



Transport for  
Greater Manchester

# Transport for sustainable communities: a guide for developers

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# Transport for sustainable communities: a guide for developers

## 1 Introduction

Many developments will have an impact on the transport network, either by generating more car traffic, increasing the number of people using public transport or altering the highway infrastructure in some way. They may also impact on peoples' lives in terms of whether or not they can access key facilities.

This document is offered, by Transport for Greater Manchester, as a source of non-statutory guidance on sustainable transport, and is intended to supplement the statutory policies set out in the National Planning Policy Framework, Core Strategies/Local Plans and guidance documents produced by local planning authorities.

### **National Planning Policy**

The National Planning Policy Framework (NPPF), 2012, makes it clear that the purpose of planning is to help achieve sustainable development. Broadly this means allowing for growth in a way that does not compromise the ability of future generations to meet their own needs. There are three aspects of sustainable development: economic, social and environmental, and transport has a central role in all three.

The economic benefits of transport are clear: sustained economic growth depends, in part, on people having easy access to work, education, healthcare, shopping and leisure and on businesses being able to access markets and distribute goods. However, these benefits can be undermined by congestion and poor accessibility. The social and environmental impacts of transport are more complex. Transport can have an impact on the health and wellbeing of the population, in terms of air quality, safety, levels of participation in work and training, physical activity and social interaction. These issues are even more pronounced for disabled people. Lack of transport, inability to use the transport available or to afford it, can therefore be a significant factor contributing to social exclusion. From the environmental perspective, the growing contribution of transport to greenhouse gas emissions means that the way we travel affects our efforts to tackle climate change, and in urban areas like Greater Manchester transport emissions are also a major source of air pollution.

Many of these impacts are a consequence of our over-reliance on the car and the locational decisions that have made it a more convenient choice for many journeys. The annual cost of local transport to the national economy has been estimated<sup>1</sup> as £11 billion in excess delays in urban areas, £4 billion in carbon emissions, £9 billion in road traffic accidents and up to £25 billion on the costs to the health of communities, arising from physical inactivity, air quality and noise.

Given the scale of these impacts, it is not surprising that one of the core principles of NPPF is that planning should actively manage patterns of growth to make the fullest possible use of active travel (walking and cycling) and public transport, and focus significant development in locations which are, or can be made, sustainable.

Interpretation of the broad NPPF policies at the local level will be through the planning policies of individual local authorities. The Greater Manchester local authorities are committed to achieving greater integration between land use and transport and relevant policies are included in their Core Strategies/Local Plans, as well as in the Greater Manchester Local Transport Plan.

However Local Plans will need to be supported by detailed technical guidance in some policy areas to give clarity to developers and local communities. This document aims to meet that need in terms of sustainable transport, by bringing together standards and best practice. The document is in two parts: a brief overview explaining the role of TfGM and setting out the transport principles for sustainable development; and a longer technical guidance which provides more detail on providing sustainable transport for new development. This covers Transport Assessments (and the accessibility assessments and travel plans that support them), planning obligations and some general design principles as well as the more detailed aspects of planning for active travel, public transport and managing the impact of car travel and freight traffic.

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<sup>1</sup> White paper 'Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen', 2011

# Overview

## 2 Transport for Greater Manchester and development management

### The role of Transport for Greater Manchester

Transport for Greater Manchester (TfGM) is the body responsible for certain transport and travel matters across Greater Manchester, covering the planning authorities of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan.

The responsibilities of TfGM include: preparing the Local Transport Plan for Greater Manchester; investing in new transport infrastructure; owning Metrolink and making sure that it is run safely and efficiently; owning the bus stations, shelters and stops; paying for some socially necessary bus services which are not provided by the commercial bus operators; subsidising concessionary fares and free travel; working with the rail industry to ensure that rail services meet local needs; co-ordinating network management strategies, investment and roadworks on the Key Route Network<sup>2</sup>; managing traffic signals and co-ordinating strategies for walking, cycling and road safety across the conurbation.

As a body responsible to the Greater Manchester Combined Authority, TfGM works closely with the ten planning authorities on the development of their forward plans and to ensure that these are supported by, and compatible with, the Local Transport Plan. The objectives of the LTP are:

- to ensure that the transport network supports the Greater Manchester economy to improve the life chances of residents and the success of business;
- to ensure that carbon emissions from transport are reduced in line with UK Government targets in order to minimise the impact of climate change;
- to ensure that the transport system facilitates active, healthy lifestyles and a reduction in the number of casualties; and that other adverse health impacts are minimised;
- to ensure that the design and maintenance of the transport network and provision of services supports sustainable neighbourhoods and public spaces and provides equality of transport opportunities; and
- to maximise value for money in the provision and maintenance of transport infrastructure and services.

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<sup>2</sup> Described in section 9

The LTP describes the transport improvements to be delivered by 2014/15 as well as those planned for the longer term. An understanding of future transport plans can help developers to identify the most appropriate uses (or the balance between them) for a site. A copy of the current LTP can be viewed at: <http://www.tfgm.com/ltp3/>

TfGM does not have any planning powers, and is not a statutory consultee in the planning process. However we offer advice to the ten planning authorities, advising them on the best way to improve land use/transport integration through forward plans and development proposals.

We do not object to development proposals unless they directly affect our operations, but instead work with planning authorities to achieve agreed objectives. The advice we provide is in accordance with Greater Manchester transport policy, as set out in the ten UDPs/Core Strategies and the Greater Manchester Local Transport Plan.

### What is Transport for Greater Manchester interested in?

TfGM will only offer specific advice to local planning authorities on developments that are of strategic importance or which affect its operational role (see below). This document is intended to explain the thinking behind that advice and also to act as a more general source of guidance for other developments, where TfGM may not provide specific advice.

### Strategic developments

TfGM is likely to offer advice to planning authorities on developments which generate a large number of trips, or have some other significant impact on the GM transport network and are therefore deemed to be of strategic significance.

Developments which generate a large number of trips may have significant transport implications, particularly if they do not have good public transport access. In these cases, TfGM will offer advice on maximising travel by sustainable modes, i.e. active travel and public transport, or on managing the Key Route Network (see section 9) to maintain the reliability of journey times. TfGM will want to comment on 'strategic' proposals for:

- residential development comprising or including over 80 units (houses or flats);
- retail/industrial/office development over 2,500m<sup>2</sup>; or
- any other commercial, community or leisure based development or visitor attraction proposing 100 or more parking spaces.

However, the strategic significance of a development will depend on other factors, such as location and timing, as well as its size. TfGM also has a strategic interest in:

- developments that include significant new transport infrastructure (other than site access); and

- developments adjacent to strategic transport proposals, such as future rapid transit routes (current strategic transport proposals in Greater Manchester are shown on Figure 1: Greater Manchester Transport Fund<sup>3</sup> Schemes).

In commenting on strategically significant proposals, TfGM may also have detailed comments related to the need to protect infrastructure and services (see below). In extreme cases TfGM will object to planning applications that significantly prejudice its operational interests.

## Other developments

Some smaller developments (i.e. below the size thresholds described above) can potentially have an impact on TfGM operations. In these cases, TfGM may have detailed, design-related comments or may need to ensure that infrastructure and services are protected during construction. As with strategic developments, TfGM will object to planning applications that significantly prejudice its operational interests.

TfGM will wish to be contacted, to provide relevant comment, on any development:

- within 200 metres of any operational or proposed Metrolink line, including the new extensions currently under construction or proposed, as outlined in the LTP;
- adjacent to a bus or rail station;
- requiring the re-location of a bus stop or shelter;
- requiring the introduction of, or changes to, traffic signals;
- proposing the alteration or removal of existing bus priority infrastructure; or
- involving a new secondary school.

## What help can TfGM provide to developers?

### Pre-application

TfGM believes that it is essential to consider transport issues at an early stage in the development of proposals, and certainly in advance of submitting a planning application. However whilst we are happy to provide advice, we recognise that transport is only one of the many issues that will need to be considered by the planning authority and it is therefore important to set TfGM advice in the context of other issues. We therefore aim to work with the planning authority to reach a common understanding of issues and potential solutions. For this reason, pre-application discussions should be arranged through the Local Planning Authority. If we are approached directly by a developer, we will notify the planning authority.

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<sup>3</sup> These schemes represent agreed Greater Manchester priority schemes. The map will be updated periodically.

From a developer's perspective, pre-application discussions can highlight issues at an early stage, including whether the planning authority will be seeking any developer contributions. Particular issues which need TfGM involvement at the pre-application stage are:

- the approach to be taken in the Transport Assessment to traffic modelling (including adequate contemporary observation of existing conditions across a suitable area of interest and working from a basis of underlying person trip generation and realistic travel mode share), junction design, public transport access, walking and cycling provision, to ensure that these will be acceptable before the work is undertaken on the TA itself;
- linked to the above, the impact of the development on both the existing operational Metrolink system and the future proposals for new extensions and stops;
- the best way to serve a development by bus, including the likely commercial viability of new services and the cost of providing a non-commercial service; and
- the extent to which any transport improvements would require developer funding.

### **Consultancy services**

In addition, TfGM's consultancy service, the Highways Forecasting and Analytical Service (HFAS), working with the GM Urban Traffic Control unit, can provide a range of paid-for services. For example, subject to the scale and type of development HFAS can:

- identify the likely vehicle and person travel demand in weekday or other relevant periods;
- use a range of highway models to scope an area of influence to aid study scoping discussions with the highway authority;
- scope the scale of supporting evidence/study required (including liaison with GMUTC regarding traffic signal control of affected junctions);
- check the local database for suitable count data and/or arrange for additional surveys to provide empirical observation of current conditions and traffic behaviour;
- to help assess mode targets, carry out accessibility analysis as appropriate;
- use model outputs and/or other data to review travel demand, mode split and distribution to develop highway demands (and optionally other mode demands; including first order identification of relevant scheduled public bus services);
- consider appropriate liaison with relevant TfGM operational services;
- subject to the above, use a range of highway models to forecast development traffic impacts for discussion with the highway authority and identification of appropriate interventions; and
- report findings.

### 3 Transport principles for sustainable development

To maximise the sustainability of a new development, the following five transport principles should be followed:

- maximise accessibility;
- reduce the need to travel by car;
- make the best use of existing infrastructure;
- design for active travel; and
- mitigate impacts.

Each of these is discussed briefly below, with more detailed technical guidance provided in sections 4–9.

#### **Principle 1: Maximise accessibility**

All significant new development should be accessible by public transport. This not only gives people the option of using their cars less (reducing congestion and CO<sub>2</sub> emissions) but enables those who do not have access to a car to take up opportunities: for work, education, healthcare and leisure. In recent years there has been growing recognition that transport can be a significant barrier to social mobility<sup>4</sup>. Although there has been a huge rise in mobility for people who have access to a car, getting to work, learning, healthcare and other facilities has become more difficult for those who do not, due to the decline of local services and the growth of out-of-town facilities.

For new development, the starting point for good accessibility is to locate in areas that have good public transport links and to use the most accessible locations (in town or city centres or around public transport interchanges) for developments that generate the highest number of trips. The Local Plans/Core Strategies of the Greater Manchester planning authorities all contain policies to encourage development in locations with good public transport access.

Good pedestrian and cycle links to key local facilities, including public transport stops and interchanges, are also a key part of good accessibility, providing low carbon access for short local journeys and helping people to improve their health by leading more active lives.

#### **Principle 2: Reduce the need to travel by car**

Most people aspire to car ownership and the car is the most convenient choice for many journeys. However, given the economic and environmental costs of congestion, the growing cost of car ownership (particularly for young people) and rising fuel prices, it is vital that people are provided with attractive non-car options for their travel.

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<sup>4</sup> 'Making the Connections: Final Report on Transport and Social Exclusion' The Social Exclusion Unit, 2003

Providing good access to public transport services and pedestrian and cycling networks is obviously essential but ‘behavioural change’ measures, to influence the way people travel, may also be needed. These can range from simply providing information about alternatives to providing assistance (e.g. in the form of training) or inducements (such as discounted tickets). Where congestion is a concern measures to make car use less desirable, such as parking restrictions, road layouts that favour pedestrians and cyclists or bus priority, may be needed.

On large sites, mixed use development can reduce the overall need to travel e.g. by providing facilities such as retail, banking or a crèche within an employment area, or locating local services close to housing. Homeworking can also reduce the need to travel and this can be catered for through design, such as the provision of broadband connections or flexible living space.

### **Principle 3: Make the best use of existing infrastructure**

Locating development close to existing public transport not only improves accessibility, but can help to build the case for additional services by generating more trips to/from the area. Similarly, providing a connection or better signage to an existing cycle route can encourage greater use of the entire network, as can providing better information about cycle routes and facilities.

On the road network, additional development can lead to congestion, which results in longer and less reliable journeys for both people and freight and can increase road safety issues. In Greater Manchester, this is a particular concern on the Highways Agency’s Strategic Route Network (i.e. the motorway network and trunk roads)<sup>5</sup> and on the GM Key Route Network<sup>6</sup> linking the major town and city centres. These locations are often very accessible by public transport, making them attractive for development, but the impact on key routes needs to be managed so that journey times remain reliable and do not increase. This may involve both encouraging people to use sustainable transport and actual traffic management measures.

### **Principle 4: Design for active travel**

In Greater Manchester, around 15% of people commuting by car travel less than 2km (just over 1 mile), and more than 30% travel less than 5km (around 3 miles). These are distances that many people could travel on foot or by bicycle if safe, convenient routes were available. This not only has the potential to reduce car trips (and hence congestion and carbon emissions) but also to improve both physical and mental health by increasing levels of physical activity and providing more opportunity for social interaction. All new development should therefore aim to make it easier for people to walk or cycle to local facilities or to access public transport for longer journeys.

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5 Shown on Figure 3

6 Shown on Figure 4

### **Principle 5: Mitigate Impacts**

Even relatively small developments can have an adverse impact on the transport network, either in the construction phase or due to changes to the highway network, and measures should be put in place to minimise those impacts. Mitigation measures will depend on the scale, location and nature of the development, but could range from safety measures during construction to the re-design of junctions or measures to reduce the number of car trips or make them less environmentally damaging. These can include improving facilities for active travel and public transport, providing better information about travel alternatives, or the promotion of car sharing, car clubs and electric vehicles. For developments which generate a significant amount of movement, a Travel Plan is essential in identifying and implementing the most appropriate measures.

New development is essential to Greater Manchester: creating jobs and investment, regenerating our towns and cities and providing good quality housing. Transport plays a vital role in making sure that these developments are sustainable and that the prosperity they bring will benefit everyone. However, transport is also a key factor in making the developments themselves successful: determining the number of people who can reach them easily, the ease with which goods can be delivered or the popularity of new neighbourhoods. This document sets out how developers can work with TfGM and the local authorities to ensure that the transport network is able to provide the support needed for successful developments whilst meeting the wider needs of Greater Manchester.

# Technical guidance

## 4 Transport assessment

NPPF states that all developments that generate significant amounts of movement should be supported by a Transport Statement (TS) or Transport Assessment (TA). The local planning authority will advise whether or not a TA/TS is required.

The Department for Transport's 'Guidance on Transport Assessment' <http://www.dft.gov.uk/publications/guidance-on-transport-assessment> sets out the requirements for Transport Assessments in relation to the Highways Agency's Strategic Road Network. However local authorities also generally follow the sentiment of this guidance in asking developers to assess likely impacts of development.

Fundamental to ensuring that the transport needs of a development can be met and that any adverse impacts are mitigated is that local requirements are considered with the planning authority at an early stage in the evolution of proposals, which will then need to take account of the TA findings or other analysis.

In the first instance, the work towards producing a TA will need to quantify the number of person trips generated by the development and allocate these to the likely modes of transport (active travel, public transport and car). The impact of the generated trips should then be compared to the existing and likely future situation, taking account of future traffic growth in the area (including that from other committed developments).

A TA also needs to consider how to encourage the environmental sustainability of the generated trips and how to manage the existing transport network to accommodate them. Finally it will need to consider how to mitigate any remaining adverse impacts on the network.

In addition to the above there are specific Greater Manchester requirements, in terms of modelling and the design of signalised junctions. Advice, on these matters is available from TfGM's Highways Forecasting and Analytical Service (HFAS) and from the Urban Traffic Control Unit (GMUTC).

HFAS and GMUTC can also be engaged by local highway and planning authorities to advise on the scoping and/or creation and content of a TS or TA. This can apply to any planning application where the local authority requires additional technical input to the process (i.e. irrespective of the size of the development).

## Accessibility

The assessment of accessibility is a key part of a transport assessment, which needs to show the extent to which a site is, or is capable of becoming, accessible by non-car modes, especially for developments that are major generators of travel demand.

It is essential that new development should have good accessibility by walking, cycling and public transport. People who do not have the use of a car will find it difficult to reach sites with poor access and will either be reliant on lifts or taxis or be faced with long journeys by public transport, perhaps involving multiple changes. Developments with poor access are therefore likely to generate more car journeys, which add to congestion.

'Good access' is, however, difficult to define in absolute terms, as it depends both on the type of development and on the individuals involved. Clearly for community facilities, such as schools or health centres, good non-car access is essential. However for a warehousing development, with few employees, good non-car access may be difficult to achieve.

The distance people are prepared to walk to public transport also varies. Obviously age and physical capability limit the ability to walk, but the frequency of the services on offer is a key factor. People will generally walk further for a more frequent service. Other factors are the condition, topography and perceived safety of the walking route and the reason for the journey. It is also likely that people in more rural areas have a lower expectation of accessibility and are therefore prepared to walk further.

There are a number of different ways of measuring accessibility. As a rule of thumb, 400 metres (about 5 minutes' walk) is often taken as the distance people are prepared to walk to a bus stop<sup>7</sup>. In general, people are prepared to walk further to rail or Metrolink services: up to 800 metres or more. In terms of assessing the accessibility of a new development, however, distance criteria are an over simplification because they take no account of factors such as where services go to, how frequent or reliable they are or whether they are likely to endure in the future (the section on 'Providing Bus Services' provides more information on this).

To help identify what bus services and demand responsive transport is available in a particular area, TfGM have developed a service planning tool that can be accessed via the following link: <http://www.gmtu.gov.uk/gmbusroute>

This allows users to understand the current timetabled bus service routes and their frequencies. In addition, it provides a measure, referred to as the Greater Manchester Accessibility Level (GMAL) score, of the operational accessibility to the public transport network for postcodes and 100 metre grid squares across Greater Manchester. These scores show the relative level of accessibility to bus, rail and Metrolink services of each location.

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<sup>7</sup> Guidelines for Providing Journeys on Foot, Institute of Highways and Transportation, 2000

Many developers use similar tools, or software such as Accession, to measure accessibility, and these can be useful in identifying issues for further investigation and discussion. However TfGM has not set any specific 'standards' because these are already set out in Core Strategies/Local Plans and because 'good accessibility' varies with the nature of the area, the type of development planned and the needs of the people who will use it.

Where a site does not have good accessibility, high trip generating development should only be located there if additional services can be provided, either commercially or by the developer. A key consideration as to whether or not a site can be made accessible is the likely commercial viability of any new services. More information on this is provided in section 8.

## Travel plans

Travel Plans play an important role in developing appropriate mitigation measures, as identified in the TA. However more generally, the NPPF sees Travel Plans as a key tool in bringing about sustainable development and the GM planning authorities will require a Travel Plan to be submitted for developments which generate a significant amount of movements.

TfGM strongly endorses the need for Travel Plans to reduce the impact of transport on the local environment (in terms of congestion, air quality and carbon), to improve accessibility and to encourage 'active travel' which improves peoples' health. However the mere production of a Travel Plan will not achieve any of these things: it is essential that plans include actual measures on the ground, which are implemented and monitored.

Travel Plans should be prepared in accordance with the DfT's 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' <http://webarchive.nationalarchives.gov.uk/20120214193900/http://www.dft.gov.uk/pgr/sustainable/travelplans/tpp/goodpracticeguidelines-main.pdf>

Local guidance and links to local resources are available on the GM Travel Plans website: <http://www.travelplans.org.uk> as well from the District Councils themselves.

### A Travel Plan should achieve:

- a reduction in car use (particularly for single occupancy trips) and an increase in travel by more sustainable modes, namely active travel and public transport;
- a reduction in the impact of the generated traffic, both in the immediate neighbourhood and on the wider highway network;
- safe access for pedestrians and cyclists; and
- a coordinated approach to developing and implementing realistic travel options.

As a general principle TfGM aims to encourage walking or cycling for short local trips of up to 5 km/ 3 miles (including trips to a public transport interchange) and public transport for the medium to long distance trips. However a Travel Plan will not succeed in getting people to use public transport if the services in the area are poor and there is no funding to improve them. In these circumstances it might be more appropriate to consider some form of demand responsive transport, or to focus on cycling and car sharing. A list of potential measures for each type of Travel Plan is provided in Appendix 1.

Even where the site is already reasonably accessible, large developments which generate a significant number of trips may still need additional sustainable transport measures to mitigate their impact on the highway network. For example:

- additional services may be desirable e.g. to provide a link to a rail station or to increase the catchment area of the development;
- improved walking and cycling infrastructure may be needed, particularly links to local facilities or to public transport interchanges;
- additional capacity may be required on existing public transport routes to accommodate likely demand; and
- behavioural change measures may be needed to maximise the uptake of sustainable options.

## Public transport information and tickets

Travel Plan measures often include the provision of information and/or discounted tickets to encourage public transport use. TfGM can provide System One travelcard tickets for corporate and business usage, as well as assisting organisations in providing employees with ticket advice and information on the public transport network within Greater Manchester.

TfGM can also assist with companies interested in initiating company ticket schemes. These enable companies to purchase annual tickets on behalf of employees through a staff advance/interest free loan arrangement, with the cost recouped over 12 months via deduction from their salary. With staff enjoying substantial savings and all the convenience of an annual travel card, the scheme represents a valuable staff benefit and demonstrates a commitment from their employer to staff travel plans.

More information can be obtained by emailing [ticketsservices@tfgm.com](mailto:ticketsservices@tfgm.com).

Future developments by TfGM will include the introduction of Smartcard ticketing and making real time public transport information available as open source data to support journey planning smartphone and computer apps. Access to real-time information, whether at home, on a workplace PC or in the course of a journey will greatly increase peoples' confidence in using public transport.

## Monitoring and evaluation of Travel Plans

The effectiveness of a Travel Plan will depend on putting measures in place before a development becomes occupied, so that there is scope to influence the way people travel. However on-going monitoring and evaluation are equally important, but often neglected, aspects of travel planning:

- the plan needs to contain clear targets for vehicular trip generation and mode split, with an agreed fall-back position if these are not met;
- the plan needs to be continually updated and be capable of securing long term action;
- there needs to be firm commitment to appointing a travel plan co-ordinator and to funding travel plan measures; and
- the post-implementation management arrangements should be identified, and included in the Travel Plan.

TfGM will stress the importance of these aspects when providing advice to planning authorities.

## 5 Planning obligations

The introduction of the Community Infrastructure Levy Regulations 2010 (as amended) means that the mechanism for obtaining developer contributions will change in the near future. This will happen through authorities introducing a Community Infrastructure Levy (CIL) and their charging schedule coming into effect; or after 6th April 2014, whichever is earlier. After that point, limitations will be placed on the use of planning obligations to fund infrastructure projects, effectively meaning that only monies from a maximum of 5 obligations can be pooled towards a single piece or general type of infrastructure. When this comes into force all obligations entered into since April 2010 will need to be considered to assess whether the limit of 5 has been reached.

At the time of writing, authorities in Greater Manchester have yet to introduce the Community Infrastructure Levy; some districts are progressing work with adoption of charging schedules due in late 2013.

Transitional changes to the funding of infrastructure via the planning system mean that priorities for transport infrastructure provision need to be clearly understood before a planning application is submitted. These requirements are best described via a hierarchy of needs:

- **Critical infrastructure** is that without which the development simply would not take place, and relates to the provision of safe access to the development. Fulfilling this requirement would normally be secured through the design of the scheme or as part of the conditions relating to the planning permission. In the case of highway infrastructure requirements, a section 278 agreement would be used to secure provision.
- **Key infrastructure** is of a site-specific nature, and is required to mitigate negative impacts of a development. The mechanism for ensuring delivery of these works is normally secured via a section 106 agreement (Planning Act 1990) or a section 278 agreement (Highways Act 1980).
- **Supporting infrastructure** is that which is required to support the sustainable growth of an area, but may not be directly or solely linked to an individual development. CIL monies will typically be spent on these strategic infrastructure projects; it may also include works to improve capacity, speed, safety or accessibility to transport infrastructure.

The pooling of contributions through the Levy will enable the local authorities and TfGM to make improvements of a strategic nature to the transport network that will benefit all developments in the area. TfGM will work with each authority to determine transport measures that CIL will be used to help fund and this list will be reviewed on an annual basis.

Where access by sustainable transport needs to be improved or the impact of the generated trips requires mitigation, and improvement measures have not been identified through a 'regulation 123 list', TfGM may recommend site-specific measures for delivery in accordance with the local planning authority's adopted planning policies. Any such contributions would need to meet the Government's policy tests, i.e. they would need to be:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

Types of planning obligations might be:

- providing on-site facilities such as information display boards or cycle parking (with showering and changing facilities where appropriate);
- providing sustainable transport links to key local destinations by introducing new or improving existing footpaths (including inclusive access measures), providing pedestrian crossings or improving cycle routes;
- contributing to the monitoring and evaluation of the travel plan;
- providing new public transport infrastructure such as bus stops, or bus turning facilities or bus priority;
- improving facilities for public transport users (improvements to bus stops, stations, additional shelters/information etc.), including measures to help disabled people;
- contributing to planned future enhancements to the public transport network that will be of direct benefit to the development;
- providing new/additional public transport routes/services;
- providing additional public transport capacity (where there is insufficient capacity on existing services);
- traffic management on the Key Route Network (including bus priority, modifications to signals, provision of journey time monitors, Weight in Motion technologies, and Variable Message Signs ); and
- travel plan/smarter choices measures, including journey planning, ticketing offers and car sharing/car clubs.

## 6 Design for sustainable access

### Key points:

- make sustainable transport a key element of the design
- consider how sustainable transport can help reduce the carbon footprint

Design has a strong influence on how people will travel. To maximise the use of walking, cycling and public transport, it is vital to make this one of the key elements of the design, rather than regarding transport as an ‘add-on’ at the end of the process. The Commission for Architecture and the Built Environment (CABE) have produced guidance on Design and Access Statements<sup>8</sup> (DAS), which may be required by planning authorities. However, the key principles apply to all developments, irrespective of whether a DAS is needed. The main points relating to access are summarised below.

### Type of use

The uses on a site can influence travel behaviour. Mixed use developments, e.g. including local shops and facilities, can reduce the need to travel. Uses with a high density of trips should be located on the most accessible sites, close to public transport.

### Density

The density of a development influences the way people travel. Low densities cannot support local facilities such as shops within walking distance, road layouts become circuitous and unattractive for walking or cycling and the catchment area for public transport is too dispersed for services to be viable. As a result, lower densities tend to result in higher car use. In more accessible locations, such as town centres or close to public transport interchanges, higher density development not only represents a more efficient use of land but also helps to ensure the viability of public transport services.

### Layout and design

These strongly influence how people make their day-to-day journeys. People will be more inclined to walk or cycle where the streetscape is attractive, with interesting features, low levels/low speeds of traffic and natural surveillance provided by active frontages. Making pedestrian and cycle routes as direct as possible also makes them more attractive to use (see section 7).

In large developments, providing through routes will make it more likely that bus services can be provided.

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<sup>8</sup> ‘Design and Access Statements: how to read, write and use them’ Commission for Architecture and the Built Environment, 2006

## Sustainability

A core principle of the NPPF is that planning should support the transition to a low carbon future. Paragraph 95 states that local planning authorities should ‘plan for new development in locations and in ways which reduce greenhouse gas emissions’.

However, in considering ways to reduce the carbon footprint of the site, developers often fail to consider fully the potential of sustainable transport. Ways of reducing transport-related greenhouse gas emissions from a new development include:

- choosing a location with good access to public transport (or providing services where they do not exist);
- designing the site layout to encourage active travel;
- providing an appropriate level and type of cycle parking (both in commercial and residential developments);
- providing charging infrastructure for electric vehicles (either communal or within individual properties);
- developing car clubs or cycle hire schemes; and
- promotional measures such as access to information about sustainable travel, or ticketing offers.

## Vehicular and transport links

Giving clear priority to pedestrians and cyclists within a large site will improve safety, increase sustainability and improve the quality of the place by giving more opportunity for interaction between people. Pedestrian and cycle routes should be more direct than those for cars, and kept as free as possible from the obstruction of parked cars. For commercial developments, locating buildings on the road frontage, with parking behind, is the best way of providing easy access for pedestrians.

Where through routes are being provided for buses, these should be as direct as possible. However for most sites, safe, direct access to the nearest public transport is needed to make it a convenient option. The provision of convenient pedestrian routes can be seen as conflicting with ‘Secure by Design’ principles in some cases, so it is important to make access to the public transport network an early consideration in the design process. In mixed use developments, high trip generating uses should be located closest to the public transport station or stop. Maximising the use of public transport in this way is not only important in reducing car use, as it also can safeguard the future of facilities and services.

## Inclusive access

The requirements for inclusive access will be set out by the local planning authority, including whether any specific consultation is needed with disability groups. These will include parking standards, location of parking spaces in commercial developments and community facilities, and the need for dropped kerbs and tactile paving at junctions on key pedestrian routes e.g. to the nearest bus stop.

Where a proposed development is close to an existing bus stop, this can be made more accessible by raising the kerb to provide easy access from low-floor buses.

## 7 Planning for active travel

### Key points:

- plan pedestrian and cycle access as a key element of overall design
- give pedestrians and cyclists priority over the car and introduce cycle safety measures
- provide space for cycle storage in new residences and provide cycle parking in all other developments
- make pedestrian access to public transport as direct as possible, including safe crossing points and dropped kerbs

### Pedestrian access

Most public transport journeys start or end with a pedestrian ‘leg’ and the pedestrian environment is therefore fundamental in encouraging public transport use as well as walking more generally. There are a number of measures which can increase pedestrian priority and encourage walking, for example:

- well-defined, signed, direct, pedestrian routes along logical desire lines linking to key local destinations e.g. schools, shops and public transport stops and stations;
- ensuring that such routes follow ‘Secure by Design’ principles, which are important for the pedestrian to feel safe (e.g. well lit with active frontages providing natural surveillance, good visibility without dense landscaping or high solid fences, and where appropriate, covered by local CCTV schemes);
- less direct routes and lower speed limits for motorised vehicles within residential areas, or ‘Home zones’ where cars share space with pedestrians and cyclists, but have a lower priority;
- hard topped level surfaces with tactile paving and dropped kerbs at crossings (with provision of pedestrian crossings/refuges as appropriate) or raised carriageway crossings giving priority to pedestrians.

“Secure by design”<sup>9</sup> principles tend to favour fewer connections into an area and can therefore lead to natural desire lines being fenced off. We therefore recommend that these issues should be considered at an early stage.

Site layouts and building design should minimise walking distances. This means providing convenient entrances to buildings and locating buildings to the ‘front’ of the site, with parking at the rear. Where pedestrians do have to cross a car park to reach the entrance, footpaths should be clearly demarcated and provide as direct a route as possible. Desire lines from bus stops should be taken into consideration when planning pedestrian access points.

<sup>9</sup> ‘Safer Places – The Planning System & Crime Prevention’, ODPM, 2004

## Cycling

The benefits of cycling are increasingly understood, both in terms of reduced congestion and emissions, and improved health. However, the existing urban form can make it difficult to provide for safe cycling. New development therefore provides a key opportunity for change and it is essential that all new developments make appropriate provision for cyclists.

Many people do not own a bike because they have nowhere to store it. Local planning authorities will provide advice on their own minimum standards for cycle parking. However, for a truly cycle-friendly development all new residences should ideally include a secure space to park a bike, whether in a garage, outhouse or a communal parking facility. Many dwellings lack this, and cyclists have to park their bikes in hallways or on balconies.

Similarly all new employment locations, leisure and community facilities should ideally provide secure cycle parking for the destination end of the trip, with employment locations providing storage and changing facilities. Locations such as business parks may offer potential for a shared 'cycle hub' where these facilities can be provided more economically. The type of parking provided (i.e. stands, lockers or a compound) will depend on the level of security on the site.

Many of the pedestrian measures described in the previous section will also help to encourage cycling. Opportunities should be taken to provide links to key local services, including public transport interchanges, and to link in to existing cycle routes in the local area. Cycle routes should be designed to give good vision at junctions (roundabout, give-ways and stop etc.) both for cyclists and vehicles. Cycle safety should also be a key consideration in the design of new roads and junctions.

Work is underway to produce a Greater Manchester Cycling Strategy, which will provide consistent guidance on cycle parking standards and design, design of cycle infrastructure and signage. This will be made available on <http://www.tfgm.com/cycling>.

TfGM publishes a series of maps showing the cycle network in each GM district. These can be found at: <http://cycling.tfgm.com/districts.htm>.

## 8 Planning for public transport

### Key points:

- Seek early TfGM advice on bus service provision
- Ensure new bus services will be sustainable beyond the initial subsidy
- Provide through routes for buses where possible
- Bus routes, bus stops and loading facilities to comply with standards
- Early consultation with TfGM on bus stop relocation, with work to be funded by the developer
- Consult Network Rail when working alongside an operational railway
- Keep disused railway lines open as potential future transport links
- Consult TfGM at the pre-application stage on any development within 200 metres of Metrolink
- Demonstrate that there will be no adverse impacts on street-running sections of Metrolink
- Conditions will be requested relating to safe working adjacent to Metrolink.

### Providing bus services

While most locations in Greater Manchester will have access to some level of bus service, there will be occasions where this is not the case, or the level of service is not sufficient for the new development. For large residential developments, additional school services may also be needed.

Most bus services in Greater Manchester are provided by private sector bus operators, who therefore decide which services to run. 80% of network mileage is commercial, and the corresponding services carry just over 90% of total bus patronage. TfGM subsidises some 'socially necessary' services that would not otherwise be provided, provides some school services and a number of 'demand responsive' services in areas where demand is low.

The daytime frequencies and timetabled coverage of commercial services for early morning, evening and Sundays for bus services in Greater Manchester vary depending on the level of demand available to support their financial viability. To help highway authorities to prioritise their resources for bus infrastructure maintenance and winter gritting, TfGM have developed a map of the bus network that is categorised into a number of levels that relate to the frequency of services provided.

This may be useful to developers in providing an initial guide to the relative strength of bus network provision across Greater Manchester. This may be beneficial in early site selection activity and/or provide an indication of the likely need for additional services or service enhancements (see also the section on Accessibility). The map is shown in Figure 2.

When TfGM is considering the need to provide a tendered bus or DRT service, the aim is to maximise the number of people living within:

- 250 metres of a bus stop with a service every 30 minutes Monday–Saturday daytime (0730–1830) and every hour in the evening (1830–2330) and on Sundays/Public holidays; or
- 400 metres of a bus stop with a service every 15 minutes at all times; and
- The service should serve a local centre/interchange so that people can gain access to the core network of services within Greater Manchester.

Additional criteria are applied to ensure access to hospitals.

TfGM works closely with bus operators to deliver improvements to the network, including making them aware of opportunities to provide new services, based on market demand and customer profiling data. However, providing or diverting a service is generally seen as a risk by operators, who will therefore generally require an initial subsidy to cover the gap between the revenue earned and the running costs. The issues that need to be considered in planning a new bus service (or diverting an existing one) are as follows.

- Will a bus operator be interested in providing it commercially?
- Would a service diversion make other services less viable?
- Will the new service be sustainable? If it is withdrawn as soon as an initial subsidy ends it will be of no benefit in the longer term.
- What type of service is most likely to be sustainable? Demand responsive transport services can be particularly useful for employment sites with 24/7 operation, where the demand is low at any one time, or for large industrial areas where demand is dispersed over a wide area.
- How should the provision of services be phased with the development? Some level of service is needed from the outset, to influence travel choices, but a demand responsive service might be the best use of resources until the site is sufficiently developed to need a full bus service.

TfGM can assist developers by providing advice on the most sustainable bus service provision and by procuring services. When tendering services, we aim to agree a fixed subsidy for the contract period, which gives certainty to developers and local authorities over what is being delivered with financial contributions.

## Designing for bus access

For very large developments, good access may only be achieved by a bus service running through the site and the road layout will need to be designed to accommodate this. Even if services cannot be provided from the outset, the right layout is needed to make this possible in the future. The key considerations are set out below.

- Operators will always prefer a through route rather than one where the bus has to turn round. Culs-de-sac should be avoided where possible, unless a bus only route can be provided.

- Where turning facilities are needed these should be tested using swept path analysis to ensure they can accommodate a 13 metre long bus.
- Opportunities should be taken to give the bus a time advantage over the car e.g. through bus priority or a bus only link (which could also benefit pedestrians and cyclists).
- For a two way bus flow, the carriageway should be a minimum of 7metres wide to allow buses to pass obstructions.
- Design work should generally be based on a 13–15 metre long bus (7.5 metre for a mini bus and 9.5 metre for a midi). Where a route is likely to be used by ‘bendy buses’ advice should be sought from TfGM. The maximum change in gradient from the level should be 1 in 5 (for a 13 metre bus).
- Large sports and leisure developments need bus and coach parking. In the case of a stadium, set down/pick up facilities should be located away from the major traffic flows. Sports, leisure and retail developments may also warrant a small taxi rank/loading area.
- For new secondary schools standing and loading areas, preferably with shelters, and turning facilities should be provided on-site and should be large enough for the number of buses required to serve the school. This will improve safety and reduce congestion. Guidance on these facilities is set out in TfGM’s Design Guidelines for Bus Stops (see below)

Where a development will bring a significant increase in traffic on a major route, this may cause delay to bus services, making them less attractive to passengers, and bus priority measures should be considered. These could take the form of bus lanes, traffic signal priority, or measures to prevent parking at bus stops. Such proposals should be developed in consultation with the planning authority and TfGM.

## Bus stops

Bus stops are normally located to maximise their walking catchment, to give regular spacing between stops and to ensure road safety. Property owners often oppose proposals to locate them outside their premises, so new stops should be put in place before the adjacent properties are occupied. Moving bus stops is to be avoided for the same reason, and TfGM will always prefer to keep a bus stop within the existing frontage.

If it is considered necessary to move a bus stop, the developer must contact TfGM at the earliest opportunity, since work cannot start without agreement from a number of partners, including the Police and the highway authority. The procedures involved could therefore potentially delay the development. Where bus stops have to be moved, this work must be funded by the developer.

TfGM has produced detailed guidance on bus stops<sup>10</sup>, covering both the process for considering relocation and the detailed design requirements for stops and shelters. This can be found at: [http://www.tfgm.com/Corporate/Documents/Miscellaneous/07\\_0650\\_bus\\_stop\\_guidelines.pdf](http://www.tfgm.com/Corporate/Documents/Miscellaneous/07_0650_bus_stop_guidelines.pdf)

## Rail

A location close to a rail station can be a selling point for a development, and will have the potential to reduce the number of car trips generated. However to realise this potential the station needs to be attractive, both in terms of the level of service, passenger facilities and the access. Where improvements to a station and its environs will potentially reduce the amount of car traffic generated by a development, TfGM will recommend that the planning authority seeks a developer contribution for measures such as:

- improving the safety and security of people using the station and its environs (including car parks and pedestrian routes) e.g. through the provision of CCTV or lighting, clearing litter and graffiti or improving natural surveillance by clearing vegetation;
- improving pedestrian and cycle access e.g. through re-surfacing, provision of drop kerbs or through signing;
- providing or improving secure parking at the station for cars and cycles;
- providing facilities for bus interchange at the station;
- improving passenger shelters, seats, information and personal security; and
- providing service information within larger developments e.g. remote real time information screens in offices or colleges.

Developments close to rail lines will be subject to noise from the operation of the railway and should include appropriate noise insulation and other measures. Freight trains may operate at night, which can be an issue for residential developments.

There are specific restrictions on working alongside rail lines, whatever the size of the development. Network Rail will have requirements e.g. regarding access and boundary fences, and their website should be consulted for details: <http://www.networkrail.co.uk/asp/1538.aspx>

In the case of disused rail lines, TfGM will look at the potential to re-use these, for example as bus rapid transit routes or cycleways, and will therefore generally recommend that they are not built over.

## Metrolink

Metrolink runs both on segregated track and on-street and so there is a greater potential for it to be affected by new development.

Where Metrolink runs on-street, a key consideration for TfGM will be the impact of generated traffic, particularly on signalised junctions. The journey time on Metrolink routes is key to their attractiveness, so any new development should minimise adverse impacts on junctions or routes that incorporate Metrolink. Developers should demonstrate, through the Transport Assessment, that there will be no adverse impact on tram journey times. TfGM may object to developments which harm the operation of Metrolink.

Planning applications for any development within 200 metres of any operational Metrolink line, including the new extensions currently under construction and other future extensions, will need to be assessed. Contact: Alan Lowe; telephone 0161 244 1421, email [alan.lowe@tfgm.com](mailto:alan.lowe@tfgm.com)

The existing and planned Metrolink lines are shown on Figure 1. In addition to these routes there is a future aspiration for an extension to Stockport.

For development within the 200 metre radius, pre application consultation with TfGM will be essential to discuss any potential impacts on Metrolink, including increasing awareness of the potential safety risks associated with working adjacent to a tramway and associated infrastructure, and any potential adverse impact on Metrolink journey times.

Examples of the types of risks assessed include:

- the use of tall equipment near overhead lines;
- disruption to the operation of the existing service during construction and implementation of a development;
- construction methods, which may affect Metrolink infrastructure;
- adverse effects on pedestrian safety; and
- ensuring future proposals are protected from development.

Careful consideration must be taken when developing adjacent to Metrolink infrastructure and within the Metrolink Hazard Zone and operational boundaries. Where development involves works adjacent to a Metrolink line, the developer must therefore comply with all the necessary system clearances and agree safe methods of working. TfGM will therefore recommend that all planning consents include a condition / note to the applicant to this effect.

Where a location close to Metrolink will potentially reduce the car traffic generated by a development, TfGM will recommend that the planning authority seeks developer contributions for measures such as improved pedestrian and cycle access or improved parking facilities. Where very large developments will increase Metrolink loadings to a level beyond that for which they were designed, TfGM will recommend developer contributions to increase the capacity of stations and services.

## 9 Managing the impact of car travel and freight

### Key points:

- Development close to the GM Key Route Network or the Highways Agency's Strategic Route Network should include measures to mitigate the impact of additional traffic
- Traffic calming should be designed to be bus and cycle friendly
- Consider reduced car parking as part of Travel Plan measures
- Consider the potential for shared-use park and ride
- Consider measures to reduce delivery vehicle movements

### The Highway Network

The ten Greater Manchester District Councils are the Local Traffic Authorities for roads in their areas. However TfGM is responsible for traffic signals and has a co-ordinating role in relation to the Key Route Network, shown in Figure 4. The KRN comprises the major roads that link the main economic centres, including key bus routes and links to the motorway network. A consistent approach to the management of the KRN has been agreed across Greater Manchester and is described in the Greater Manchester Network Management Plan, which aims to improve the variability of journey times. This is vital for supporting economic growth, reducing carbon emissions and improving the quality of life for the communities living along those routes.

The aim is to:

- maximise the efficiency of the existing network (e.g. through signal timings)
- minimise the impact of road works, incidents and events and maintain the routes to a consistent standard
- develop appropriate improvement schemes where needed; and
- improve non-car travel.

Improving non-car travel to encourage more people to walk, cycle or use public transport is vital, as this may be the most effective way to improve journey time reliability in some locations. New development close to the KRN needs to include measures to manage the impact of the additional traffic and maximise travel by sustainable modes.

TfGM works closely with the Highways Agency to ensure an integrated approach to the management of their Strategic Route Network of motorways and trunk roads (see Figure 3) and the local highway network, including the KRN. Where a development is close to the SRN, we will work with the HA to develop a joint understanding of the impacts and potential mitigation measures across all modes.

## Traffic calming

Traffic calming aims to improve road safety by reducing the average speed of motor vehicles. Badly designed traffic calming can have adverse impacts on both cyclists and bus passengers/drivers, whereas well-designed traffic calming can also improve the street environment and encourage more people to walk or cycle.

For cyclists, the main concerns are pinch points, which push them closer to motorists, and ramps, which should have long smooth profiles. Guidance on cycle-friendly traffic calming has been produced by Sustrans, and can be viewed at: <http://www.sustrans.org.uk/assets/files/guidelines/traffic%20calming.pdf>

On bus routes, the key issues are the potential for delay to services and the potential discomfort for passengers and drivers as a result of poorly designed ramps. TfGM and the ten Greater Manchester local highway authorities have agreed best practice guidelines for traffic calming on bus routes<sup>11</sup>, which avoid undue adverse impacts on bus service reliability, or on the comfort of our passengers and drivers. Badly designed traffic calming has caused damage to buses and ultimately the withdrawal of services by operators. TfGM is likely to object to any new traffic calming schemes not conforming to the guidance, which can be found at: [http://www.tfgm.com/Corporate/Documents/Miscellaneous/Traffic\\_calming\\_for\\_bus\\_routes\\_guidance.pdf](http://www.tfgm.com/Corporate/Documents/Miscellaneous/Traffic_calming_for_bus_routes_guidance.pdf).

## Car parking

The local planning authority will advise on their adopted parking standards. These attempt to strike a balance between over provision, which may encourage car use, and under-provision, which leads to on-street parking and can cause both a nuisance to residents and problems for cyclists.

In areas very well served by public transport, TfGM will encourage local authorities to apply a reduced level of car parking in new developments, as part of a Travel Plan, combined with measures to encourage the use of that public transport.

Where a development is close to a station, there may be the opportunity to extend an existing park and ride site, or provide a new one. However new larger scale park and ride locations need to be carefully considered, as they can encourage people to drive further. For large scale leisure developments, where peak usage may be in the evenings or at weekends, the scope for shared park and ride use should be considered.

In terms of design, care needs to be taken in locating parking so as to:

- provide safe site access and egress by all users;
- minimise pedestrian-vehicular conflict;
- make pedestrian access as short and direct as possible; and
- ensure that the parking spaces can be used effectively and efficiently.

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<sup>11</sup> Traffic Calming for Bus Routes, TfGM 2009

## Car sharing and car clubs

Car sharing can be an effective way of reducing car trips from a development, particularly where public transport does not offer an attractive alternative. Priority parking spaces can be provided as an incentive for car sharers. Large businesses may set up their own schemes, but the Greater Manchester authorities also offer a car sharing scheme, which is available for all organisations to join. Details are available at <http://www.carsharegm.com/>.

Car clubs are useful for people who only need to use a car for some of their journeys. Members have flexible access to the hire of a vehicle. Vehicles are parked in reserved parking spaces close to homes, town centres or workplaces and can be used and paid for on an hourly rate, daily or weekly basis. This can be a useful way of reducing car trips, as vehicles are hired only when needed.

Car clubs can be promoted to individuals e.g. through a residential travel plan. However organisations can also have corporate membership with one of the car club providers, providing an effective way of managing work-related trips.

## Electric Vehicles

Electric vehicles are an increasingly important part of the sustainable transport 'mix' and the number in use is expected to grow significantly in future. All significant developments should therefore consider the inclusion of charging points.

## Freight

Commercial developments can only function with the support of effective freight transport and logistics, but developers need to accommodate these requirements while still meeting wider policy objectives for sustainable transport.

The key considerations are to reduce congestion, carbon emissions, air pollution and safety issues associated with freight movements. The type of sustainable transport measures that can be put in place will depend on the scale and location of the development, but measures could include:

- taking opportunities to move freight by rail or water;
- developing consolidation centres for large urban areas (these also provide an opportunity for smaller, cleaner vehicles to take goods 'the last mile');
- co-operating with other site users on common purchasing and recycling policies to reduce vehicle movements;
- routing vehicles to avoid residential areas and unsuitable local roads;
- scheduling deliveries outside of peak times wherever possible; and
- using low emission vehicles.

# Appendix 1: Checklist of travel plan measures<sup>12</sup>

## Workplace travel plans

Element	Measures to consider
Site design	Pedestrian and cycle friendly site (see section 7)
	Conveniently located bus waiting and drop off points, giving easy access to main entrances with improved waiting environments
	Conveniently located, secure cycle storage
	Walkers' and cyclists' changing facilities, including showers and lockers
	Parking restraint or car-free site (with provision for disabled parking)
	Location of parking space to reduce its prominence – e.g. to the rear of buildings, priority for car sharers
	Landscaped areas designed to facilitate recreational use
	Designated pick-up/drop-off point for taxis
	Electric vehicle charging points
Off-site infrastructure	Improvements to local walking and cycling networks serving the site, including links to public transport
	Improvements to public transport infrastructure on routes serving the site – e.g. introduction of bus priority
Reducing the need to travel	Choice of location to facilitate sustainable access
	Policy to enable home-working, where feasible. Satellite office working facility
	Video-conferencing/audio-conferencing facilities
	On-site services for employees – e.g. café, crèche, shop
	Policy of using local suppliers

<sup>12</sup> Based on Appendix B, 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process', DfT 2009

Element	Measures to consider
Initiatives to support active travel	Promotion of active travel, emphasising health benefits
	Distribution of maps showing safe local walking and cycling routes
	On-site security patrols
	On-site cycle repair scheme
	Salary sacrifice scheme for cycle purchase
	Cycle miles incentive scheme
	Pool bikes and cycle mileage allowance for cycling in the course of work
	Formation of a bicycle users group (BUG). Cycle training and bike buddy scheme for those not confident about cycling
Increasing public transport use	New or improved services including shuttle buses to public transport hubs
	Improvements to the waiting environment
	Journey planning smartphone applications for staff
	Staff discounts and special offers for bus and rail day and season tickets.
	Guaranteed ride home by taxi for staff in emergency
	Policy of using public transport for travel in the course of work where feasible
Parking management	Limited parking allocation on site, coupled with on-street parking controls
	Needs-based parking allocation scheme, with dedicated car club/ pool car parking
	Parking charges, with revenue ring-fenced to pay for sustainable travel measures
	Parking cash-out to provide daily payment for not bringing car on to site
Freight and deliveries	Rail or water-borne freight
	Consolidation centres
	Co-operation with other site users on common purchasing and recycling policies, to reduce delivery vehicle movements
Promotion and communications	Personal travel advice offered to employees. Incentives for all sustainable travellers
	Corporate membership of car club
	Sustainable travel directions for all visitors
	Publication of travel plan and travel information on organisation's web site. Real time public transport apps on PCs and smartphones
	Promotion of sustainable travel options and specific initiatives

## Residential travel plans

Element	Measures to consider
Site design	Permeable, pedestrian and cycle friendly site (see section 7)
	Parking restraint or car club parking only (with provision for disabled parking)
	Areas for social exchange, recreation, seating, play and biodiversity
	Cycle parking for residents and visitors
	Cycle shower and changing facilities in site workplaces (if applicable)
	Requirements for bus routing considered in road design
	Bus infrastructure (see section 8)
	Electric vehicle charging points
Off-site infrastructure	Road safety improvements on routes serving the site. Creation and enhancement of cycling and walking links
	Off-site bus infrastructure/bus priority
	Facilities to improve interchange (e.g. signing; cycle parking lockers)
Reducing the need to travel	Choice of location to facilitate sustainable access
	Improved sustainable access to key local facilities
	Broadband access and provision of home-office space in homes
	Home delivery drop-off point
Increasing public transport use	New or enhanced services including shuttle links to stations (see section 8)
Promotion and communications	Personal travel advice for new households, e.g. travel welcome packs with customised information and incentives for sustainable travel e.g. free/discounted use of public transport, car club or cycle facilities
	Cycle training, bicycle user group (BUG)/cycle buddy scheme
	Community travel web site and notice-board. Community travel events and forum

## School travel plans

Element	Measures to consider
Site design	Pedestrian-friendly site, so pupils are not in close proximity to cars
	Secure, well-lit, sheltered cycle parking, located in areas close to main entrances
	On-site bus drop-off and waiting areas
	Parking for staff and visitors minimised
	Conveniently located facilities for hanging and storing outdoor wear, shower and changing facilities for staff
	Visibility of pupils arriving/departing from school reception areas
	Wet-weather waiting areas for parents
Safe routes to school scheme	Safety improvements on routes serving the school, tackling perceived danger points as identified by school pupils, parents and teachers through consultation
	Safe routes to on-highway bus stops
Reducing the need to travel	Choice of location to facilitate sustainable access
	School admissions policies that encourage attendance of schools in local neighbourhood
Initiatives to support active travel	Walking incentive schemes / Walk to School events
	Walking buses
	Pedestrian and cycle training. Cycle maintenance classes
	School crossing patrols
	Cycle trailer loan scheme for parents
Increasing public transport use	Promotion for public transport services in school
	Yellow School Buses/ School-run mini buses/ Improved bus links
	Pro-active approach to behaviour problems e.g. supervision of bus boarding

Element	Measures to consider
Managing car use	Parking restrictions outside school entrance
	Restrictions on parent and sixth form parking in school grounds
	Park and walk scheme
	Car sharing scheme
	Inclusion of school travel in school policy statements and induction sessions
	Curriculum work on school travel backed by teaching resource <a href="http://www.dingding.org.uk">www.dingding.org.uk</a>
	School travel work highlighted in newsletters, letters home, assemblies and leaflets. Use of events, competitions

## Visitor Travel Plans

Element	Measures to consider
Site design	Pedestrian and cycle friendly site with good connections to off-site networks
	Cycle storage, conveniently and visibly located at main entrances
	High quality bus stops and waiting areas, at prominent and convenient locations
	Parking restraint or car-free site (with provision for disabled parking)
	Reduced conflict between pedestrians/cyclists and vehicular traffic
	Location of any car parks in secondary locations
	Visitor orientation signs at appropriate site entry-points
Improvements to off-site infrastructure	Improvements to public transport infrastructure on routes serving the site e.g. bus priority on key routes; upgrade of key bus/rail stations
	Improved walking and cycling links between the site and other key destinations, including public transport hubs walking routes and the National Cycle Network
Reducing the need to travel	Choice of location to facilitate sustainable access. Promotion of visitor site to local residents – e.g. special admission rates and other discounts.
On-site facilities and services	On-site shuttle service e.g. buggy between main gate and buildings
	Taxi service
	Left luggage facility – e.g. for backpacks and cycle equipment
	Wagons for carrying children and picnics; cycle hire outlet for use of bikes
Increasing public transport use	Enhanced services to link with other destinations, including public transport hubs
	Adjustment to times, frequencies or stopping points of existing services
	Specially run services for special events
	Upgrades in quality of existing services, including branding
	Pre-booked transport for last leg of journey for connection to rail station e.g. demand responsive site mini-bus or taxi-firm on demand responsive basis

Element	Measures to consider
Parking management	Cost of parking not subsumed in cost of admission, but charged separately
	Parking revenue ring-fenced for sustainable travel measures
	Control of off-site parking – e.g. yellow lines or CPZ
Promotion and communications	Information about sustainable access prominently featured in all promotional literature, posters, web-sites etc. publicising the site
	Discounts or special offers for visitors arriving by sustainable transport
	Prominently displayed on-site information about public transport and taxis
	Sustainable transport incorporated in promotional strategies for the site

## Appendix 2: Contacts for planning applications

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### Strategic planning applications

Richard Clowes  
Policy Team  
[richard.clowes@tfgm.com](mailto:richard.clowes@tfgm.com)  
0161 244 1269

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### Bus services

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Network Intelligence Manager  
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0161 244 1974

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### Bus stops

Claire Robinson  
Service Infrastructure  
[claire.robinson@tfgm.com](mailto:claire.robinson@tfgm.com)  
0161 244 1669

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### Cycling (strategic issues including network maps, Cycle Hubs)

Anne-Louise Black  
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0161 244 1616

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### Rail stations

Steve Wagner  
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0161 244 1697

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### Metrolink

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### Transport Assessments

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# Figure 2: Bus network priorities

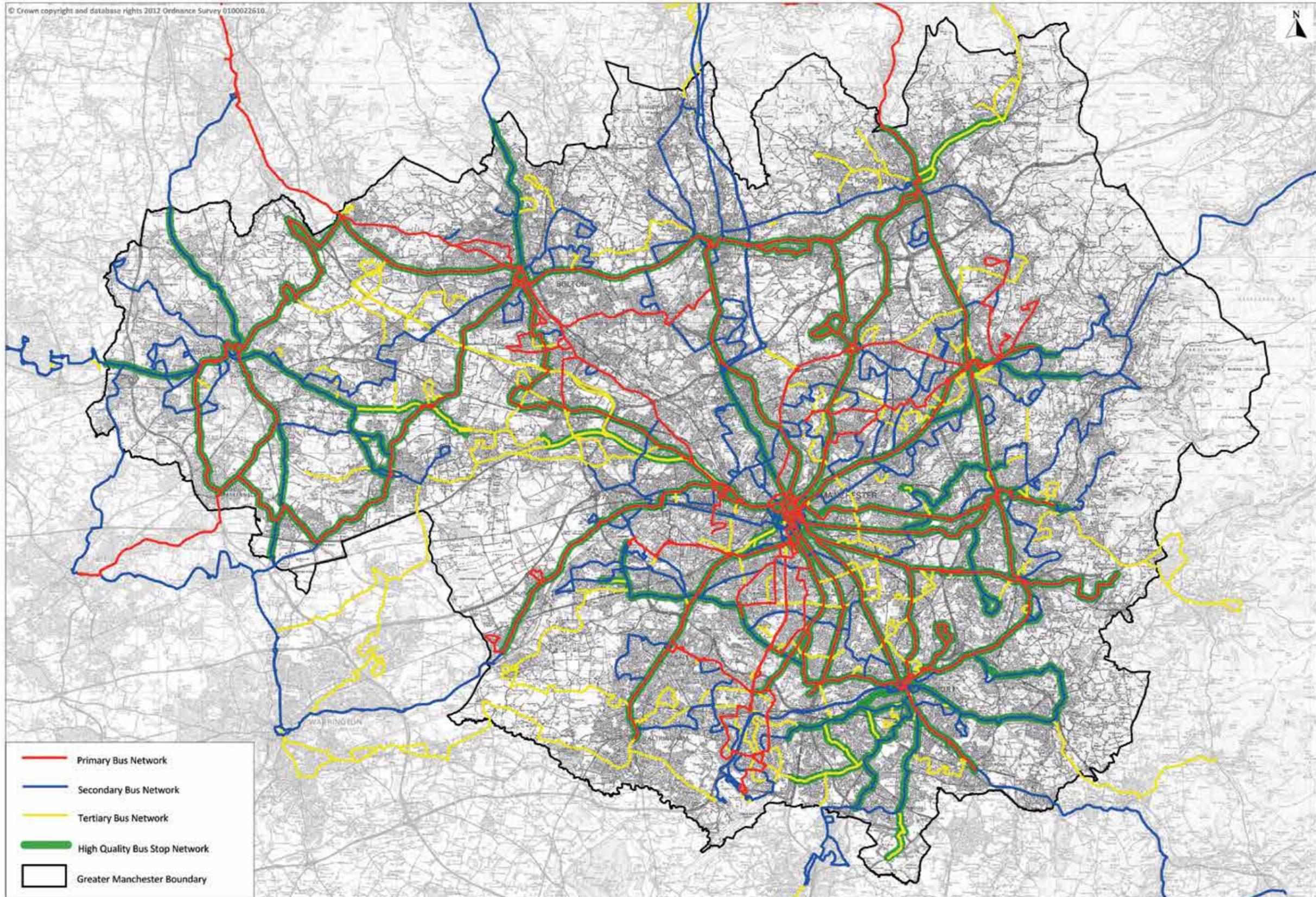
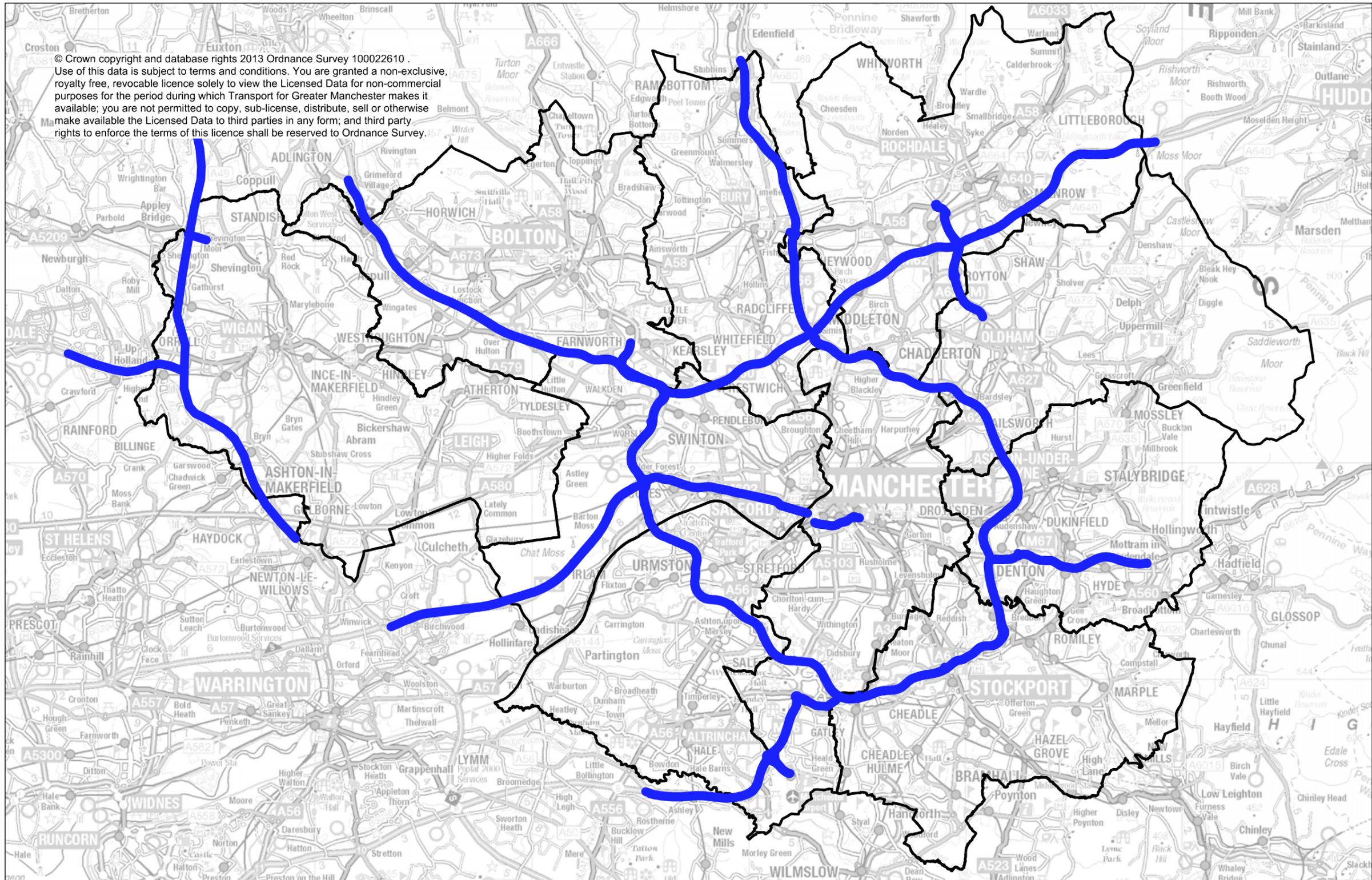
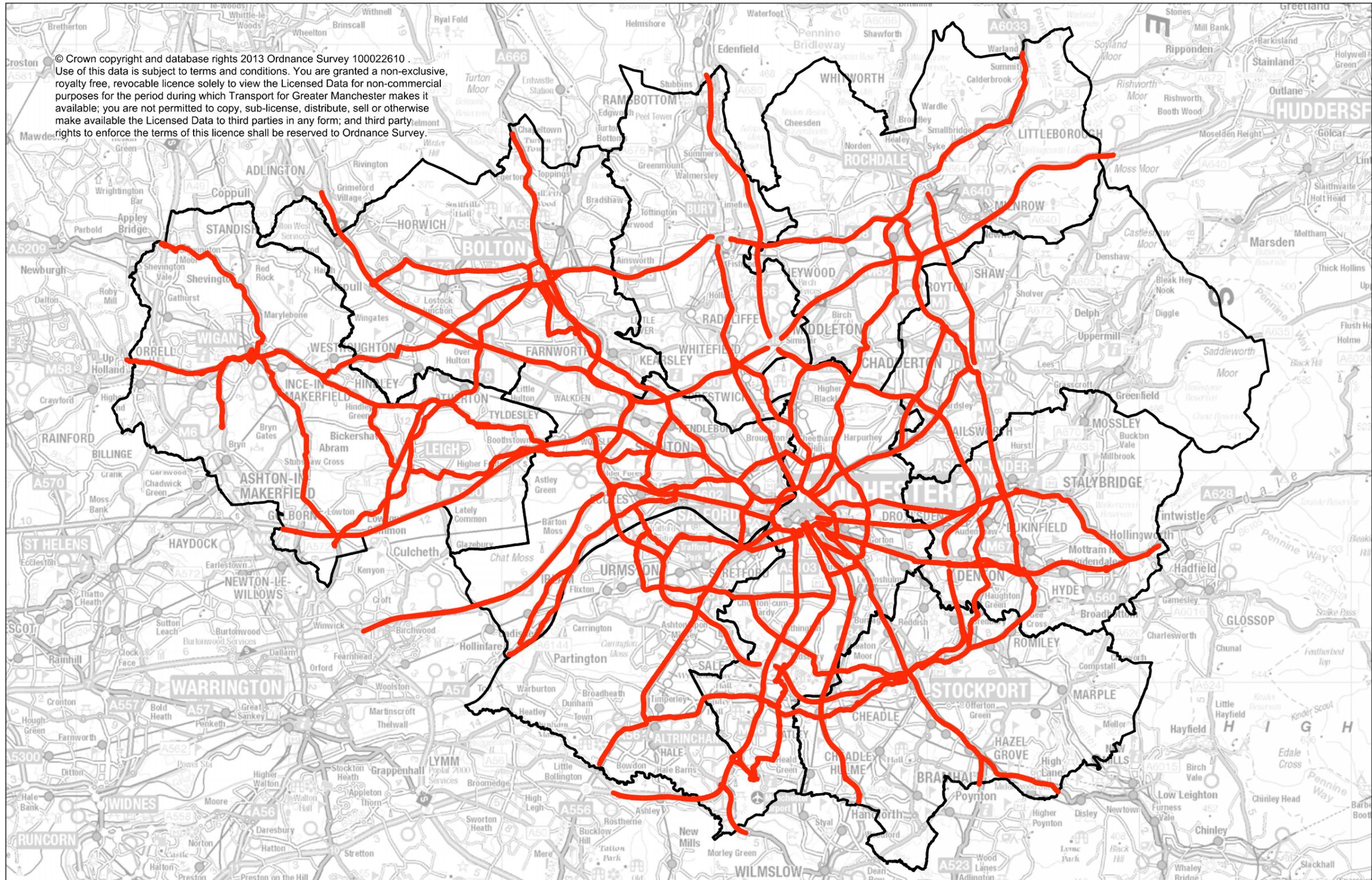


Figure 3: Highways Agency Strategic Route Network



 <p>Transport for Greater Manchester 2 Piccadilly Place, Manchester, M1 3BG</p>	<p>Strategic Route Network.</p>	<p>Drawn By : bhurstm</p>	<p>Scale : NTS</p>	<p>Date : 25/02/2013</p>	<p>Report :</p>
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Figure 4: GM Key Route Network



 <p>Transport for Greater Manchester                  2 Piccadilly Place,                  Manchester,                  M1 3BG</p>	<p>Key Route Network.</p> <p>Drawn By : bhurstm</p>	<p>Scale : NTS</p>	<p>Date : 25/02/2013</p>	<p>Report :</p>
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