

GREATER MANCHESTER TRANSPORT STRATEGY 2040 OUR VISION





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1. INTRODUCTION

Transport matters. For Greater Manchester's economy and communities to flourish and prosper, we need to connect people with opportunities and information, entrepreneurs with ideas and capital, and employers with talent and skills. Excellent transport connectivity can also act as a catalyst for new development and regeneration: transforming and revitalising old sites with new productive uses. But transport can only fulfil this potential if it is planned in tandem with a wider economic, social and environmental programme covering housing, employment, innovation, public service and welfare reforms, and the need to develop a sustainable economy.

This integrated approach is well understood in Greater Manchester and has shaped the largest transport network development programme seen anywhere outside London over recent years such that:

- Metrolink is now established as one of the best modern tram systems in Europe;
- The renaissance of rail travel is well underway with major investment taking place around the central Manchester hub in particular;
- Transport facilities in our town centres have been transformed through modern, attractive interchanges;
- We are shaping new approaches to bus travel through bus priority schemes, improving performance standards, investing in low-emission vehicles and by considering options for bus market reform;
- Cycling is now established as an attractive option for commuters, supported by our Velocity programme to transform Greater Manchester into a cycle city by 2025;

- Our highway network is supported by innovative, real-time traffic management and information systems; and
- We are evolving integrated travel information systems to meet the needs of communities and businesses.

However, much more needs to be done, both within Greater Manchester and at the regional and national level, to create the world-class connectivity for both people and goods that Greater Manchester needs to compete effectively within a global economy.

This need is understood by national government and the ground-breaking Greater Manchester Agreement will, subject to the necessary legislative changes being implemented, devolve powers and funding for transport, strategic planning, housing investment and crime to an elected Greater Manchester mayor. This will enable us to take a bold, long-term view of investment and maximise the benefits for the conurbation.

Our transport strategy will need to be integrated with wider infrastructure planning to support growth. At the same time, we must focus on meeting the varied needs of our travelling customers, including commuters, business travellers, logistics operators and visitors.

This document provides a vision of what a successful transport system might look like in 2040 to support Greater Manchester's wider economic, social and environmental ambitions. Any comments on our vision will be taken into consideration as we develop a new Greater Manchester Transport Strategy for 2040, which will set out more detailed policies and proposals for the coming years (see www.tfgm.com/2040 for more details). A full draft Transport Strategy and Delivery Plan is due to be published for consultation in 2016 and is intended to replace our current Greater Manchester Local Transport Plan.



2. GREATER MANCHESTER IN 2040

Transport does not exist in isolation: a number of other factors influence the demand for travel and the success of our strategy. Over the period to 2040, there will be significant and complex changes in Greater Manchester and the wider world that will have a huge impact on travel demand and infrastructure requirements.



Economy & Employment

Greater Manchester at the heart of a globalised Northern Powerhouse economy, with an increasingly skilled workforce.

Over the past 30 years, our economy has become increasingly globalised, and this trend is set to continue over the period to 2040, supported by digital

communication systems, and faster and more fuel-efficient international transport. In this context, Greater Manchester will continue to capitalise on its strengths as the main international gateway to the North.

It is expected that European city regions, such as Greater Manchester, will grow as centres of skills, service delivery and advanced manufacturing. Our economy will therefore need increased access to a highly skilled workforce to support growth of our existing knowledge-intensive employment sectors, such as financial and professional services, creative and technology industries, and academic research; and to secure our position as a world leader in scientific innovation. In particular, our strengths in advanced materials research and development puts us in a strong position to increase our manufacturing base and our export potential.

Major city regions will continue to act as key drivers of the national and global economy, acting as critical centres of knowledge exchange and commerce. Greater Manchester's position at the heart of a Northern Powerhouse economy is critical to its future success. Improved city-to-city connectivity will support business-to-business markets and access to wider and deeper labour markets. Better connectivity within the city region will enable fast and affordable access to employment opportunities for our residents. As workers become more mobile and the trend continues towards more varied types of employment and working arrangements, transport options will need to be

increasingly flexible and adaptable to changing mobility requirements, for example the need for services outside the traditional "peak" times.

Despite the growth of the regional centre, the geographical spread of economic activity in Greater Manchester creates complex commuting patterns and tends to lead to high levels of car reliance for many journeys to work.

Around 44% of our 150,000 knowledge-intensive jobs are located within the regional centre and we expect this proportion to grow over the period to 2040.

Tackling congestion on our transport networks and making sure we have capacity for growth will continue to be a key priority; on our major roads, on our railways and in local towns and communities. Given that there is little scope within our urban areas to build new roads or widen existing ones, our strategy must focus on making our existing transport networks more efficient through advances in technology, providing better travel alternatives to the private car and enabling more efficient servicing and deliveries. This needs to be combined with targeted capacity improvements on our road and rail network to provide the transport infrastructure we need to support our growing economy. Our focus will also be on delivering a more consistent, resilient, better integrated public transport system, resulting in more seamless journeys across all forms of transport, and measures to enable and encourage the most sustainable travel choices.



Society & Community

A larger, more economically active population with diverse transport needs.

The conurbation experienced a significant population increase of 6.6% from 2001 to 2011, growing to 2.7 million people, with the City of Manchester increasing by 19% – the fastest growing of England’s major cities. Projections suggest that our population will exceed 3 million by 2040 and that at least one in four people will be over the age of 60.

We are, in parallel, seeing continued growth in the numbers of young people, as Greater Manchester’s birth rate continues to rise and our student population grows. We expect Greater Manchester and the North of England to become more attractive to migrants as the economy and reputation of the North grows over the period to 2040.

Tackling Inequality

Inequality and deprivation currently hold back our economy and prevent people from realising their full potential. To become more financially self-sustaining we need to get more people working and into better jobs. This is the focus of Greater Manchester’s wider public service reform programmes.

Greater Manchester’s 2014 Growth and Reform Plan set out an ambitious package of measures to eliminate the £4.7 billion annual gap between public spending and taxes generated in Greater Manchester by 2020. Transport reforms and investment play a key role in delivering that plan.

Whilst cars will still be a crucial part of our future economy, for many Greater Manchester residents travel by car is still not an option. We will need high quality, affordable and seamless transport connections from the most deprived areas to key employment and training locations, particularly for the 31% of households with no access to a car. We will also need better links to important day-to-day facilities such as GP surgeries, schools and shops; everyday journeys that are critical to our quality of life.

In interviews with Greater Manchester jobseekers 38% of respondents cited transport as being amongst the top three barriers to attending an interview or getting a job.

Attitudes to travel

Ongoing social change will lead to shifting attitudes to travel and travel behaviour over the period to 2040. Increased use of social media will enable new forms of communication to flourish, while there is also a growing trend towards community-focused activities and

services, particularly in response to local public sector funding cuts.

Younger people’s travel aspirations are likely to be very different to previous generations, with less emphasis on private car ownership and use. They are more likely to communicate using social networking, rather than relying on face-to-face meetings. When they do travel, they are more likely to consider a range of possible options ‘on the go’, with the support of mobile and wearable devices.

People will be working for longer and older people will be more likely to want access to a range of work and leisure opportunities. At the same time, access to healthcare and services for elderly people will become even more critical and such services must be accessible by non-car modes, or delivered directly to those unable to travel.

Safety and personal security

Safety and security is fundamental to any transport network. We have been successful in significantly reducing casualties and crime over the last 15 years, but we must do more as traffic accidents across the UK remain the biggest single threat to young lives. We will work towards eradicating road deaths in Greater Manchester over the period to 2040, focusing on the most vulnerable road users: pedestrians, cyclists, motorcyclists and young drivers. We will also focus on improving people’s perceptions of safety and personal security, particularly when walking, cycling or using public transport.



More active travel

The health of our population will become an even higher priority over the coming decades, as our population ages and as we develop a more joined-up approach to public service delivery, with more shared local health and transport priorities and budgets.

Greater Manchester currently has some of the highest levels of physical inactivity in England, with 80% of residents not taking the recommended level of exercise and 30% of school pupils classed as obese.

We must invest in a transport system that supports improved health, by enabling people to build more walking and cycling activity into their daily lives. This will reduce the burden on the NHS and cut the number of working days lost to illness.

Urban Development

Economic growth and unprecedented demand for housing across Greater Manchester will require more compact urban development patterns.

Development patterns have a significant influence on travel behaviour and transport infrastructure requirements. The economic growth anticipated in Greater Manchester to 2040, accompanied by unprecedented demand for new housing, means that we

will need the right housing in the right locations, and must enable our expanding workforce to take advantage of new employment opportunities across Greater Manchester and beyond. High quality housing in attractive locations will help to attract businesses to the area and encourage more of our workforce to live locally.

Greater Manchester will need at least 200,000 new homes by 2040 to support anticipated economic and population growth.

Significant economic growth is also proposed in neighbouring authorities, leading to more cross-boundary travel in and out of Greater Manchester. This could have a major impact on the movement of passengers and goods on our road and rail networks. We will need to work closely with our neighbours to plan for increased travel demand.

A new long-term Spatial Framework for Greater Manchester is being developed to identify the scale and likely spatial distribution of housing and employment growth across the conurbation. The spatial plan will support delivery of the Greater Manchester Strategy, to enable sustainable economic growth and a more inclusive society.

A more accessible and efficient transport system requires compact and mixed-use urban development, focused in and around existing town centres and the

regional centre, where possible, to support regeneration. Such land use patterns also support low-carbon lifestyles by locating development in areas that are easier to serve by public transport and with key local facilities within walking and cycling distance of where people live. Where needs cannot be met in these areas, new development sites need to maximise the use of existing public transport or ensure that new services can be provided.

Transport is only part of the solution, but developing urban centres and residential areas with attractive streets and public spaces, that are easy to walk and cycle around, and that are served by modern and affordable transport systems, will help to make Greater Manchester a more attractive place to live and work.

Our 2040 transport strategy will prioritise the infrastructure investment that will support sustainable economic growth and attract inward investment in regeneration areas. We will work with planners and developers to ensure that new developments are designed in a way that supports sustainable travel behaviour.

Environment and Resources

A sustainable, low-emission city region that is more resilient to the effects of climate change.

One of the most significant challenges Greater Manchester faces over the period to 2040 is climate change. Climate change is already happening, with the average UK temperature now 1°C higher than it







was 100 years ago and 0.5°C higher than it was in the 1970s. In Greater Manchester, climate change is likely to involve more severe flooding during winter months and an increase in droughts during the summer. This will potentially affect the resilience of transport infrastructure and increase maintenance requirements.

Greater Manchester is committed to a 48% reduction in carbon emissions by 2020 (from 1990). Transport currently accounts for 30% of these emissions and, of these, 95% are from road vehicles.

Road transport is having a seriously detrimental impact on air quality in the conurbation. This is a significant cause of poor health, with emissions of nitrogen dioxide (NO₂) and particulates (small particles) the main problem. Like other major UK cities, we need to cut NO₂ emissions in Greater Manchester to meet EU limits.

Cities are inherently more sustainable in terms of energy and resource use than less urbanised areas and, therefore, Greater Manchester is well placed to reduce its environmental footprint. But we must do more to reduce emissions from our transport system and to encourage more sustainable travel behaviour. We must also adapt to climate change and become more resilient through careful planning and targeted infrastructure investment over the coming years.

By 2040, we will deliver a low-emission transport system to enable us to meet our ambitious carbon

reduction targets and to eradicate poor air quality caused by transport in Greater Manchester. Failure to tackle these issues will act as a brake on economic growth.

Air pollution from particulate emissions is estimated to cause at least 1,000 deaths each year in Greater Manchester.

Taking a proactive approach to this agenda, and establishing Greater Manchester as a world leader in new low-emission technologies and techniques, is a major opportunity for our economy, building on the advanced research and manufacturing expertise already within the city region.

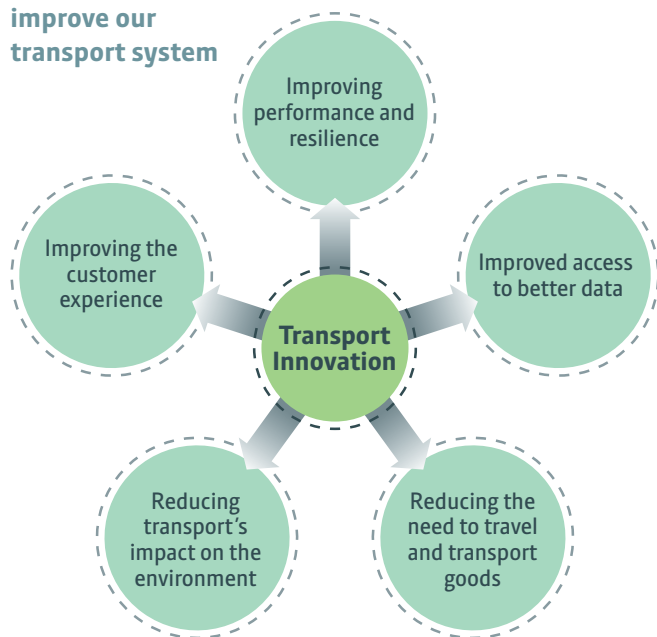
Innovation and Technology

Greater Manchester has the potential to become a world leader in transport innovation, by collectively harnessing our wealth of talent in transport services, advanced manufacturing, and digital and creative industries.

Global developments in technology will transform the way that people live and work in Greater Manchester, with new ways of communicating, travelling and connecting with people and places. Digital systems and devices have already become embedded in our everyday lives, enabling almost limitless access to information and networks and the creation of new “virtual” communities.

We can expect to see further developments that will completely change the way we travel or access services. Advances in material science and energy storage over recent years are already having a significant impact on the viability of electric cars and bicycles. Innovative apps are enabling direct feedback from customers to service providers, allowing them to become more responsive. We will embrace the use of innovation and technology to improve the way that customers can access transport services and information.

Using technology to improve our transport system



Through the exploitation of further advances in science and technology there are substantial opportunities to improve the capacity, efficiency, resilience and safety of our transport networks and reduce their environmental impact.

Innovation and technology will enable us to improve customer choice and the seamless journey experience, in terms of information, ticketing and payment systems. ‘Smart’ data collection and analysis will also enable us to develop a better understanding of customer behaviour and travel demand, with the capability to track and forecast this easily, while advances in digital communications will reduce the need for personal travel and delivery of goods at times when networks are congested.

Policy & Governance

Greater Manchester will have greater autonomy over decision-making and funding, and a fully integrated approach to public service delivery.

Greater Manchester is at the forefront of developing new systems of local government to meet local economic priorities. Governance structures and wider policy decision-making will have a significant impact on our ability to deliver a customer-focused transport system over the next 25 years. We require increased devolution from central government to give much greater autonomy over decision-making and funding.

Greater Manchester is currently below the UK average in terms of both productivity and pay rates. To create a high-wage, high-productivity economy and make a positive contribution to UK economic growth, we need to help residents become more self-sufficient and businesses more productive, reducing the demand on public services. This requires more local decision-making and more targeted transport investment; focused on both growing the overall Greater Manchester economy, but also improving access to economic opportunity for more deprived groups.

As public sector funding pressures continue into the future, we will need to develop innovative approaches to service provision and funding, working with both the private sector and local communities.

As some public services move towards being planned and delivered at the city region rather than the local district level, we need to ensure that local knowledge and understanding is not lost, through effective engagement with local communities and districts. New models of engagement will need to be developed, using technology and social media where appropriate, to ensure a good understanding of the needs of local communities.



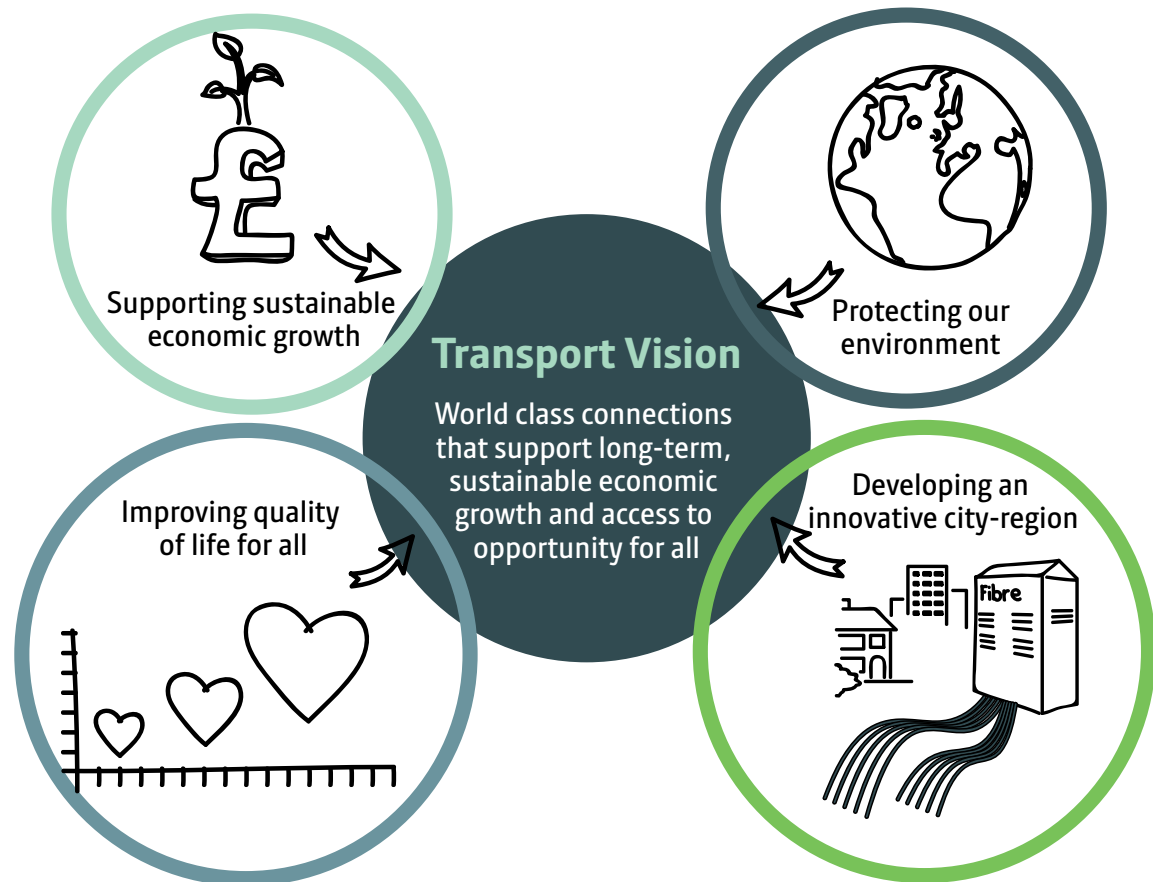
3. A VISION FOR A CONNECTED GREATER MANCHESTER


Through the Greater Manchester Strategy we already have a vision for 2020 for “A new model for sustainable economic growth based around a more connected, talented and greener city region where all our residents are able to contribute to and benefit from increased prosperity.” We want to sustain this vision for the next 25 years. A resilient, effective and integrated transport network is critical to the success of all great cities.

By 2040, Greater Manchester will look and feel very different. It will be more prosperous as a result of its leading role at the heart of a Northern Powerhouse which will help to re-balance the UK economy. This requires a transformational change to our economy, with a significant growth in high-skilled, knowledge-based industries, particularly in our regional centre; and further development of our role as the major international gateway to the north of England for passenger and freight movements via Manchester Airport and the Manchester Ship Canal.

Any transport system needs to fulfil basic customer requirements; it needs to be integrated, safe, secure, healthy, low emission, accessible and resilient and provide best value. We will continue to make improvements in all these areas to improve the customer experience, but in addition we need to ensure that transport is helping to achieve the Greater Manchester Strategy vision described above.

The four key elements of that vision, namely sustainable economic growth, quality of life, environment and developing an innovative city-region, will provide a focus for transport investment up to 2040 and beyond.



A blurred photograph of a person walking and a person riding a bicycle on a city street. The image is overlaid with a green and blue geometric design consisting of several overlapping rectangular blocks. The text is positioned in the upper right quadrant of the image.

“Our transport system must be well integrated, safe, secure, healthy, low-emission, accessible and resilient.”



The period to 2040 is a great opportunity for Greater Manchester to achieve its ambitions for a low-carbon, self-sustaining economy, and an improved quality life for people living and working in the city region.

Transport plays a critical role in delivering the changes needed and the challenge for our strategy will be to target future investment so that it has the maximum impact on achieving our economic, social and environmental aspirations and provides the level of service that users of our transport system will expect and demand.

What will success look like in 2040?

To make our vision a reality, we will need to achieve a number of specific outcomes in relation to economic growth, quality of life and the protection of the environment. Our strategy will identify the way in which we will achieve these outcomes.

To support sustainable economic growth we need:

- less congested roads and public transport;
- better access to skills and markets;
- more reliable journey times;
- a resilient and well-maintained network; and
- a transport system fit for a major European city, which is viewed as a great place to visit and invest.

To improve the quality of life for our residents we need:

- better access to jobs and training, and to health-care and other essential services;
- a transport network that makes it easier to stay healthy through regular walking and cycling;
- improved road safety and reduced crime; and
- local environments that are not dominated by traffic, noise and pollution.

To help protect our environment, we need:

- more people to travel by public transport, on foot and by bike;
- a reduction in harmful emissions from vehicles;
- to make best use of our existing transport infrastructure; and
- a reduction in the damage that transport can do to natural environments.

In working towards the above outcomes, we will take advantage of the significant opportunities offered by technology and innovation to establish a truly integrated transport system.

To develop Greater Manchester as an innovative city region we need to support investment in transport to:

- enhance the capacity, efficiency, resilience and safety of our transport networks;
- improve customer experience through easy to use, integrated payment systems and real-time information;
- understand better the needs of our travelling customers through 'smarter' data collection, trend analysis and forecasts;
- reduce environmental impacts through low-emission vehicle technology; and
- reduce the need to travel and transport goods through advances in digital communications.

4. SPATIAL THEMES

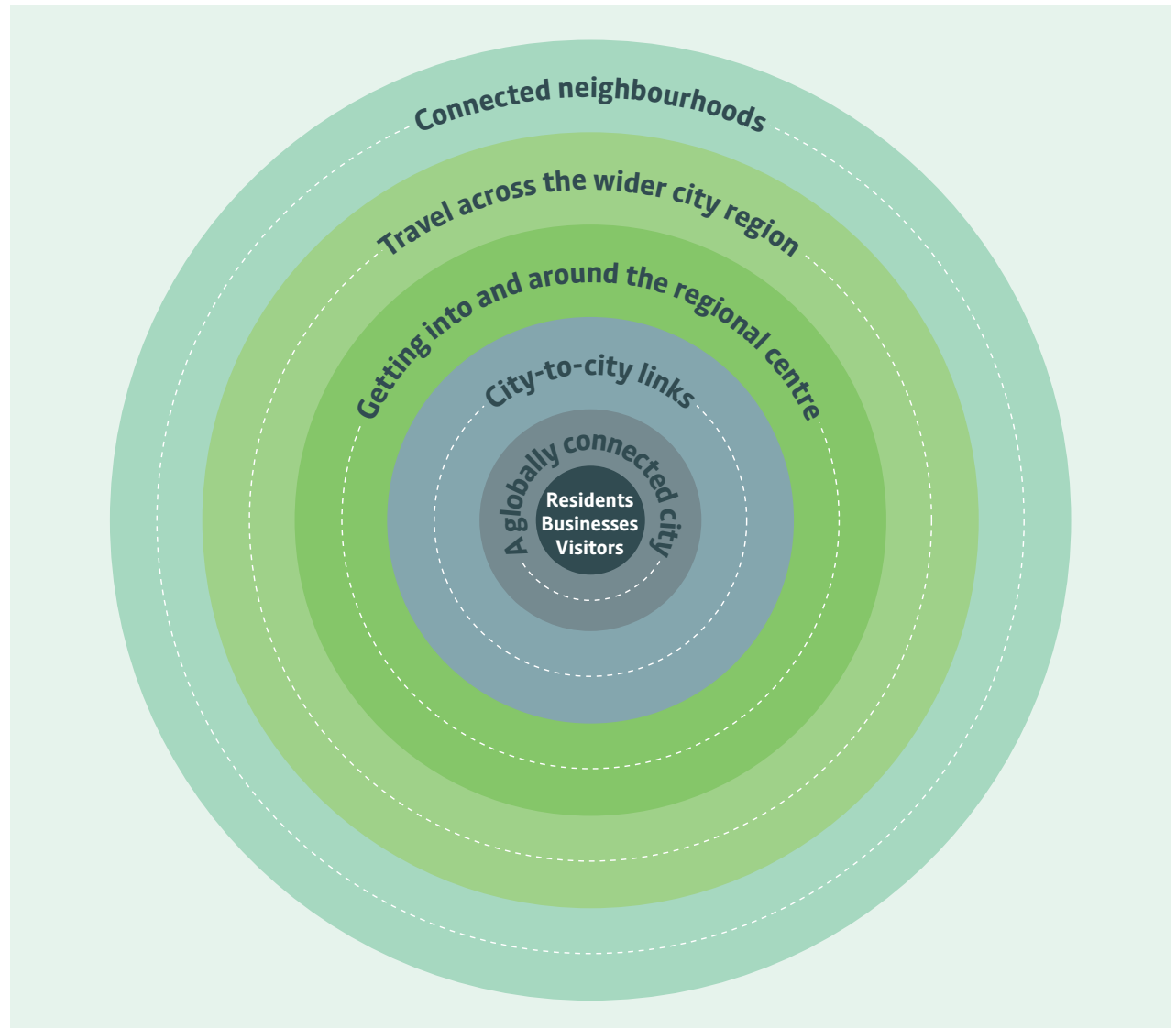
Alongside identifying transport proposals which apply across Greater Manchester, our strategy will also target improvements for different types of travel, from global connectivity to support overseas trade and leisure markets, right down to the critical local trips that people make on a daily basis from their homes to work, school, shops, services, and local transport interchanges.

Five types of travel have been identified and are summarised in the graphic on the right. For each, connectivity improvements will be identified for businesses, residents and visitors, which best satisfy our overarching strategy vision for **“World Class connections that support long-term, sustainable economic growth and access to opportunity for all.”**

These connectivity improvements are discussed in sections 5–9.

What is connectivity?

Connectivity is about improving access to places and services for both people and goods. Improving connectivity may mean better transport infrastructure and services, but it could also be about providing smarter access through advances in digital communication or getting more out of our existing networks through better travel information and by supporting travel choices.







5. A GLOBALLY CONNECTED CITY

If we are successful then by 2040:

- Journey times to and from our international gateways will be more reliable and more international freight will be carried by rail and water.
- Excellent public transport, walking and cycling provision, combined with easy to use ticketing and payment systems and bespoke travel information, will expand access to the airport, both locally and across the North, enabling more airport passengers to arrive by non-car modes.
- More people will be able to take advantage of the significant job opportunities at Manchester Airport and in the Atlantic Gateway area.

Greater Manchester's international connections are vital to enable us to compete effectively on the world stage and to rebalance the UK's economy. Excellent international connections will support increased inward investment and tourism. Greater Manchester is also already an important strategic location for freight movement via road, rail, sea and air and further targeted investment will enable us to capitalise on this strategic advantage.

With over 1.1 million international visitors in 2012, Greater Manchester is the third most visited tourist destination in the UK after London and Edinburgh.

Manchester Airport/Airport City

Manchester Airport is an important national and international gateway to the whole of the north of England with direct flights to North America, the Emirates, Hong Kong, Moscow, Singapore and India. In addition, the airport also offers highly flexible,

affordable access to nearby European cities, putting Manchester within minutes of cities such as Dublin. It attracts passengers from across the North, North Wales and parts of the Midlands. Its throughput is larger than that of all the other northern airports combined and it is the only airport in the North connected to the national rail network and directly to the motorway network.

Transport investment needs to support the airport's ambition to grow from the current (2013) 20 million passengers to 55 million, which would generate around 51,000 jobs on site and £2.5 billion of GVA. While this can be achieved using existing capacity, the airport is embarking on a £1 billion programme of investment to transform its facilities and infrastructure to create a global gateway with the flexibility and resilience to cater for evolving customer needs. As well as being a major employer, the airport is central to supporting inward investment and international trade. Securing direct flights from mainland China will be a priority to enable further growth in tourism (worldwide, Chinese tourism travellers have grown from 10 million in 2000 to 83 million in 2012) and business.

A series of sites around the airport have been designated as an Enterprise Zone, set to attract global business and provide 35,000 jobs. This includes Airport City, the World Logistics Hub and the Medipark near to Wythenshawe Hospital. These must be well served by modern, seamless transport connections to connect communities across Greater Manchester to the opportunities on offer.

The development of the HS2 station at Manchester Airport will increase its importance as an international gateway, attracting flights to more destinations and providing an alternative to congested airports in the south-east of England. It is also likely to increase the demand for the Enterprise Zone as a business location and boost demand at the airport itself.



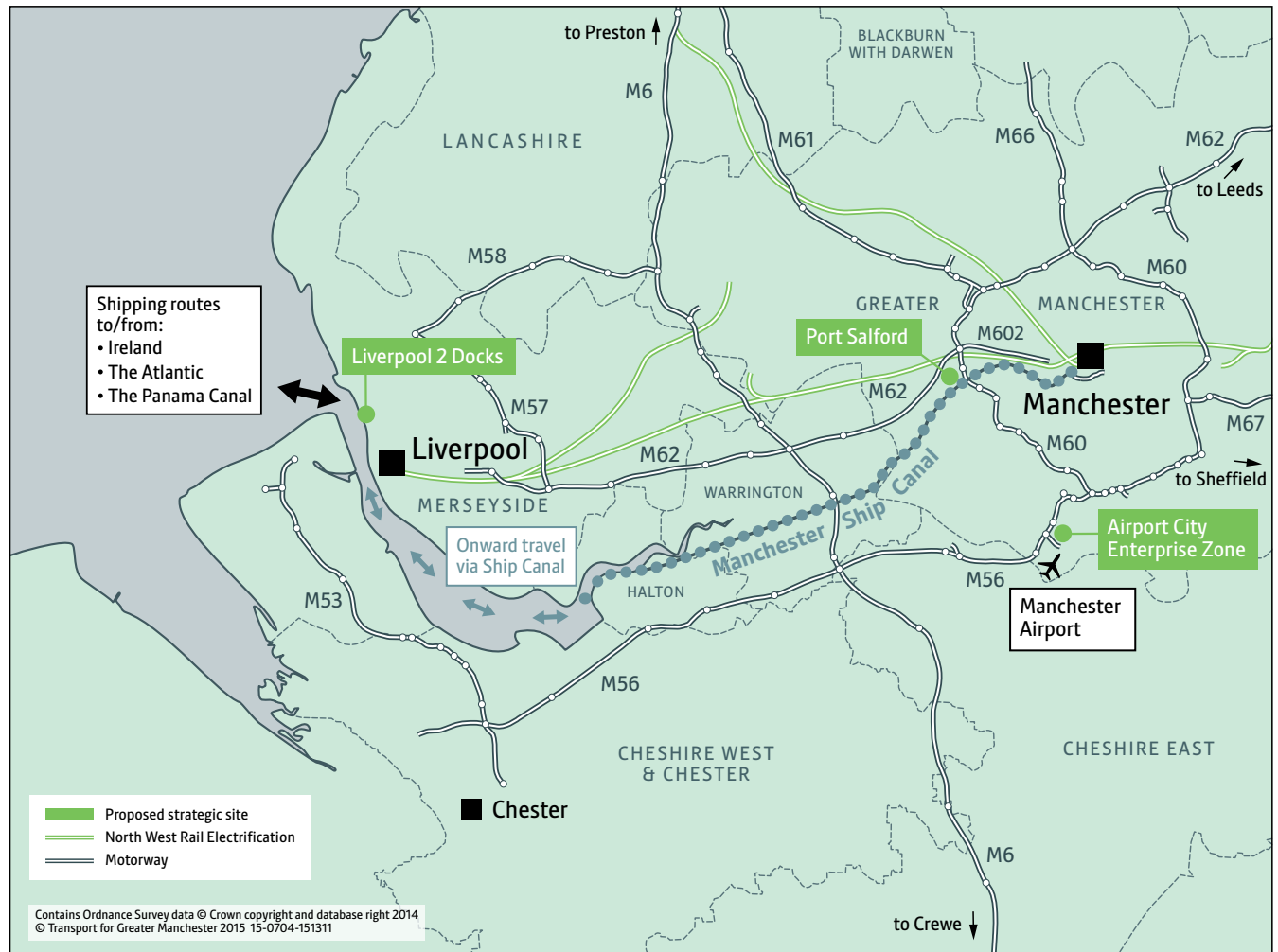
We will continue to improve local and regional links to the airport and the Enterprise Zone. This will include tackling congestion on the M56 to improve journey time reliability for cars and goods vehicles.

Improved high capacity and high quality public transport links to the airport from the regional centre, other Greater Manchester town centres and from key locations across the north west and north of England will be a priority to enable passengers and workers to reach the airport more easily. Opportunities to make greater use of autonomous transport systems will be explored in and around the airport to improve connectivity and reduce traffic impacts. More locally, improved public transport, cycling and pedestrian routes will enable local people to benefit from the new jobs on offer.

Atlantic Gateway

Greater Manchester is unique among inland conurbations in having a major waterway, the Manchester Ship Canal, which provides direct access from a major port. Changes in shipping patterns driven by the widening of the Panama Canal and the planned completion of deeper water container berths at the Port of Liverpool means that Liverpool is expected to at least double its share of the container market, and this offers new opportunities for Greater Manchester via the canal. The development of the Port Salford Tri-modal Inland Port Facility will enable specialist goods handling and distribution across both road and rail. These facilities will reduce transportation costs for northern businesses and improve competitiveness.

Although Port Salford's rail and canal connections will mean that some of the increased freight from the greatly expanded Port of Liverpool will be carried sustainably, there will inevitably be an increase in road freight traffic, with a need to make better 24 hour use of the network. We will need better links to the motorway network



and improved trans-Pennine routes in particular. As technology improves, freight will increasingly be carried on low emission vehicles and Greater Manchester can take steps to facilitate this. Access to the port will also need to be improved by public transport from across Greater Manchester to give better access to jobs for our workers.

In addition to the port, significant developments in

Trafford Park and around Carrington, as well as logistics opportunities in the M58/M6 area, will increase pressures on parts of the transport network that are already congested. Given the importance of all these sites, the efficient operation of the transport network must be a priority and we will need to greatly improve public transport to the area and enable the movement of more freight by rail and water in order to reduce congestion.





6. DELIVERING BETTER CITY-TO-CITY LINKS

If we are successful then by 2040:

- Greater Manchester will be better connected to other major towns and cities by fast, high-capacity, high-frequency public transport and integrated ticketing and payment systems.
- Journey times on key road and rail corridors will be shorter and more reliable, with the majority of longer-distance road trips being made using low or zero-emission vehicles and more national and regional freight movements being made by rail and water.
- Access to our major transport interchanges will be improved for all modes and these locations will become focal points for economic growth and new development.

In the next few years, Greater Manchester is set to benefit from a massive investment to improve its national and regional connections. The £600 million Northern Hub rail development and a £400 million electrification programme will improve links between the cities and towns of the North and stimulate £4.2 billion of economic benefits.

At the same time, Highways England (HE) is investing up to £250 million in a smart motorway scheme to improve reliability on the M60/M62 corridor. A planned new link road to M62 J19 will also help to relieve congestion. A new link road to ease congestion at the end of the M67 at Mottram Moor is also in the design stage.

This is just the start, however, as the Government plans a £20 billion project to extend Britain's new high speed rail network northwards from London to Birmingham, Leeds and Manchester. The High Speed 2 (HS2) link to

Manchester should be complete by 2033, with stations at both Manchester Piccadilly and Manchester Airport and opportunities to link to the West Coast Main Line in the Wigan area. By reducing travel time and increasing business productivity and connectivity, HS2 will make Greater Manchester a significantly more attractive business location, bringing up to 180,000 new jobs by 2040 and adding £1.3 billion to our GVA.

The new line will provide extra capacity to meet the rapidly growing demand for rail travel, cutting the journey time from Manchester to London by an hour, to just 68 minutes. It will also provide more capacity for freight to be carried by rail, from key locations like Trafford Park and the future Port Salford.

We want to see some of these benefits delivered early, extending Phase 1 to Crewe by 2026 and bringing forward the development of Piccadilly Station to



stimulate the regeneration of the surrounding area. However, to capitalise on the opportunity offered by HS2, links and capacity between the northern cities must also be transformed.

On the motorway network, more capacity is needed to serve the growing economy, particularly the M60/M62, M56/M60 and M6 corridors.

Transport for the North asks Government to support a £15–20 billion, 15-year investment plan for transport across the North.

The 'Transport for the North' proposals describe how the North, with Greater Manchester playing a leading role at its heart, needs a very high quality (fast and frequent) trans-northern rail network joining the centres of the city regions to enable it to become an "economic powerhouse". This will require a new trans-Pennine route, offering an alternative to the constrained highway routes, particularly to Sheffield. A faster route to Liverpool and direct, fast and frequent access to Manchester Airport for all the North's city regions will help northern businesses access global markets. Trans-Pennine road links and those to Liverpool will also need to be improved by releasing local bottlenecks.

At the same time, additional capacity is needed on the rail network within Greater Manchester to sustain growth and enable people to access job opportunities. The local network needs to be connected with HS2 services, new intercity and regional services, tram services and expanded park and ride facilities. This requires building on existing commitments to provide more electrification, new rolling stock as a matter of urgency, higher rail service frequencies, new services, gauge improvements and the removal of network pinch points, as well as integrated ticketing and seamless travel.

20 minutes off the train journey time between Manchester and Leeds would be worth £6.7 billion to the North of England economy.

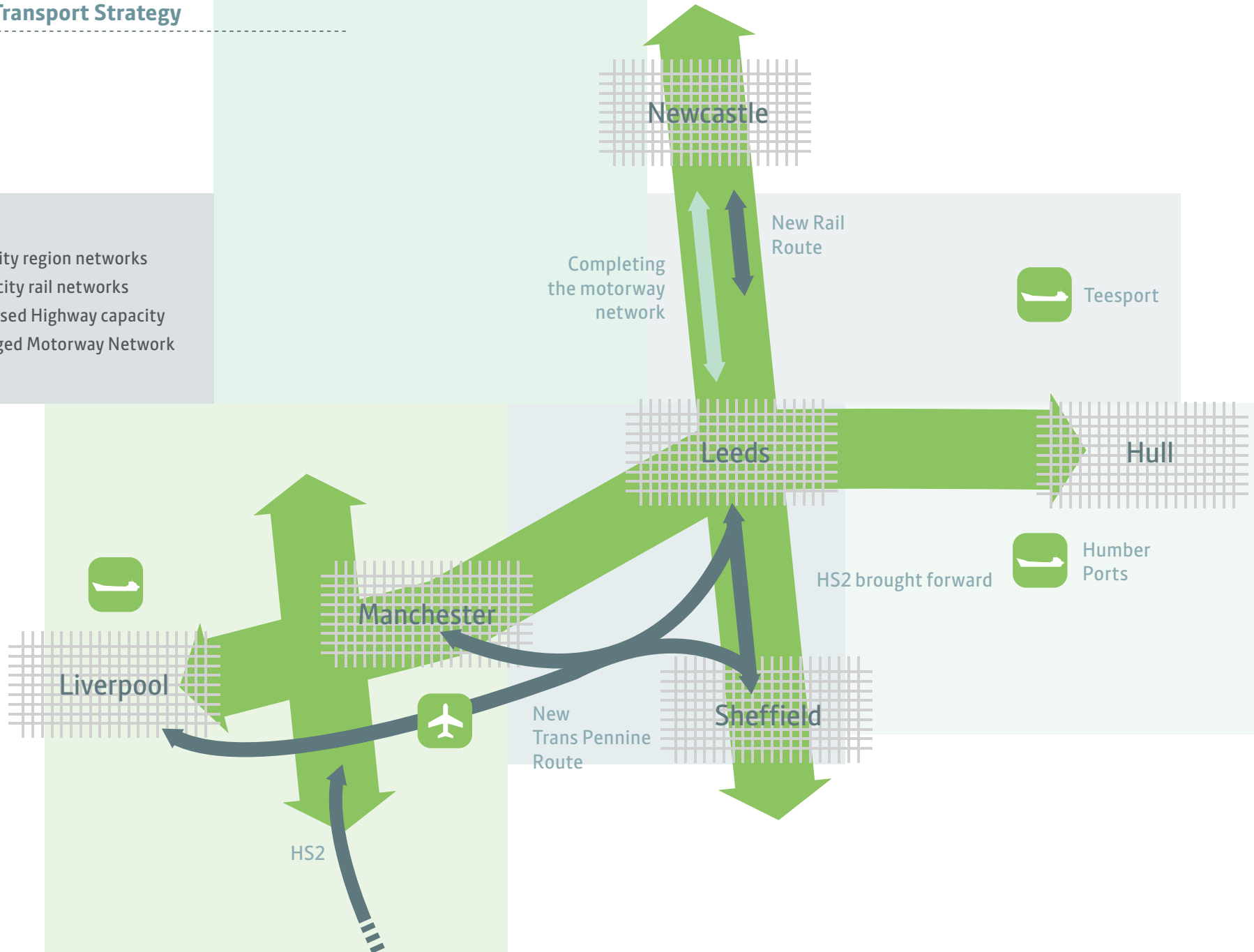
We need to make the maximum use of the existing motorway network through extending 'managed motorways' schemes and addressing strategic gaps in the road network, particularly improving reliability and accessibility for freight and business. Good access is essential to allow the efficient and timely movement of large quantities of freight by rail, road and water covering not only ports, rail links and large distribution centres but also light commercial vehicles and the airport for premium logistics.

By 2040, we will see much greater use of autonomous systems on our regional and national road and rail network to deliver more capacity and a safer and more resilient transport system. This is likely to include technology that enables vehicles to operate safely more closely together; better in-vehicle communications to provide real-time information to drivers and passengers on incidents and network conditions; and autonomous safety functions that enable vehicles to identify and react quickly to potential safety risks and to reduce accidents on our transport network.



Northern Transport Strategy

- Grid pattern: New city region networks
- Dark grey arrow: Inter-city rail networks
- Light green background: Increased Highway capacity
- Green background: Managed Motorway Network





7. GETTING INTO AND AROUND THE REGIONAL CENTRE

If we are successful then by 2040:

- **Increased high-capacity, high-quality public transport and cycling provision on more radial routes into the centre will give more people access to jobs and reduce congestion on our road network to make journey times quicker and more reliable for commuters and businesses operators.**
- **A larger and more densely developed city centre will be attractive and easy to walk and cycle around, with limited car use in the central area and all vehicles entering it being low or zero-emission. Poor air quality from traffic pollution will be a thing of the past.**
- **One integrated public transport system that allows customers to change seamlessly between trams, trains and buses, using one travel ticket that can also be used for car and cycle parking and hire. This will transform the experience for visitors, bringing the 'human scale' to an enlarged city.**

The regional centre (Manchester city centre and adjacent parts of Salford and Trafford) is the economic engine of the city-region, employing around 160,000 people. A nationally significant centre for financial and professional services, knowledge-based creative and new media industries, cultural events, conferencing and retail, it has the connections and infrastructure to attract the skilled labour needed by key sectors from across the conurbation and beyond. Its role as the key hub for the Greater Manchester public transport network and the rail network for the north of England will be greatly strengthened by the arrival of HS2, with a new high quality station at Piccadilly.

The regional centre will continue to be the focus for economic growth in Greater Manchester, with major development in 'The Corridor' along Oxford Road, around Piccadilly Station, at the Etihad Campus and the Ancoats area, at Spinningfields/Central Salford, at MediaCityUK in Salford Quays and Trafford Wharfside. To prevent congestion from undermining this growth, there will need to be a major shift from car use to public transport, cycling and walking. Connections across the centre for pedestrians and cyclists must be easy to use, safe and well-signed.

70% of am peak trips into the centre are by public transport, cycling or walking.

Capacity on public transport to and within the centre will be significantly increased. Some of this is already being delivered on rail, Metrolink and cross-city bus services, but further growth may require more radical solutions, such as tunneling under the city centre. We also need to continue to develop the role of coach travel and taxis in supporting the visitor economy. Buses will also need to rise to the challenge of attracting more people out of their cars. Recent years have seen significant increases in rail and Metrolink journeys, but bus travel has remained static, despite investment in infrastructure. Buses must become a more popular mode of choice for commuting as in London, as a critical component of a seamless and sustainable transport network.

We will need to provide fast, high capacity, reliable, resilient, integrated public transport on key corridors, with integrated ticketing, real time information and affordable fares. This will require some road capacity to be reallocated to provide better infrastructure and priority for mass transit public transport and for cycling, both of which can move significantly greater volumes of people into and out of the regional centre, making better use of existing roads.



Growth in jobs means at least 30,000 more trips into the centre in the peak.

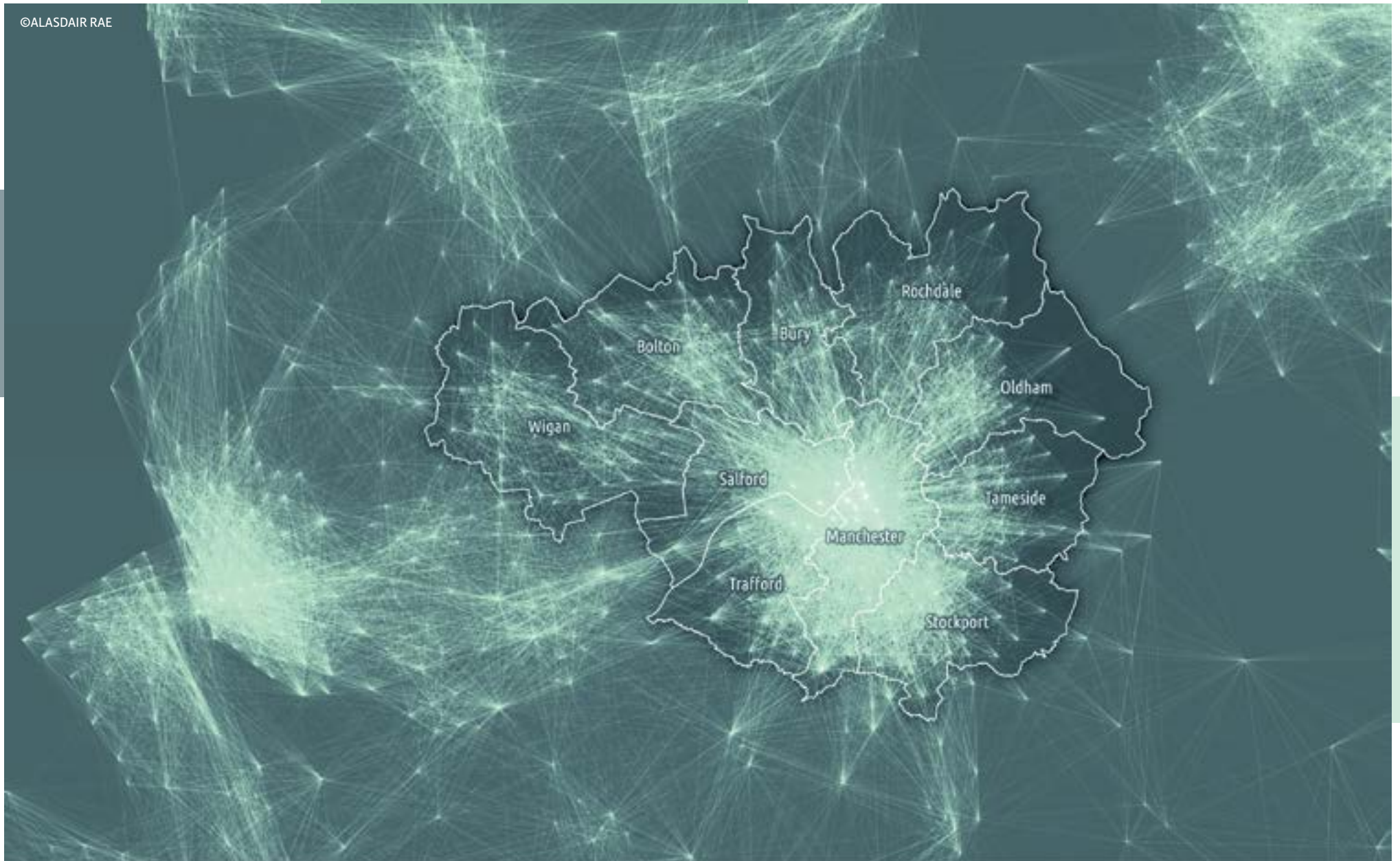
Road traffic on key routes into and around the centre will need to be managed to make the best use of available capacity and to direct it to the most appropriate route using real-time, in-vehicle communications. Managing the supply and cost of parking in and around the city centre will be critical, as will maintaining appropriate access for deliveries.

Improved broadband coverage and speed are allowing more business to be conducted digitally, reducing the need to travel, but the centre will continue to attract large volumes of trips.

An increasing number of people are choosing to live in the regional centre, rising from 7,000 in 2001 to 25,000 in 2016. This trend is set to continue, with around 50,000 new homes needed by 2040. The centre therefore needs to be a pleasant place to live: easy and safe to walk and cycle around, with high quality streets and public spaces. Improved streets and public spaces will help people to create a 'mental map' of the centre, establishing walking as the main way of getting around.

The concentration of activity in the city centre and its role as a transport hub, means that air quality is a problem. We will tackle this through greatly increased use of low and zero emission vehicles, to improve people's health and to bring emissions in line with EU limits.





Commuting Flows in Greater Manchester and Beyond, 2011 (all modes)

8. TRAVEL ACROSS THE WIDER CITY REGION

If we are successful then by 2040:

- **Our town centres will be transformed into vibrant and attractive destinations with more diverse economies, and with more people living in and around them. Attractive streets and public spaces will help bring in new investment. Most trips to our main town centres will be made by sustainable transport, using high quality public transport services and walking and cycle routes.**
- **Effective connections for orbital journeys will make it much easier to reach key Greater Manchester destinations such as hospitals, colleges and employment areas without a car. Integrated ticketing, services and bespoke, 'real time', travel information will enable more seamless public transport interchange, while walking and cycling will be modes of choice for short trips.**
- **Journey times on the busiest local roads will be more reliable, air quality improved, and roads will be better maintained.**
- **New development will be focused in areas with good public transport and served by good quality walking and cycle routes.**

Greater Manchester has a network of town centres and major employment locations outside the regional centre. Ensuring that trips to key destinations like town centres, employment areas and hospitals can be made easily, and by a choice of mode, is a challenge for our strategy.

Our town and district centres are vital to Greater Manchester, both as important economic and community focal points, and as local transport hubs. As people's shopping and leisure habits change, these centres will need to reinvent themselves. This will require good access by all transport modes. Improvements to walking and cycling access, parking and public transport and

streets designed for people, not just cars, will all help to attract investment into local centres.

Transport provision needs to support the regeneration of centres, to create high quality places to live, work and do business. It also needs to reflect the role and potential of different places, for example the largest centres, like Bolton and Stockport, have been identified as having potential to attract more office development, while others, such as Bury and Wigan, can serve a catchment area that extends beyond the Greater Manchester boundary. Other centres need to strengthen their roles as local service centres.

While most areas have good access to jobs in the regional centre and main town centres, there are other locations that are or will become important sources of employment. These include the Airport/Airport City, Trafford Park/Port Salford area and Logistics North in Bolton. Further key growth areas may be identified through the Greater Manchester Spatial Framework.

Improved and better integrated public transport and better cycle links will be needed to access these and other large employment sites, both to enable people to access jobs and to reduce congestion.

Major employment developments are also planned in neighbouring areas, e.g. Omega and Lingley Mere adjacent to the M62 in Warrington will create 24,000 jobs. We need to make sure Greater Manchester residents can access these jobs, but also ensure that the extra travel demand does not cause congestion. We also need to reduce congestion on routes where there are already strong commuter flows to and from neighbouring areas.

Logistics sites are likely to become increasingly important as the demand for internet shopping and home deliveries increases the need for distribution centres. We will need to manage the impact of goods vehicles on the road network, including their impact on air quality.

Good transport links to key locations such as hospitals and further education colleges will also be critical. This is a challenge because the specialisation of different facilities means that it is not possible to provide everyone with direct access to them. Local interchanges, particularly those in town centres, will therefore have an important role to play as part of our vision for one integrated public transport system, particularly as integrated smart ticketing makes it easier and more affordable for people to change between services or types of transport and reach a wider range of destinations. Walking and cycling are also important in providing these links. We will need to take opportunities to improve off-road walking and cycling routes, e.g. using our canals and greenways to develop a well connected network for active travel.

Damaging emissions from transport affect the whole of Greater Manchester, in terms of both air quality and carbon. As well as introducing more low emission buses and goods vehicles and encouraging more people to travel by public transport, by bike or on foot, we will boost the uptake of zero emission vehicles by providing more charging points for electric vehicles in local centres.





9. CONNECTED NEIGHBOURHOODS

If we are successful then by 2040:

- **Local neighbourhoods will be more pleasant and safe to walk and cycle around, with most short trips being made on foot or by bike. Access to local public transport services and neighbourhood facilities will be easier without a car.**
- **More people will choose not to own a car, but will have more flexible access to a low-emission vehicle if and when needed.**
- **The impact of traffic on local neighbourhoods will be reduced and access to local centres will be improved for deliveries and for public transport, without compromising safety for pedestrians and cyclists.**

Nationally, the average length of journeys for day-to-day activities (education, shopping, personal business, other escort trips) is within five miles of home. This shows the importance of the journeys we make locally.

People need easy access to jobs, schools, shops and other facilities. Good local connections are the foundation of an effective transport network, as links to public transport stations and stops are an essential part of longer trips.

More than half of short local trips are made by car, so to provide these vital links without increasing congestion, more local trips need to be made on foot, by bike or on public transport. For many people, journeys of up to two kilometres (just over a mile) can easily be made on foot, while five kilometres (three miles) is an easy cycling distance.

29% of trips made in Greater Manchester are made on foot.

To bring about real change, we must make neighbourhoods and town centres ‘pedestrian and cycle friendly’, providing attractive, ‘liveable’ streets and public spaces, with slower traffic speeds and safe routes. At the same time we need to maintain access for deliveries and public transport. The design and speed of local roads needs to reflect their function, with pedestrians and cyclists given priority and space wherever possible.

Public transport will need to become ‘seamless’ to make it easier to change between services and with simple, integrated ticketing that offers best value travel. The network must be easy to understand and use, accessible to all users, and have information readily available both

before and during the journey. It must also provide links to the places people need to reach, at the times they need to travel.

31% of Greater Manchester households have no access to a car.

For some people, door-to-door transport is essential. We need to make sure this is provided in the most cost-effective way and that the different types of provision (e.g. hospital transport, social services transport, Ring and Ride and taxis) are fully integrated to improve their effectiveness.

Through our fuller strategy, we will develop policies for the role of these flexible transport options as part of the Greater Manchester transport system.

We will make local rail stations more accessible for people with disabilities and improve access to them on foot and by bike. Through integrated ticketing and travel information, supported by integrated service planning, we will also encourage bus/rail interchange at local stations. In targeted locations, we will also provide parking where this will encourage people to travel by train rather than drive all the way to their final destination, working with neighbouring authorities to overcome excessive car miles to stations at the Greater Manchester boundary.

Major new developments need to be located with easy access by all modes of transport or where public transport can be provided in a cost-effective way. The design of new housing needs to make it easier to travel without a car, so we will encourage developers to build homes and commercial developments where the needs of pedestrians and cyclists are integral to the designs. We will also encourage the provision of space for car clubs and charging points for electric vehicles to make car use more sustainable.

The local highway network needs to be safe and well maintained, with key roads always available, able to cope with extreme weather conditions and offering reliable journey times. We will need to work with the Government to provide incentives for people to buy low emission vehicles, to improve local air quality and reduce carbon emissions.

Improved broadband coverage will reduce the need for some journeys, but more local collection points will be needed to improve the efficiency of internet shopping and to reduce local traffic.





Maintenance and Renewal

- Highways
- Rail and Metrolink
- Passenger facilities
- Off-road pedestrian and cycle routes

New Investment

- Global connectivity
- City-to-city links
- Regional centre connectivity
- Travel across the city-region
- Connected neighbourhoods
- GM-wide programmes

Service Delivery

- Integrated planning and funding
- Key route network
- Rail station devolution
- Integrated bus network

10. DELIVERING OUR VISION

This document sets out our long-term vision for transport in Greater Manchester to enable us to build on the major programme of transport improvements already planned or underway for delivery in the short to medium term future.

Achieving our vision requires transformational change in three areas: new investment; maintenance and renewal; and service delivery. Some of these changes can be achieved by the Greater Manchester authorities, whereas others will need us to work in partnership with the Government, national and local bodies and the private sector.

We need to make sure we can plan and deliver both new and improved services against a sustainable financial background. We will work with the Government through devolution and other opportunities to review how transport facilities, their maintenance and the services that operate on them, are best funded over the medium and long-term.

New Investment

Current programmes include a very significant expansion of the Metrolink network, alongside major bus priority schemes and new state-of-the-art transport interchanges.

Massive investment in the rail network is in the pipeline, starting with the electrification of several key routes but with a commitment by Network Rail to fund the Northern Hub improvements in full, and the Government announcement that Phase 2 of HS2 will bring high speed rail to Manchester.

Successful multi-million pound government funding bids are delivering major walking and cycling investment programmes, alongside comprehensive travel choices programmes to encourage much higher levels of active and sustainable travel across Greater Manchester.

We are also investing in our road networks, with a number of major schemes underway to relieve critical bottlenecks that could otherwise constrain our economy.

The increased role of mobile technology and the roll-out of broadband are transforming the way travellers search for and receive information as well as the management of our networks.

Maintenance and Renewal

Maintenance and renewal are vital to the safe and efficient functioning of our networks. A major programme of renewing Metrolink trams and passenger facilities is underway, along with a programme of updating bus stations.

Highway maintenance is a continuous activity, but successful national funding bids are allowing us to target additional investment on the Key Route Network. We are also using prudential borrowing to increase the level of investment in both maintenance and preventative treatments.

Service Delivery

In terms of service delivery we are developing a number of landmark reforms (some of which may require new legislation) to the way that we plan, deliver and manage transport in Greater Manchester. These include:

- Greater integration of planning and funding across economic development, public health, health provision, land use planning and transport;
- Development of the “Key Route Network” of major local roads across Greater Manchester, that will be managed as a single multi-modal network by TfGM on behalf of the GM Combined Authority, working in close partnership with Highways England;
- Greater influence over the rail network through work with neighbouring regions on Rail North and Transport for the North;
- TfGM management of local rail stations to deliver a step-change in quality of station provision in our local communities;
- Considering whether new approaches for the delivery of bus services would enable a more consistent bus market with an integrated approach to service planning, marketing, fares and ticketing; and
- A fundamental review with the Government of the medium-term funding arrangements for Greater Manchester.

There is more work to do to identify all the schemes and measures needed to achieve our 2040 vision. However, work done so far tells us that we are likely to need the following:

Global connectivity

- HS2 stations at Manchester Piccadilly and Manchester Airport
- Improved access to Manchester Airport for goods and passengers
- Sufficient road and rail capacity for Port Salford

City-to-city links

- Improved trans-Pennine and Mersey belt road and rail links
- Improved public transport to the Airport
- Improved local links to the motorway network

Regional centre connectivity

- Improved bus circulation and interchange facilities
- Improved pedestrian and cycle permeability across the centre including better wayfinding
- Development of a rapid transit network to bring Metrolink style services to more key corridors
- Improvements on the Inner Relief Road to remove bottlenecks and reduce severance for pedestrians and cyclists
- Low emission city logistics

Travel across wider city region

- High quality interchanges in town centres
- Development of a rapid transit network to link more of our major employment areas, like the Airport
- Town centre access and circulation improvements for traffic and pedestrians/cyclists
- Access to major development sites

Connected neighbourhoods

- Continued roll-out of the Cycle City strategy
- More pedestrian and cycle friendly local neighbourhoods

Throughout Greater Manchester

- A continued sustained investment in travel choices and information programmes
- A package of bus priority measures
- Improvements to local rail stations
- Improvements to the suburban rail network
- Continued improvements to road safety
- Improvements to traffic signals
- Greater investment in highways maintenance
- Smart technology to improve network efficiency and customer services
- Low emission vehicle rollout and car-sharing services
- Measures to reduce the impact of freight operations
- Development of more consistent interchange quality
- An integrated approach to all types of door-to-door transport
- Integrated ticketing and payment systems
- Commercialisation of facilities





11. DEVELOPING THE STRATEGY

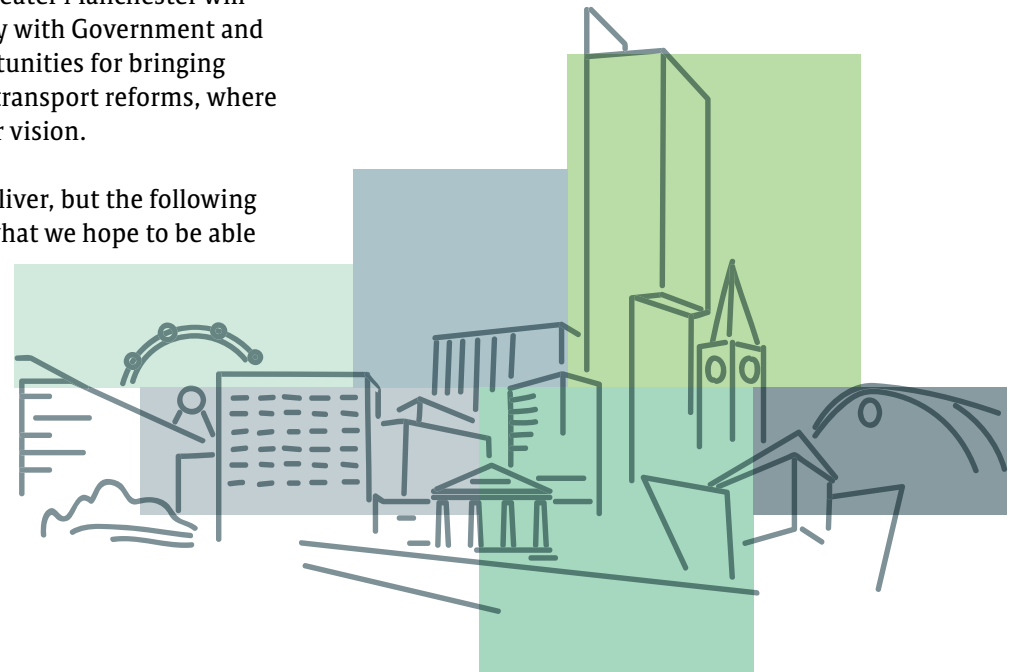
This document is the starting point in the development of a new transport strategy for Greater Manchester. It has set out a vision for the transport network that we believe Greater Manchester needs by 2040 to support economic growth and prosperity, to enable everyone to benefit from that prosperity, and to safeguard our environment for current and future generations.

The 2013 Greater Manchester Strategy set out a compelling vision for the city region, supported by a set of principles to promote growth and to reform public services. This strategy, supported by our subsequent Growth and Reform plans paved the way for the ground-breaking devolution agreement with Government in 2014. The resulting reforms to the way we manage our roads, rail stations and bus services will support the delivery of the vision set out in this document. They will ensure that Greater Manchester has the necessary powers and resources to maintain long-term investment in transport infrastructure and services and to deliver transformational changes to the customer experience.

The reforms will also enable us to pursue more innovative solutions to transport challenges and to better integrate transport modes into the seamless, accessible and efficient network needed by a leading European city-region. At the same time, the emerging Northern Transport Strategy, overseen by Transport for the North, will deliver significant connectivity improvements between and within our great Northern cities and enable Greater Manchester to continue to develop its position at the heart of a Northern Powerhouse economy.

We are now keen to consult with stakeholders and the public to make sure that the vision is one that we can all support. Following this consultation, the next stage is to develop and consult on a full Greater Manchester Transport Strategy for 2040 (see www.tfgm.com/2040 for more details). The full Strategy will be a key component of our new local transport plan and will set out the critical transport measures that will be required to turn our vision into reality. Greater Manchester will also continue to work proactively with Government and other partners to identify opportunities for bringing forward further devolution and transport reforms, where these support the delivery of our vision.

The strategy will take time to deliver, but the following timeline gives an indication of what we hope to be able to achieve and by when.



World class connections that support long-term sustainable economic growth and access to opportunity for all

2015

2025

2040

Buses play an increasingly significant role at the heart of an integrated public transport network.

High quality bus services mean that many more people are travelling by bus in Greater Manchester

Expansion of Metrolink and completion of major bus priority packages reduce car travel into the city centre and improve access to Manchester Airport and Trafford Park.

Next generation urban rail, Metrolink systems and bus priority support our rapidly growing economy.

Electrification of rail lines to Liverpool, Preston and Leeds and completion of the Northern Hub improvements provide more capacity and faster links for commuters and rail freight. Improved local stations provide more consistent, higher quality facilities

HS2 stations at Manchester Piccadilly and Manchester Airport transform links to Birmingham and London, and north to Scotland.

New TransNorth rail services and trans-Pennine highway links transform city-to-city connectivity and support the growing Northern Powerhouse economy.

Integrated fares and easy to use payment systems enable easier interchange between transport services and more flexible travel options.

Real-time transport information, provided direct to personal devices and vehicles, improves the travel experience in Greater Manchester.

Completion of smart motorway network across the region improves the reliability of Greater Manchester's strategic road network.

Key Route Network enables the efficient and safe movement of people and goods across our Greater Manchester highways system.

Highways England bring forward capacity enhancements identified through strategic studies

High quality streets and public spaces make all our town and city centres easy to walk around and highly desirable places to live, work and visit.

Reduced traffic speeds in residential areas encourage more walking and cycling and reduce fatalities on our roads to near zero.

A comprehensive segregated Greater Manchester cycle network transforms cycling into a natural travel choice, particularly for short journeys.

Opening of Port Salford increases the proportion of goods arriving into Greater Manchester by water.

Significantly more freight is being carried by rail and water, reducing the numbers of HGVs on our roads.

Greater Manchester meets EU air quality requirements and many more vehicles are low emission.

Zero emission vehicles are the norm, greatly reducing carbon emissions and improving air quality.

New innovations in transport systems and vehicles are significantly improving capacity, safety, resilience and reliability of our network.



