatial distribution of housing OAN growth if same as for 2014 GMFM		Spatial distribution of total employment in 2035 same as for 2014 GMFM	
	Total employment in 2035	Forecast change 2014-35	Estimated change for housing OAN	Difference between housing OAN and 2014 GMFM	Estimated change for housing OAN	Difference between housing OAN and 2014 GMFM
Greater Manchester	1,547,566	155,615	228,048	72,433	228,048	72,433

- 8.11 As would be expected using the first methodology described above, the main concentration of the additional growth associated with the housing OAN compared to the 2014 GMFM is in Manchester and Salford. This would seem consistent with the location of the sectors that are likely to drive any additional growth under the accelerated growth scenarios, as many will be focused in and around the city centre.
- 8.12 Under the second methodology, Manchester again sees the highest level of additional employment growth under the housing OAN, but to a much lesser extent than under the first methodology. Generally, there is a more even share between the districts of the additional employment growth associated with the housing OAN. Rochdale, Tameside, Oldham, Bury and Wigan generally see the lowest employment growth under both methodologies.
- 8.13 The precise distribution of the uplift in employment growth would in practice be highly dependent on the location of opportunities to bring forward additional land for development, and there would be considerable scope to deviate from the figures above.
- 8.14 A similar approach can be used to estimate the spatial distribution of the employment floorspace changes. It is not possible to apply the first methodology used above to warehousing floorspace because some districts are forecast to see a net reduction under the 2014 GMFM and others a net increase, so using that methodology would result in the scale of the losses increasing as well as gains, thus implying that some districts would perform worse under the housing OAN. For consistency, the table below therefore only uses the second methodology described above, and shows the estimated change in floorspace in each district under the housing OAN.

	Estimated change in employment floorspace under the housing OAN scenario 2014-2035 (m ²)			
	Industrial	Warehousing	Industrial and warehousing	Offices
Bolton	-55,687	76,457	20,770	137,075
Bury	-41,991	35,634	-6,356	53,705
Manchester	-24,842	258,367	233,525	639,037
Oldham	-55,635	11,379	-44,256	44,858
Rochdale	-80,389	19,751	-60,637	31,500
Salford	8,423	183,735	192,158	266,623
Stockport	-45,160	57,468	12,308	139,544

	Estimated change in employment floorspace under the housing OAN scenario 2014-2035 (m ²)			
	Industrial	Warehousing	Industrial and warehousing	Offices
Tameside	-79,012	24,895	-54,117	33,067
Trafford	-25,864	91,519	65,655	127,835
Wigan	-96,308	34,321	-61,987	55,697
Greater Manchester	-496,465	793,526	297,061	1,528,941

- 8.15 The above table is intended to provide a very general indication of the possible spatial distribution of employment floorspace change under the housing OAN, and therefore it is only appropriate to draw broad conclusions from it. All districts would see a net increase in warehousing floorspace under the housing OAN, with high levels of additional growth in Manchester and Salford. Manchester and Salford would continue to dominate the increase in office floorspace. As with the total employment distribution discussed earlier, the distribution of employment floorspace growth will depend very much on the availability of development opportunities that are attractive to potential occupiers.

Identifying employment floorspace requirements

- 8.16 Despite the fundamental importance of the provision of new employment floorspace for supporting economic growth, the methodologies for identifying employment floorspace requirements are poorly developed. Whereas the Government's Planning Practice Guidance is clear that the latest DCLG household forecasts should form the starting point for identifying dwelling requirements, it is much vaguer in the approach to be taken for identifying employment floorspace requirements, and simply refers to a range of information that plan makers should consider. In practice, despite analysing a wide range of evidence, many employment land reviews fall back on past trends as the basis for determining future requirements.

Net and gross floorspace

- 8.17 The identification of employment floorspace requirements is made more problematic by the difficulties of translating estimates of the net change in demand for different types of floorspace, based on economic forecasts, into gross requirements for new employment floorspace. All but one of the forecasts discussed in this report would result in a reduction over the period 2014-2035 in the total amount of industrial floorspace required, but this does not mean that there would be no need for new industrial floorspace. The stock of premises is constantly being renewed as older buildings exceed their useful lifespan and the changing needs of businesses prompts the development of new premises.
- 8.18 The forecasts of net change in floorspace therefore represent the balance between the gross additions and the gross losses. For industrial floorspace,

the gross losses are likely to exceed the gross additions, resulting in a net loss, whereas the economic forecasts suggest that the opposite will be the case for warehousing and offices.

- 8.19 Theoretically, if the net change can be forecast and gross losses can be estimated then the required gross additions can be calculated. However, estimating gross losses is fraught with difficulties.
- 8.20 Consideration of past trends in floorspace losses would potentially be a starting point, but a simple extrapolation could be very misleading as losses may have significant peaks and troughs that are not necessarily related to the demand for new accommodation but are more the result of premises falling into disrepair and/or being redeveloped or reused for other uses such as housing. Although improvements are gradually being seen, there is not currently any detailed monitoring of employment floorspace losses in all districts across Greater Manchester, and so data on past trends is not available. The Government used to publish very broad data on the amount of employment floorspace in each district, but this was discontinued several years ago with the last figures relating to 2004/5, and the data was not directly comparable with the definitions of floorspace types used by districts.
- 8.21 Another approach would be to attempt to identify the existing premises that are likely to be demolished or converted to other uses, in order to give an estimate of future gross losses. In practice, this is impossible to do comprehensively with any level of certainty. Some future losses will be known to be likely where they are the subject of a planning permission, and others may be known due to discussions with developers. However, a large proportion of future losses will not be possible to identify, particularly when looking over a period of two decades, as they will depend on a wide range of factors including individual decisions made by existing occupiers, the degree to which occupier demands change over time, levels of investment from property owners, and demands from other uses for redevelopment or conversion.
- 8.22 As a result of these issues, there is no widely accepted methodology for translating forecast net change in employment floorspace into gross requirements for new employment floorspace.

Past trends

- 8.23 Given the difficulties of translating net into gross requirements, plans are often based on a continuation of past average gross employment floorspace development rates. As discussed in section 5, if future employment floorspace requirements were based purely on a continuation of the past rates of development seen over the period 2004-2014, then Greater Manchester would require:
- Gross additions of 3,171,015m² of industrial/warehousing floorspace
 - Gross additions of 2,210,038m² of office floorspace

- 8.24 Although past trends are often used, it is questionable the extent to which they are a good indicator of future requirements. All other things being equal, the continuation of past development rates could be considered to represent 'business as usual', with any aspirations for higher levels of economic growth potentially requiring an increase in development rates, whereas lower levels of development could possibly constrain growth compared to the past.
- 8.25 However, a range of other factors will influence the need and demand for new employment floorspace, not least the quality of existing premises and their ability to meet the changing needs of businesses, and also the rate at which existing floorspace is lost including to other uses such as housing. In some circumstances, high past levels of development could have led to a significant degree of renewal in employment floorspace resulting in less demand for new floorspace in the future, whereas low rates could have built up problems of quality in the stock of premises which will require higher development rates in the future to address it. Equally, an acceleration in the changing demands of occupiers could lead to the need for higher rates of renewal and new development in the future. Levels of investment in renewing existing stock will also have an impact, and changing risk profiles for developers and increased cost pressures on occupiers could lead to a much greater focus on reutilising second-hand floorspace.
- 8.26 These factors are essentially intangible, and there is little evidence available on their trends. In combination, this makes it impossible to identify with any degree of certainty whether continuing past levels of development rates would lead to a surplus, shortfall or about the right amount of new employment floorspace coming onto the market.
- 8.27 If a continuation of past trends was used to identify gross requirements for individual districts, and the housing OAN floorspace estimates were used to identify net change, then gross reductions could be estimated as shown in the two tables below, with the first relating to industrial and warehousing floorspace, and the second to office floorspace. In practice, a higher or lower level of gross additions may be appropriate, but this gives a rough indication of the scale of losses that might be expected.

	Net and gross changes in industrial and warehousing floorspace 2014-2035		
	Estimated net change (1)	Gross additions based on past trends (2)	Calculated gross reductions (2 minus 1)
Bolton	20,770	180,830	160,060
Bury	-6,356	127,991	134,347
Manchester	233,525	303,948	70,423
Oldham	-44,256	265,512	309,769
Rochdale	-60,637	619,576	680,213
Salford	192,158	223,321	31,163
Stockport	12,308	214,729	202,421

	Net and gross changes in industrial and warehousing floorspace 2014-2035		
	Estimated net change (1)	Gross additions based on past trends (2)	Calculated gross reductions (2 minus 1)
Tameside	-54,117	270,507	324,625
Trafford	65,655	649,362	583,707
Wigan	-61,987	315,239	377,226
Greater Manchester	297,061	3,171,015	2,873,954

	Net and gross changes in office floorspace 2014-2035		
	Estimated net change (1)	Gross additions based on past trends (2)	Calculated gross reductions (2 minus 1)
Bolton	137,075	226,662	89,587
Bury	53,705	67,633	13,928
Manchester	639,037	883,478	244,441
Oldham	44,858	88,559	43,701
Rochdale	31,500	74,577	43,077
Salford	266,623	352,571	85,948
Stockport	139,544	170,640	31,096
Tameside	33,067	58,966	25,899
Trafford	127,835	155,108	27,273
Wigan	55,697	131,844	76,148
Greater Manchester	1,528,941	2,210,038	681,097

8.28 The figures in the two tables are very different. In terms of the office floorspace table, there is a reasonably similar spatial relationship between the estimated net change in floorspace from the housing OAN and the gross additions that would be required if the scale of future development matched past rates. Bury, Tameside, Trafford and Stockport look as though they may need an uplift in development compared to past rates, given the relatively small absolute and proportionate difference between their estimated net change and gross requirements based on past levels of development. To a greater or lesser extent, the figures for Bolton, Oldham, Rochdale and Wigan suggest that those districts may all require lower levels of new development than in the past in order to deliver the estimated net change under the housing OAN, assuming that no individual district is significantly disproportionately affected by floorspace losses.

8.29 A much more varied picture is seen in the table relating to industrial and warehousing floorspace. For Manchester and Salford, a continuation of past development rates would appear unlikely to deliver the estimated net change in floorspace, unless they saw virtually no losses of existing floorspace, which is extremely unlikely. In contrast, if Rochdale and Trafford continued their past development rates, then they would be expected to see very large reductions

in existing floorspace, due to the high levels of completions seen in recent years, with the former estimated to see a net loss overall. Oldham, Tameside and Wigan would also see considerable reductions in floorspace if they continued their past development rates, given the estimated net change in industrial and warehousing floorspace for those districts. Thus, the gross additions in some districts may largely involve moving around existing occupiers, which may help to protect their economic position rather than necessarily improve it.

- 8.30 Given that the forecasts of net change in employment floorspace are heavily influenced by past trends and relationships between variables, it would be anticipated that there would be a reasonably close relationship between forecast net change and past development rates, and this can be seen in the figures for office floorspace. However, there appears to be no discernible relationship in the case of industrial and warehousing floorspace, with Rochdale having the second lowest estimated net change in floorspace for 2014-2035 despite having the second highest gross completions for 2004-2014.
- 8.31 This once again highlights the challenges in translating economic forecasts into gross floorspace requirements, and complicates consideration of whether a reduction or increase compared to past development rates would be required in order to deliver the estimated net change in floorspace consistent with the housing OAN.
- 8.32 The total gross reductions that could be seen if the net change and gross addition figures were correct are very significant across Greater Manchester in the case of industrial and warehousing floorspace, equating to around 22% of the total such floorspace estimated from the 2014 GMFM to exist in 2014. This would represent a quite considerable level of floorspace renewal, although it would take around a century for all existing floorspace to be replaced at that rate. A lower figure of 12% is seen for offices, which appears quite limited when looking at a period of two decades, and so it is possible that a higher rate of replacement floorspace could be seen, and therefore that some uplift on past development rates would be required in terms of office floorspace.

Market demand

- 8.33 The net floorspace figures discussed above are based on economic forecasts of job change in different sectors. Both them and any gross requirements based on past development rates will therefore be influenced by the locations where businesses have previously invested, and so should reflect market characteristics to some extent. However, there is significant scope for the spatial distribution of net floorspace change to vary over time, depending on the locations that best meet changing occupier requirements.
- 8.34 The discussion of ideal site characteristics in section 7 would suggest that certain parts of Greater Manchester may be better placed than others to take

advantage of growth opportunities, and this may mean that there is a significant deviation in actual employment floorspace change from that identified above.

Supply

- 8.35 The supply of high quality development opportunities, particularly meeting the characteristics identified in section 7, will be a key determinant of the spatial distribution of future employment floorspace growth. Although the forecasts provide a starting point for what may be required in each district, the demand could easily move around in response to the best development opportunities.
- 8.36 The sites suggested in response to the current consultation on the Greater Manchester Spatial Framework could potentially highlight additional opportunities, and so it is not possible to draw any firm conclusions on the appropriate distribution of employment floorspace requirements within Greater Manchester at this time. Supply issues are considered further below.

Strategy

- 8.37 The continuation of past patterns of economic development may not necessarily be appropriate, and it will be important for the spatial distribution of employment floorspace to support the overall strategy for Greater Manchester that will be set out in the spatial framework. Two particularly important elements are likely to be how to secure a reduction in the need to travel by less sustainable modes, and how to ensure that all parts of Greater Manchester contribute to and benefit from economic growth.
- 8.38 In terms of this second issue, the evidence set out in this report, in terms of past activity, current conditions, forecasts and key opportunities, is reasonably consistent in identifying that Manchester and Salford are in a particularly strong position. If Greater Manchester is to be successful then it will be essential that the best is made of this competitive position of the two cities.
- 8.39 The evidence is also quite consistent in indicating that some locations, particularly the north-east districts of Oldham, Rochdale and Tameside, but also Wigan on some measures, have been playing a lesser role than the rest of Greater Manchester in delivering employment growth and are likely to continue to do so in the future. It will therefore be important that a strong economic function can be found for these areas so that they are able to make a more significant contribution to Greater Manchester's economic growth, and to fully share in its benefits. This must be focused on securing net additional investment to Greater Manchester if long-term sub-regional growth prospects are to be enhanced. Major interventions may be required to exploit this potential and transform the growth prospects of these areas, for example in terms of employment, housing, labour market and skills, so that they are better able to attract investment targeted at more than just the local market.

Land supply

Total identified supply

- 8.40 The ten local authorities have provided data on their estimated employment land supply for the period 2014-2035, in terms of the gross new floorspace that could be provided on specific sites, as shown below. The sites within this supply are considered by the local authorities to be developable and deliverable, and broadly compliant with existing planning policies. The precise methodology that has been used for calculating their employment land supply may vary between districts, for example in terms of the choice of site size thresholds for inclusion.

	Employment supply (gross new floorspace m ² 2014-2035)	
	Industrial/warehousing	Offices
Bolton	499,818	134,324
Bury	64,326	117,433
Manchester	283,971	1,344,169
Oldham	193,004	73,290
Rochdale	340,385	70,888
Salford	347,256	705,757
Stockport	113,445	157,532
Tameside	153,664	22,800
Trafford	698,491	261,368
Wigan	336,798	200,331
Greater Manchester	3,031,158	3,087,891

Comparison of past development rates and identified future supply

- 8.41 Section 5 of this report set out the past levels of employment floorspace development over the period 2004-2014, and identified what the industrial/warehousing and office floorspace requirement would be for the period 2014-2035 if they were simply a continuation of those past average rates. In order to ensure choice and flexibility within the identified supply of employment sites, so that a wide range of developer and occupier needs can be met, it is often assumed that the identified supply should exceed the requirement by 20%.
- 8.42 The table below compares the identified supply of sites for gross new industrial and warehousing floorspace, as shown above, with the estimated net floorspace change associated with the housing OAN and the requirements for 2014-2035 if they were based on past average development levels from the period 2004-2014, with the assumption that a 20% supply buffer will be required. In practice, a smaller supply buffer may be appropriate if a considerable proportion of the supply consists of large, high quality sites without any significant development constraints, as there will be greater

confidence that those sites will be capable of meeting the needs of businesses.

	Industrial and warehousing floorspace requirements 2014-2035 based on past trends compared with identified supply (m ²)				
	Estimated net change for housing OAN 2014-2035	Requirement based on past average for 2004-2014	Supply required if using past trend with a 20% buffer	Supply identified by districts	Surplus (+) / shortfall (-) against past trend with 20% buffer
Bolton	38,461	180,830	216,996	499,818	+282,822
Bury	2,110	127,991	153,589	64,326	-89,263
Manchester	273,246	303,948	364,737	283,971	-80,766
Oldham	-31,663	265,512	318,615	193,004	-125,611
Rochdale	-47,061	619,576	743,491	340,385	-403,106
Salford	213,970	223,321	267,985	347,256	+79,271
Stockport	29,383	214,729	257,675	113,445	-144,230
Tameside	-42,573	270,507	324,609	153,664	-170,945
Trafford	87,781	649,362	779,234	698,491	-80,743
Wigan	-47,726	315,239	378,287	336,798	-41,489
Greater Manchester	475,927	3,171,015	3,805,219	3,031,158	-774,061

- 8.43 Although the identified supply across Greater Manchester is only slightly below the requirement based on past average development rate, once a 20% buffer has been applied then there is a shortfall of over 770,000m². Only two districts have a supply surplus compared to their past levels of development, Bolton and Salford. In the case of Bolton, this exceeds 280,000m² as a result of a combination of the second largest supply in Greater Manchester and the second lowest past rate of development.
- 8.44 Using this approach, Bury, Manchester, Trafford and Wigan all have shortfalls of less than 100,000m², although there are significant differences between the positions of these districts. Trafford has both the highest past development average and by far the largest identified supply, whereas Bury has the smallest supply by a considerable way but also the lowest past development rate. Stockport and Tameside have the next lowest supplies, resulting in shortfalls of roughly 150,000m². By far the largest shortfall is seen in Rochdale, in significant part due to the extrapolation of high levels of development delivered in the past.
- 8.45 When considering the estimated net change in floorspace associated with the housing OAN, the supply looks very tight in Manchester, and would only just be sufficient to deliver the net change if there was virtually no loss of existing floorspace. The identified supplies for Rochdale and Wigan appear much healthier in this context, and would easily deliver the net change figures even if there were very significant losses of existing floorspace. The low supply

figures for Bury, Stockport and Tameside appear less concerning when compared with the net change figures.

8.46 The next table sets out the same information for office floorspace.

	Office floorspace requirements 2014-2035 based on past trends compared with identified supply (m ²)				
	Estimated net change for housing OAN 2014-2035	Requirement based on past average for 2004-2014	Supply required if using past trend with a 20% buffer	Supply identified by districts	Surplus (+) / shortfall (-) against past trend with 20% buffer
Bolton	144,628	226,662	271,994	134,324	-137,670
Bury	57,001	67,633	81,159	117,433	+36,274
Manchester	674,541	883,478	1,060,174	1,344,169	+283,995
Oldham	48,033	88,559	106,271	73,290	-32,981
Rochdale	34,394	74,577	89,493	70,888	-18,605
Salford	280,397	352,571	423,085	705,757	+282,672
Stockport	149,526	170,640	204,768	157,532	-47,235
Tameside	36,040	58,966	70,759	22,800	-47,959
Trafford	140,812	155,108	186,130	261,368	+75,238
Wigan	61,300	131,844	158,213	200,331	+42,118
Greater Manchester	1,626,672	2,210,038	2,652,046	3,087,891	+435,846

8.47 In contrast to industrial and warehousing provision, this shows that Greater Manchester has a considerable supply surplus of sites for office floorspace compared to past levels of development. All of that surplus is effectively generated by Manchester and Salford, with each having a supply more than 280,000m² larger than required to continue their past development rates. These two cities account for 66% of the total identified supply within Greater Manchester, and 56% of the office floorspace delivered over the period 2004-2014.

8.48 More modest supply surpluses are seen in Bury, Trafford and Wigan, although the first of these is in part due to relatively low levels of past development. Oldham, Rochdale, Stockport and Tameside all have reasonably small shortfalls compared to past levels of development, but in the case of Tameside the identified supply is very small and the shortfall is minimised by the fact that the district had the lowest past development average. Bolton can be seen to have the largest shortfall taking this approach, which is primarily due to it having had the third highest past development rate after Manchester and Salford, with the identified supply being mid-range for the ten districts.

8.49 The identified supplies for Bolton and Tameside are less than their estimated net change, and so would be insufficient to deliver the scale of growth likely to be associated within the housing OAN. The supply in Oldham, Rochdale and

Tameside also leaves very little scope for existing floorspace losses and choice/flexibility in the site supply. Manchester and Salford have particularly large supplies compared to the net change in office floorspace that could be expected based on the OAN housing scenario.

Conclusions

- 8.50 Given that the 2014 GMFM forecast is based on past trends and relationships, it may be expected that a continuation of past employment floorspace development rates would be approximately what would be required to deliver the net floorspace changes in that forecast. The housing OAN would be expected to involve a higher net increase of office floorspace (1,528,942m² compared to 1,151,679m²), and a net increase rather than decrease in industrial and warehousing floorspace (increase of 297,062m² compared to a reduction of 265,532m²).
- 8.51 It would seem likely that part of this difference in net floorspace change would be accounted for by higher levels of new floorspace provision, and some of it would be the result of greater occupation and less loss of existing floorspace, since higher economic growth would rely on a wide range of businesses requiring a variety of accommodation. It is assumed here that there would be a 50/50 split between increased new supply and decreased losses, although the actual ratio could vary considerably depending on the types of occupier involved and the precise nature of their needs.

Industrial and warehousing floorspace

- 8.52 It is estimated that the housing OAN would involve a net increase of 297,062m² of industrial and warehousing floorspace over the period 2014-2035, whereas the 2014 GMFM would see a net reduction of 265,532m², which is a difference of 562,594m². If it is assumed that there is a 50/50 split between increased new supply and decreased losses, then this would mean that an additional 281,297m² of new industrial and warehousing floorspace would be required under the housing OAN compared to a simple continuation of past development rates. This would therefore give a total gross industrial and warehousing floorspace requirement for the period 2014-2035 of 3,452,312m² (3,171,015 + 281,297).
- 8.53 This uplift of 281,297m² of new industrial and warehousing compared to the continuation of past development rates would be sufficient to deliver a considerable enhancement in the role of Greater Manchester for logistics, as discussed in the Greater Manchester logistics study⁴⁵ and at the end of section 6 above. The need for additional industrial and warehousing land could potentially be reduced if there was confidence that the existing supply of premises could meet the changing needs of businesses. Given that the three completed occupier deals at Logistics North involve relocations from elsewhere in Greater Manchester, it would be expected that there would

⁴⁵ MDS Transmodal (September 2014) *Greater Manchester Logistics Study: Technical Report*

continue to be significant demand for new floorspace, simply in order to retain existing businesses wanting to upgrade or expand.

8.54 Once a 20% buffer has been allowed for, the above requirement for 3,452,312m² of new industrial and warehousing floorspace would necessitate a potential supply of 4,142,775m². When compared with the current identified supply of sites of 3,031,158m², this means that there may be a need to find sites for an additional 1,111,617m² of industrial and warehousing floorspace, equating to around 318 hectares of land at a 35% plot ratio.

8.55 Taking the same approach, the industrial and warehousing floorspace requirements for the other scenarios are shown below, together with that for the housing OAN:

	Calculation of industrial and warehousing floorspace requirements and supply 2014-2035						
	Floorspace change 2014-2035		Additional floorspace required compared to past trends (50/50 split)	Gross floorspace requirement 2014-2035	Total supply requirement with a 20% buffer	Current supply position surplus(+)/ shortfall(-)	
	Estimated net floorspace change	Difference with 2014 GMFM				Floorspace	Land equivalent ⁴⁶
2014 GMFM	-265,532	0	0	3,171,015	3,805,219	-774,061	-221
AGS-SNPP	243,695	509,227	254,614	3,425,629	4,110,755	-1,079,597	-308
Housing OAN	297,062	562,594	281,297	3,452,312	4,142,775	-1,111,617	-318
AGS-High	892,442	1,157,974	578,987	3,750,002	4,500,003	-1,468,845	-420
AGS-Higher	1,493,150	1,758,682	879,341	4,050,356	4,860,428	-1,829,270	-523

Office floorspace

8.56 It is estimated that the housing OAN would involve a net increase of 1,528,942m² of office floorspace over the period 2014-2035, whereas the 2014 GMFM would see a net increase of 1,151,679m², which is a difference of 377,263m². If it is assumed that there is a 50/50 split between increased new supply and decreased losses, then this would mean that an additional 188,631m² of new office floorspace would be required under the housing OAN compared to a simple continuation of past development rates. This would therefore give a total gross office floorspace requirement for the period 2014-2035 of 2,398,669m² (2,210,038 + 188,631).

8.57 Once a 20% buffer has been allowed for, this requirement for 2,398,669m² of new office floorspace would necessitate a potential supply of 2,878,403m². When compared with the current identified supply of sites of 3,087,891m², this means that there would be a surplus of 209,488m² in the supply. In practice, it would be appropriate to retain all of that supply so as to ensure that there is continued office development potential after 2035, and to maximise the ability to attract potential office occupiers during the plan period.

⁴⁶ Assumes a plot ratio of 35%

	Calculation of office floorspace requirements and supply 2014-2035						
	Floorspace change 2014-2035		Additional floorspace required compared to past trends (50/50 split)	Gross floorspace requirement 2014-2035	Total supply requirement with a 20% buffer	Current supply position surplus(+)/ shortfall(-)	
	Estimated net floorspace change	Difference with 2014 GMFM				Floorspace	Land equivalent ⁴⁷
2014 GMFM	1,151,679	0	0	2,210,038	2,652,046	435,409	+29
AGS-SNPP	1,499,783	348,104	174,052	2,384,090	2,860,908	226,547	+15
Housing OAN	1,528,942	377,263	188,631	2,398,669	2,878,403	209,051	+14
AGS-High	1,854,253	702,573	351,287	2,561,325	3,073,590	13,865	+1
AGS-Higher	2,182,474	1,030,795	515,398	2,725,436	3,270,523	-183,068	-12

Summary

8.58 On this basis, it may be appropriate for the following levels of employment floorspace development to be planned for in order to support delivery of the housing OAN scenario.

	Employment floorspace requirements 2014-2035				
	Floorspace (m ²)			Land supply equivalent (hectares) ⁴⁸	Uplift on past development averages
	Net change	Gross additions	Gross supply required ⁴⁹		
Industry and warehousing	297,000	3,452,000	4,143,000	1,184	9%
Offices	1,529,000	2,399,000	2,878,000	192	9%

8.59 As discussed earlier, further work will be needed to determine the appropriate distribution of these Greater Manchester requirements between the ten districts. This will be partly informed by the analysis of any sites that are suggested for development as part of the 'call for sites' during the consultation on the Greater Manchester Spatial Framework, particularly in terms of filling the potential supply gap for industrial and warehousing floorspace. It will also be influenced by the ongoing 'Deep Dives' work described in the introduction of this report.

⁴⁷ Assumes a plot ratio of 150% (also see next footnote, which explains that this is a very broad estimate)

⁴⁸ The ratio of floorspace to site area, known as plot ratio, can vary enormously between different types and location of premises, particularly for offices. Consequently, these land supply figures should be seen as purely indicative. Given that a large proportion of office development is likely to be of a high density in the city centre and town centres, a plot ratio of 150% has been assumed here. A plot ratio of 35% has been assumed for industry and warehousing.

⁴⁹ Gross additions plus a 20% buffer