Chapter 6: A connected city

Strategic overview

For a city to be successful it needs to be well connected – internationally, nationally and locally. The level of a city's connectivity is determined by its capacity to connect people with one another, as well as to goods, services and places. Historically, people needed to be in the same place to connect, but modern technology is increasingly enabling these connections to happen virtually. This chapter considers physical connectivity brought about by transport, but also digital connectivity.

Connections are necessary so that people can access work opportunities, education and services, and so that businesses can access markets and their customers. It is only through excellent connectivity that the economy can continue to grow, educational standards can increase, and the city can become more equitable and liveable.

The chapter takes account of the Greater Manchester 2040 Transport Strategy and is structured around the relevant themes contained in the Our Manchester Strategy, creating a city that is:

- **Connected** considering connectivity by mode of travel and by virtual links
- Integrated using connections between these modes to enable door-to-door journeys
- Sustainable and thriving managing how demand is met, and how technological opportunities are exploited to ensure that carbon emissions are reduced while enabling the city to grow

• A place to live and innovate – ensuring that people are put at the centre of the ways we manage, maintain and develop our streets, and how we accommodate and support innovation.

The COVID-19 pandemic has forced society into making immediate and drastic adaptations to the way people live and travel. These changes have had the biggest impact in cities, where everyday activities are only possible because of the connectivity described above, the proximity of large numbers of people to one another, and the connections they make. In the long term, society may return to something broadly similar to the pre-COVID world, but we are currently in a transitional period in which strict lockdown measures have intermittently been imposed and then lifted, so 'normal' is not entirely possible. Our period of recovery will continue to depend on three things: making public transport safe to use so that people can remain connected to the economic and cultural life of the city; enabling people to actively travel' safely and easily; and connecting people remotely through digital technology.

Manchester has already joined the growing list of cities around the world to have accelerated plans to make their city centres more people-centred and less reliant on the use of private motor vehicles. In the early stages of the pandemic, we closed some streets to cars and widened pavements to aid social distancing in both the city centre and our district

centres, on an experimental basis at first. These physical adaptations of our built environment have been brought forward on an accelerated timescale but are very much seen as the future direction for how we are aiming to enable connectivity in a more sustainable, zero-carbon and people-friendly way. As we move to a post-lockdown world, we will need to retain the ability to be flexible and adapt to changing circumstances and responses to the pandemic.

Analysis of progress

Manchester already benefits from strong connections but is continuing to make improvements through sustained investment in infrastructure. It is essential that Manchester has world-class connectivity to realise the city's ambitions for economic growth and prosperity.

Working collaboratively with Transport for Greater Manchester (TfGM), we are taking a strategic approach to planning our city's transport network. In 2016, residents and businesses were consulted on the Greater Manchester 2040 Transport Strategy,

Digital connectivity has become even more central to creating a connected city due to the effects of the pandemic. Having access and using online information and services now depend to an even greater degree on being digitally included, so our analysis of Manchester as a connected city now extends deeper into the progress made and challenges that remain around digital inclusion.

¹ Examples of active travel include walking, wheelchair, cycling, skateboard, scooter, etc

which was first adopted in 2017. A substantially refreshed 2040 Strategy was adopted in early 2021, along with a five-year delivery plan of infrastructure priorities. For Manchester, we are building on this strategic approach with the adoption of a refreshed <u>City Centre Transport Strategy</u>, published in March 2021. This prioritises walking as the main way of moving around the city centre and aims for 90% of morning peak journeys to the city centre to be made by sustainable modes by 2040.

Connections by air

Manchester Airport

Manchester Airport provides national and international connectivity; it is the third-busiest airport in the UK in terms of passenger numbers and is the only two-runway airport outside the south east of England. Figure 6.1 shows that passenger numbers at Manchester Airport were continuing to grow, with a rise of 6.3 million passengers since 2015, increasing to 29.4 million passengers in 2019. However, air traffic has been severely impacted by the COVID-19 pandemic, which significantly reduced passenger numbers to just over 7 million during 2020, a 76% reduction compared to 2019. Monthly passenger figures from Manchester Airports Group reported reductions of 99% in April 2020, and 87% in December 2020 compared to the same periods in 2019. These figures are a reflection of world trends.

The Airport is currently undergoing a *£*1billion transformation programme, which is due to be completed in 2024. This work will significantly increase the size of Terminal 2, and also involve other improvement and enhancement work, maximising the capacity of the Airport to be able to carry 55 million passengers a year. The first phase of work, the extension to Terminal 2, opened in July 2021.

Figure 6.1:



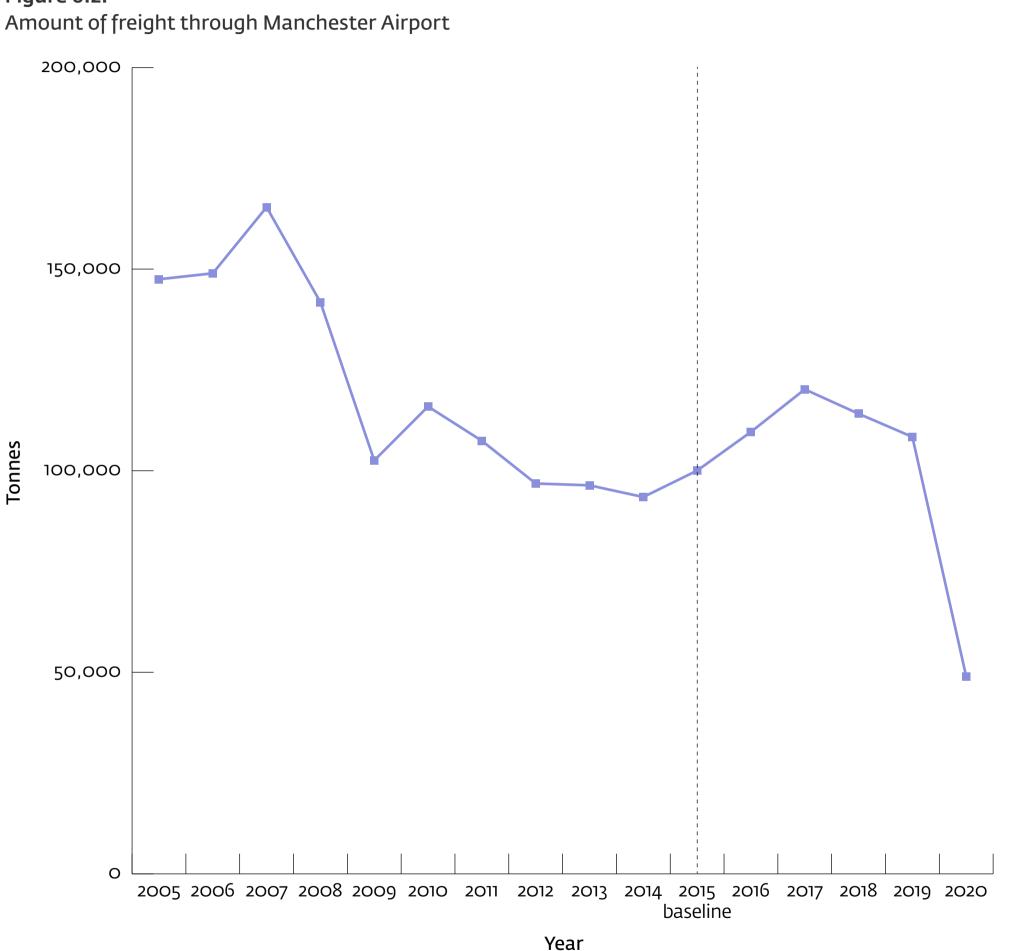
Source: Civil Aviation Authority © Crown Copyright 2021

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Air freight

The World Freight Terminal located at Manchester Airport includes a dedicated cargo freight facility providing a base for approximately fifty freightforwarding firms. Figure 6.2 shows that a significant decline in freight tonnage was experienced between 2007 and 2009. This was mainly as a result of the global recession and a spike in oil prices. Following the recession, the industry has shown signs of recovery and ongoing stability. The COVID-19 pandemic significantly impacted on freight movements in 2020, although the 45% reduction compared to 2019 is not as significant as the reduction seen in passenger numbers. Monthly cargo tonnage figures from Manchester Airports Group reported reductions of 90% in April 2020 and 45% In December 2020 compared to the same periods in 2019.





Source: Civil Aviation Authority © Crown Copyright 2021

Connections by rail HS2

Work to develop the second phase of the High Speed 2 (HS2) rail line, connecting Manchester and the Airport with Birmingham and London, has been progressing over the past year. Phase 2 has been split into two phases. Phase 2A will be from Birmingham to Crewe, the Hybrid Bill for which gained royal assent in February 2021, enabling construction to begin. Phase 2B is Crewe to Manchester. The Hybrid Bill for this section has not been submitted yet, but is expected to be submitted in 2022.

The route will approach Manchester through a 16km tunnel, emerging at Ardwick, where the line will continue to its terminus at Manchester Piccadilly. It is planned that a major new station will be constructed at Manchester Piccadilly, supporting the regeneration of the surrounding area. A further station is planned to serve Manchester Airport. Discussions and work on HS2 in 2020 and 2021 have been centred around the format of the Piccadilly station and how it can best enable regeneration of the surrounding area, as well as the optimal service for both HS2 and Northern Powerhouse Rail.

Construction is due to start on the line to Manchester in 2033, and the scheme is expected to be completed in late 2038.

Northern Powerhouse Rail (NPR)

Plans for high-speed rail links connecting Manchester to the other cities of the North of England are being developed by Transport for the North (TfN) – the UK's first statutory subnational transport body. Formed in 2018, its role is to make the case for

strategic transport improvements across the North of England in order to improve connectivity and drive economic growth.

The preferred route was agreed by leaders in the North in March 2021, and the plan has now been submitted to the Government for consideration. Further targeted studies, a shortlisting process and the development of business cases will take place through 2021 and 2022 to help make the case for long-term funding through the Department for Transport.

Highway connections

The strategic and key-route road networks are essential to the economy of the city and wider region, and support the movement of people and freight locally and across the country.

Strategic road network

An efficiently operating M60 is important to Manchester, as it not only distributes traffic throughout the city, but also provides a means of travelling around rather than through Manchester for longer journeys. Several projects continue to be progressed by Highways England with the aim of improving connections by road: the Manchester North West Quadrant Study is looking at ways to ease congestion and make journey times more reliable between junctions 8 to 18 of the M6o. The A57 Link Project is looking at improving connectivity between Manchester and Sheffield. This particular journey has the worst per-mile journey time between any pair of UK cities, with particular issues of congestion and community severance. Further improvements to the region's major roads are being actively considered by the Department for Transport, Highways England, and Transport for the North. A

Within Manchester, the Manchester and Salford Inner Relief Road (MSIRR) is vital for distributing traffic around the city centre, and significant investment is now planned to improve this route. Improving this route will result in less traffic diverting from the key route network onto less suitable routes.

There is limited scope to increase the extent of the highway network; however, work is underway to improve the operation of the network to reduce congestion and increase its capacity.

Highway network five-year investment plan

Manchester's highway network includes over 1,350km of road length, 2,600km of footway length, and more than 350 bridges and structures. Based on the latest valuations, the total highway asset has an indicative gross replacement value of more than £2.7billion, making it the Council's most valuable asset. Our ability to offer a reliable and resilient highways system is not only important for existing businesses, but is also a determining factor

key challenge for Manchester in its role in influencing and liaising with Highways England and DfT will be to ensure these projects can be aligned with our target of net zero-carbon by 2038.

Key route network

During 2020, improvements were completed on the MSIRR along Great Ancoats Street and at the junction of the Mancunian Way and Princess Parkway. The total investment of all improvements is in the region of £30million; this will not only improve the flow of traffic around the MSIRR, but also improve access across the MSIRR into the city centre for cyclists and pedestrians.

in attracting new businesses, particularly those with a time-critical need for logistics and commercial transport links.

The current five-year (2017–2022) £100million highway investment programme is underway, with the primary goal of improving the condition of Manchester's roads, footways and drainage, as well as supporting maintenance of the bridge network.

During 2020 the following work was carried out:

- Carriageway Surfacing Programme 149 sites, total area 346,511 square metres
- Challenge Fund three sites (Kingsway, Ashton Old Road and Oldham Road), total area 153,540 square metres
- Footways 62 sites, total area 89,102 square metres
- Preventative 150 sites, total area 221,941 square metres.

The annual road condition GEIST surveys have reflected this work, showing an improvement in the percentage of the road network beyond mid-life grading (in 'poor' condition) from 25% in 2017 to 18% in 2020. £18.8million was invested in this programme during the financial year 2020/21, and £66.1million has been invested since the programme started in the financial year 2017/18. The resident satisfaction of highway conditions improved by 9% between 2018 and 2020 (national NHT survey). The satisfaction levels for 2020 were 52%, an increase of 1% since 2019, which is the same as the national average. Since the start of the programme, the number of reported drainage gully faults and complaints has fallen by 47%. The following milestones were achieved in 2020:

- The Medlock Street roundabout congestion reduction scheme has been completed, including cycling and walking improvements.
- The eagerly awaited road-widening and pedestrianimprovement project at Hyde Road was completed.
- The Great Ancoats Street project, which will make access across the busy road safer for pedestrians and cyclists, was completed.
- School safety improved during the year, with the completion of 77 out of 81 school-crossing improvements across the city.
- The A6 Stockport Road bus-layby widening scheme was completed.
- The Airport City Green Bridge scheme over the M56 motorway connecting the Airport to Wythenshawe was completed.
- The first phase of the walking and cycling scheme through Chorlton was completed, including the construction of the first CYCLOPS junction within the UK.
- In excess of 54,371 new LED street lights have been established within the street lighting PFI.
- Social-distancing measures were established at 11 locations within the regional centre and several district centres.

An integrated transport system

Integrated transport systems should allow for combining several different modes of transport across a journey to provide a seamless end-to-end service. It also means ensuring that timetables are planned in a way that makes them fully co-ordinated, including integrated travel information and route planning, and ensuring that ticketing systems are integrated across different modes and routes. Integrated journeys can include elements that are active, and when integrated with virtual connectivity, time spent travelling can become more productive. An integrated network is more resilient, more accessible, provides greater choice and should be easy to use. It should also be efficient in terms of time, cost, comfort, safety, accessibility and convenience, resulting in increased economic and social benefits. Investment in such a system should result in a higher uptake in active modes of travel (walking and cycling) and public transport, and reduce congestion and pollution.

The Park and Ride schemes help to reduce journeys by car that would otherwise add to congestion within Salford and Manchester, as car journeys can be connected with Metrolink and rail trips, reducing the need to travel the full distance by car. Within Manchester, there are three Park and Ride schemes attached to Metrolink stops; these have 373 car parking spaces. Two further sites just outside the city boundary at Sale Water Park and Hollinwood provide an additional 521 spaces. A further 139 Park and Ride spaces are provided at five railway stations within the city. Worsley Park and Ride provides access to Manchester by bus rapid transit and has 230 spaces.

In March 2021, the Mayor announced that powers contained in the <u>Bus Services Act 2017</u> would be used to introduce a system of bus franchising in Greater Manchester. This would see the introduction of a unified brand across the city region for buses, with simplified, integrated ticketing across bus and Metrolink. Private operators would run services to a specification on fares, timetables and routes set by TfGM. The system would be introduced in phases, with anticipated completion by the end of 2024.

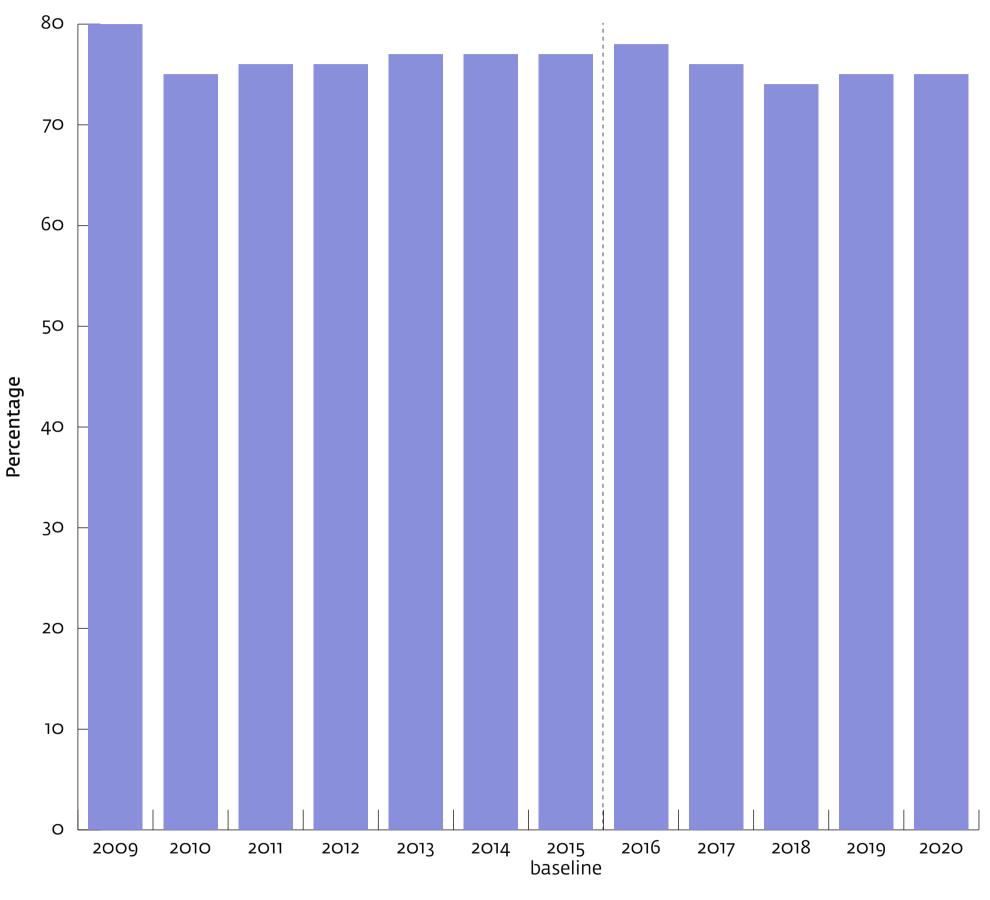
Car Clubs provide access to a car without needing to own one and may be a way of supporting a more sustainable transport network as part of the wider transport mix. It is proposed to increase the number of Car Club vehicles across the city, adding electric vehicles to the Car Club fleet, and expanding the number of locations from which they are available. The current fleet operating in the city includes 47 vehicles operating from 42 locations. A number of new bays are expected to become available during 2021 as part of the network expansion, and a further eight electric Car Club vehicles are to be provided through the eHubs project as part of a pilot scheme.

Encouraging walking and cycling, and the use of public transport

Currently within Greater Manchester, 88% of trips are shorter than five miles, and more than half of them are made by car. Although the percentage of single-occupancy cars travelling into the city centre during the morning peak time is reducing, as shown in Figure 6.3, car ownership overall is increasing (there was a growth of 14% in licensed cars in the city between 2015 and 2020: from 141,800 to 161,600).²

Figure 6.3:

Percentage of single-occupancy car journeys into Manchester city centre (7.30–9.30am)



Source: TfGM © Crown Copyright 2021

Year

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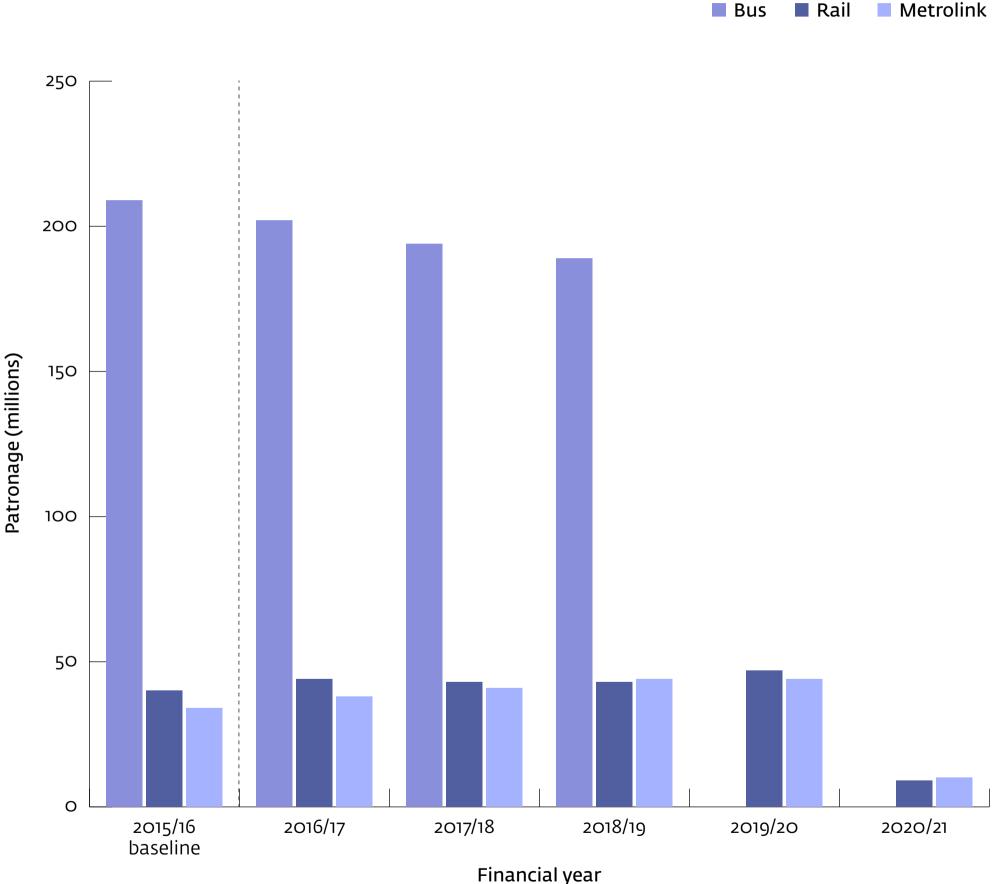
Figure 6.4 shows public transport patronage across Greater Manchester. The figures for 2019/20 and 2020/21 are effectively incomparable with previous years due to the effects of the pandemic. Figures for rail have been rebased to 2015/16 due to a change in data collection to include passenger journeys boarding and alighting in Greater Manchester to or from destinations outside Greater Manchester, to give a truer picture of rail patronage. Therefore, the previous data going back to 2002 has not been presented here.

Over the past ten years, rail and Metrolink use has increased significantly, while bus use has been slowly declining. A number of measures to support the continued growth of rail travel and Metrolink, and reverse the decline in bus travel, are described below. However, the extent to which patronage rebounds across all public transport modes will depend on measures to increase public confidence in the safety of travel, as well as improvements to infrastructure and services.

The data presented in Figure 6.4 is incomplete due to the limitations of collecting data under lockdown conditions. The pandemic prevented collection of the usual Continuous Passenger Sampling Surveys, therefore bus usage is missing from 2019/20 and 2020/21. As the data shows, patronage on rail and Metrolink collapsed in 2020/21 due to Government advice against public transport travel for all but essential journeys, as well as various lockdown periods with different restrictions, and working from home.

Figure 6.4:

Public transport patronage across Greater Manchester



Source: TfGM © Crown Copyright 2021. Bus data is unavailable for the years 2019/20 and 2020/21

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Bus travel

Bus travel is supported by the Council and TfGM in the following ways:

- Investment in Bus Priority infrastructure on key routes into the city centre, including the Leigh Guided Busway, Rochdale Road, and the Oxford Road Corridor. Recent work included the reconfiguration of the Portland Street/ Chorlton Street/Charlotte Street traffic signals, which improved pedestrian-crossing facilities and reduced bus-journey times along Portland Street. This was achieved by removing a stage from the traffic signals.
- Greater Manchester Infrastructure Programme: Work to identify a pipeline of new bus-priority measures is underway with TfGM and district colleagues. This includes planning for bus priority on key corridors across Manchester, including at Princess Road, Chester Road, Wilmslow Road, Bury New Road and Oldham Road.
- City Centre Transport Strategy and related bus planning and improvements: Quality Bus Transit and Streets for All corridor analysis to develop bus-priority measures for A6 (through Salford), A6 (to Stockport), A56, A57 and A664 through Victoria North/M62 Northeast Express Bus Corridor.
- Commissioning consultants to help produce a City Centre Bus Routing Plan to ensure that the Council can effectively integrate bus transport into the overall management of street and other urban space in the city centre. This will support planning and infrastructure provision for bus operators to meet the CCTS targets for bus patronage

In March 2021, the Mayor announced that powers contained in the **Bus Services Act 2017** would be used to introduce a system of bus franchising in Greater Manchester. This followed two rounds of consultation in 2020 and early 2021, the second of which re-examined the proposed franchising scheme and other options in the light of the effects of the pandemic. Bus franchising will be introduced in three phases across Greater Manchester, with the full network franchised by the end of 2024.

The Council is working collaboratively with TfGM on its Local Bus Strategy to ensure the right strategic framework informs decision-making on buses. It is also working on a Bus Service Improvement Plan to ensure that bus reform results in the Our Network vision set out in the Greater Manchester 2040 Transport Strategy are realised. Both will be published later in 2021. In addition, recognising the importance of buses to the city centre and our future transport strategies, we are undertaking work on routing and other infrastructure planning for buses into and within the city centre.

Metrolink

The Metrolink network has expanded to become the largest light rail network in the UK. Services now run on seven lines to 99 stops, covering nearly 105km. The network is currently undergoing significant improvements, and further developments are planned for the future:

• Legal powers exist to extend the Airport Metrolink extension through the completion of a western loop, which would connect the existing line to the new Terminal 2 and then to the proposed HS2 station, to Wythenshawe Hospital, and then back to the existing line. The current intention is to deliver the link to

The Council is working collaboratively with TfGM on its Rapid Transit Strategy to ensure that decisions on investment in Metrolink and bus rapid-transit infrastructure and services are made according to a coherent strategic framework. The Strategy will be published later in 2021.

Walking and cycling

There is great potential to increase the number of shorter journeys being made on foot or by bike. In order to improve health and access to jobs, and to alleviate pressure on our public transport system, levels of walking and cycling will need to continue to increase. There is a strong case to support walking and cycling in Manchester, and increasing the share

the new Airport terminal first, with the further extension following the construction of HS2. TfGM is currently producing a business case for this proposal.

• Proposals have been announced to extend the Metrolink network to Stockport using a tramtrain system, whereby tram services share lines with trains. The new line would extend from the existing Metrolink stop at East Didsbury to the new transport interchange in Stockport. This scheme is in the early development stage, with a possible construction start date of 2025.

 TfGM has committed to developing options by 2025 for a Metrolink station at Sandhills, to support the development of sustainable neighbourhoods of up to 15,000 homes in the Victoria North area to the north of the city centre. Work is ongoing to develop options.

• TfGM is in the process of acquiring 27 new trams; six are now in operation and the other 21 are due to be in service by mid-2022.

of trips for these active modes has the potential to reduce car use, use our highway network more efficiently, and create more space on public transport. In addition, active modes improve the mental and physical health of our residents, reduce our carbon emissions, and improve air quality.

Greater Manchester's Cycling and Walking Commissioner published the Made to Move document at the end of 2017. This document sets out 15 steps to be taken to create a genuine culture of cycling and walking within the city. The first step in this process is the production of a detailed Greater Manchester-wide walking and cycling infrastructure plan known as a Local Cycling and Walking Investment Plan; this will be produced in collaboration with the district authorities, and is now known as the Bee Network. The Greater Manchester Local Cycling and Walking Infrastructure Plan (LCWIP), Change a Region to Change a Nation, was published at the end of June 2019.

In order to implement and develop the Bee Network, initial funding of £160million was made available through the Mayor's Challenge Fund (MCF). This is available for all Greater Manchester councils to apply for by submitting qualifying schemes. The programme will deliver improvements to the highway network to make it easier and more attractive for people to take shorter journeys on foot or by bike. Manchester has secured programme entry for more than £79million of projects in the Mayor's Challenge Fund (MCF) programme. Nine bids have been agreed (up to April 2020) for the programme entry stage for funding within the Manchester district; these were submitted by the Council and all projects are on track to be delivered by spring 2022. Included are the following schemes:

- Chorlton Cycleway A 5km route partly funded by the MCF and the Cycle Cities Ambition Grant (CCAG). Work on the first phase of this scheme was completed in the summer of 2020, and work on some of the further phases commenced early in 2021. The city's second CYCLOPS junction has now opened on Stretford Road, in addition to the UK-first junction at Royce Road, which opened in spring 2020. Detailed design options are being prepared for the rest of the route, which should be complete by December 2021.
- Levenshulme and Burnage Active **Neighbourhood** – An active neighbourhood scheme that includes a series of signalised and minor junction upgrades, parallel crossings, modal filters, and investment in streetscapes to encourage local trips on foot or by bike. The scheme is partly funded by the MCF and Manchester City Council. The initial six-month trial of 14 filters was successful, with only one needing to be moved. This will inform the implementation of a permanent scheme. Further measures are being considered for Burnage, and researchers at The University of Manchester have provided traffic-counting and air-quality monitoring to inform locations for interventions.
- Princess Road/Mancunian Way roundabout **improvements** – Full junction upgrade, including removing the existing subways, and creating protected cycle tracks, pedestrian paths and a signalised crossing. Partly funded by MCF and local contributions. Work was completed on this project in the winter of 2020.
- Northern Quarter Project to enhance the 'on foot and by bike' experience from Manchester Piccadilly to Manchester Victoria stations via the Northern Quarter. Funded partly by MCF and CCAG. A number of temporary measures

were implemented in the area as part of socialdistancing measures, some of which are being made permanent. More detailed design work is ongoing for other phases of the scheme, which should be completed by May 2022.

• **Rochdale Canal** – The project includes improvements to the canal towpaths, improved access under a low bridge at Butler Street, and various other improvements to access/egress points and adjacent routes. Work will commence in late summer 2021.

 Northern and Eastern Gateway Connectivity – A parallel route to Great Ancoats Street providing a safe and convenient cycle link to the north of the MSIRR, including two more CYCLOPS junctions and segregated lanes to facilitate east-west movement. Public consultation took place in spring 2021 and construction is anticipated to complete in spring 2022.

• **Beswick Active Neighbourhood** – The project is to develop a network of streets that are not only safe, but also feel safe. This is to encourage the local community to confidently take to their bikes and walk more often; the project includes a filtered neighbourhood approach. Construction commenced on-site in January 2021, with Phase 1 already completed.

• Oldham Road (Inner Radial) – The project will add segregated cycleways to both sides of Oldham Road, from the Intermediate Relief Road to the North Manchester Connectivity project below. MCF funding has been secured to develop this scheme further.

• North Manchester Connectivity – This scheme provides a link (via Oldham Road) from the city centre to the north east of Manchester along

Lightbowne Road. It was submitted jointly by Manchester City Council, Rochdale Borough Council and Oldham Council. Funding is currently being sought for further development of this scheme.

Three further schemes submitted by other parties located within Manchester have also secured programme entry for MCF funding. These are:

- Metrolink Cycle Parking Enhancements to the tram stops along the Bury line at Bowker Vale, Crumpsall, Abraham Moss and Queens Road to support integrated travel. This is a TfGM project.
- Manchester Cycleway Improvements including additional lighting, better access points, and section widening to the existing Fallowfield Loop Cycleway and Stockport Branch Canal route. This is a Sustrans/ TfGM project. Public consultation was carried out in spring 2021 and the results will be carefully analysed and considered in the final designs.
- Manchester Cycle Hire This project will introduce a docked cycle hire scheme with 1,500 conventional bikes and 300 e-bikes, initially to the city centre around Manchester, Salford and Trafford. This is a TfGM project and is due to be delivered in autumn 2021.

Manchester was also awarded approximately £5.5 million across two tranches of Active Travel Fund submissions from DfT. Tranche 1 was spent on temporary social-distancing measures in the city centre in summer 2020. Tranche 2, which aims to create more permanent schemes, is being invested in two schemes:

• City Centre Active Travel – Measures to deliver the City Centre Triangle of walking and cycling improvements on Deansgate and Whitworth

Street (the third side of the triangle will be delivered by the Northern Quarter MCF scheme detailed above).

• Wythenshawe Active Travel – A scheme to provide segregated lanes and other measures connecting the Airport with Wythenshawe Hospital. Public consultation was carried out in spring 2021, and the results are being carefully analysed and considered in the final designs. The scheme may have a funding shortfall, which will require further commitments.

During 2020/21, TfGM and Living Streets worked with 113 primary schools in Greater Manchester to encourage walking to school. Fifteen of the schools are located in Manchester. Overall, active modes of travel increased by an average of 26% across Greater Manchester, and in Manchester schools there was an increase in active journeys from 70% to 76%. Walk to School and Walking Buses Routes is a TfGM and Living Streets programme promoted to all schools by Manchester City Council. Neighbourhood Teams engage with schools to provide 'walk to school' resource packs. A total of 8,430 pupils from 20 Manchester schools have signed up to take part in the programme and established 'walking bus' groups.

The Bikeability scheme has provided funding for the Council to carry out cycle training in schools. Between 2016 and March 2020, 18,287 cycle-training places had been delivered – 4,715 of them in 2019/20. However, due to the pandemic the number of places provided during 2020/21 significantly reduced to 819. The Cycle Training Session programme in schools was impacted during 2020/21. We are currently working with Bikeability to provide venues for a series of summer-holiday sessions, with particular emphasis on those pupils leaving year 6 to go to high school who were not able to receive training last year.

School Streets

Road-safety concerns are commonly named by parents and quardians as the main reason for reluctance to support children to walk, cycle and scooter to school. School Streets is an opportunity to make it safer and easier for children to get to school actively. A School Street is a road outside a school that has a temporary restriction on motorised traffic at school drop-off and pick-up times. The restriction applies to school traffic (exempting Blue Badge holders) and through traffic.

are to:

To date:

- sessions

The key aims of holding a School Streets session

• Enable schools to restrict traffic to enable a car-free and safer pick up and drop off

 Help to boost the number of children walking, cycling and scootering to school each day

• Increase awareness of air pollution and improve air quality around schools.

 Fourteen schools have held School Streets road closure sessions, including seven on Clean Air Day (8 October)

• 5,667 pupils have taken part in School Streets

 A further 11 schools (4,237 pupils) have expressed interest in holding trial School Streets sessions

• Evaluation and sharing of experience and knowledge with and between schools will continue to further improve the School Streets process and delivery arrangements

 Of the further ten schools that have expressed an interest, many felt that because of the current increased workload and uncertainty around COVID-19 they would like to defer any School Streets trial to allow further time to communicate with residents and parents.

Cleaner air and reduced emissions

Our transport system is a major source of emissions and contributes to poor air quality; these emissions damage our health by polluting the air we breathe and contribute to climate change. Reductions in these emissions are subject to legal limits, and the Government has mandated a number of cities, including Manchester, to produce Clean Air Plans. These are aimed at reducing concentrations of roadside nitrogen dioxide (NO₂) emissions to legal levels in the shortest possible time.

All ten Greater Manchester local authorities have worked together to develop a joint <u>Clean Air Plan</u>. This includes:

- A Government-mandated category C charging Greater Manchester-wide Clean Air Zone, to secure compliance with NO² legal limits on local roads in the shortest possible time, and by 2024 at the latest
- Multimillion-pound funding support for Greater Manchester businesses and organisations to upgrade eligible non-compliant vehicles.

Following a review of all the information gathered through the eight-week public consultation in 2020 – as well as wider data, evidence and modelling work – the final Clean Air Plan has now been published. The plan was approved by the ten Greater Manchester local authorities in July 2021. Information and documents about all aspects of the Clean Air Plan can be found at <u>www.cleanairgm.com</u>

Initially, from May 2022, the Clean Air Zone will cover HGVs and buses; LGVs, coaches, taxis and private-hire vehicles will be included from May 2023. Vehicles in these categories will be subject to a daily charge to enter the Clean Air Zone, the boundary of which will be the ten Greater Manchester districts.

The Clean Air Zone does not include cars, because modelling showed that this would not bring forward the date at which NO2 levels were within the legal limit. This is because privately owned vehicles are typically parked up and not in use for over 95% of the time. Including private vehicles would also have disproportionately affected those people who are least able to invest in a newer, cleaner vehicle.

Electric vehicles

The Government aims to ban the sale of new petrol and diesel cars by 2030. Increasing the use of electric vehicles is a key way in which we can reduce our carbon and air-pollution emissions. The number of plug-in cars and light goods vehicles (LGVs) licensed within Manchester saw a sixfold increase in growth between 2015 and 2020, increasing from 139 to 881. This still remains at a very low level, making up only 0.5% of the total number of cars and LGVs within Manchester, below the UK average of 1%.

This is currently supported by provision of the Greater Manchester public-charging network known as Be.EV. The Be.EV network went live in July 2013 (under GMEV branding), and membership grew from a very low base to 2,946 members by March 2021. In 2018/19 there was an average of 5,485 individual charging sessions, but this has dropped to 4,806 for the period October 2020 to March 2021, which again may be due to the influence of the pandemic and the general reduction in travel.

The current Be.EV network includes 159 doubleheaded 15kw fast-charge points and three 50kw rapid chargers (one of which is restricted to buses) across the region. The network is currently under review, and in the short term the number of fastcharge points will be reduced to 118 before proposals to expand the network are put in place. The Be.EV network has predominantly focused on public car parks and destination locations, although it does include a small number of on-street locations, including two in Chorlton. The Council is working with TfGM to develop plans to expand the network further to support a range of vehicles, including taxis.

There are currently proposals to expand this network, including funding through Early Measures as part of the Clean Air Plan for an additional four double-headed charge points within Manchester. Further funding is providing three double-headed charge points for the sole use of taxis/private-hire vehicles, which are expected to be installed in 2021. A further four double-headed charge points are also to be provided through the eHubs pilot project during 2021 for the sole use of the Car Club. There are proposals for a further 30 double-headed charge points to be installed in Manchester as part of the Be.EV network, but funding has yet to be committed to this project.

The Council's Facilities Management Team have recently replaced their fleet of diesel vans with electric vans and reduced the fleet by two vehicles. This change will bring an 80% reduction in the fleet's carbon emissions every year – approximately 12 tonnes. The Council's Fleet Services Team have provided support for this change along with funding from the Triangulum Project – an EU initiative supporting innovation to develop frameworks bringing cutting-edge technology to Europe's cities. The Council is also in the process of purchasing 27 electric refuse vehicles, which it hopes to charge overnight using power generated from solar panels installed at the Hammerstone Road depot. Eleven of these vehicles are currently operational, and the remaining 16 are expected to commence operating by the end of 2021.

Through the eHubs pilot project it is hoped to deploy 25 e-cargo bikes for hire within the city in 2021.

Automated vehicles

In 2017, a consortium – including the Council and TfGM – secured funding for ± 3.7 million to trial a driverless electric shuttle service at Manchester Airport, and the use of autonomous vehicles between Stockport Railway Station and Manchester Airport in platooning formations of up to three vehicles. If platooning and electric-vehicle technology become widely adopted, it would reduce congestion, improve air quality, and reduce the impact of transportation on climate change. In the short term it would deliver a novel and improved passenger experience at Manchester Airport, helping to boost Manchester's reputation as a leader in technology and transport innovation. It is hoped that the widespread introduction of autonomous vehicles will make our roads safer. The trials are due to take place in 2021.

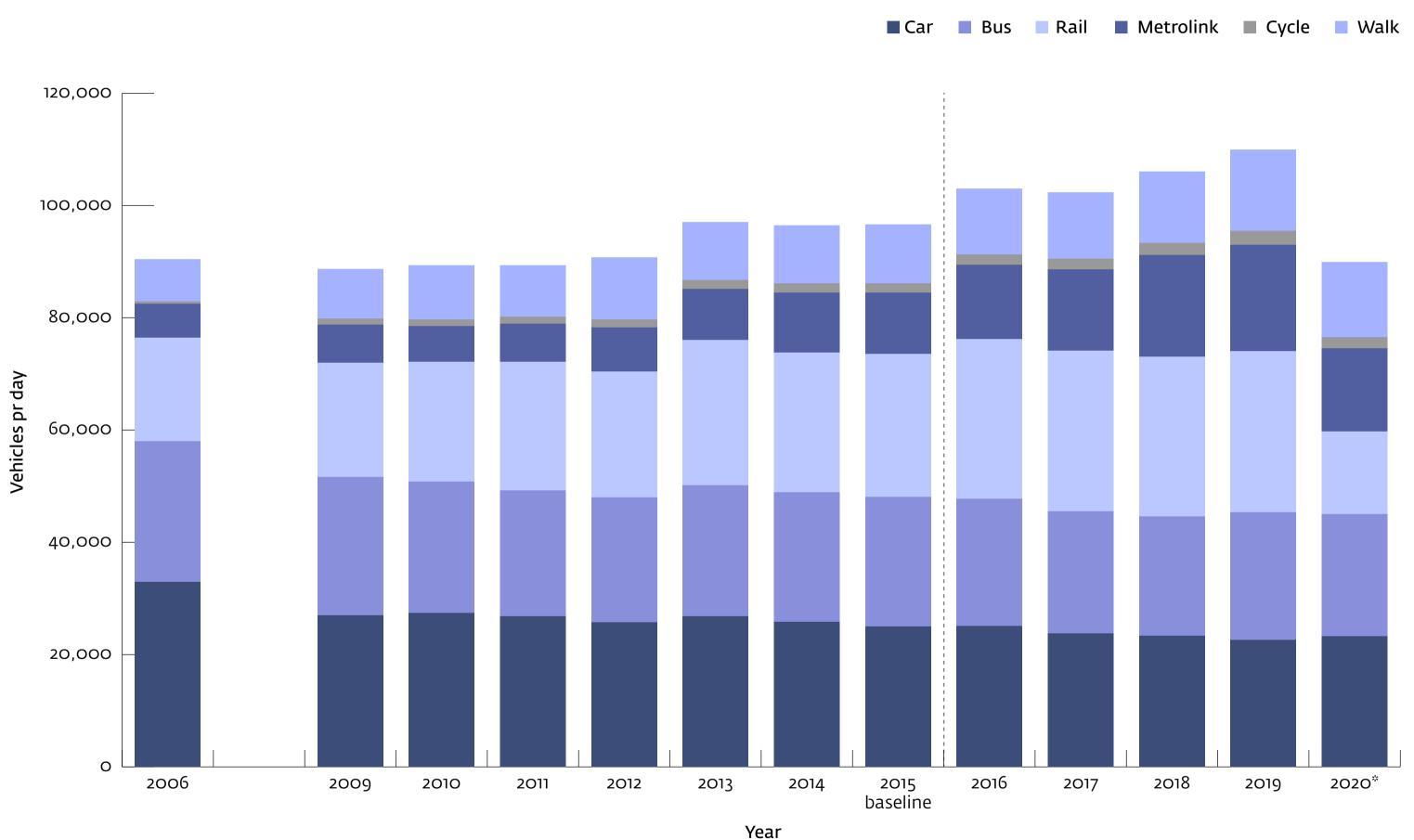
Modal shift to sustainable modes

Travel demand to and from the city centre has grown significantly in recent years, reflecting increases in the number of jobs and the resident population; this is discussed in more detail in the 'A thriving and sustainable city' chapter. There has been a 14% increase in the number of morning peak-hour trips into Manchester city centre between 2015 and 2019, with 4% year-on-year increases noted in 2018 and 2019. However, due to the pandemic there was an 18% decrease in journeys across all modes between 2019 and 2020. Figure 6.5 shows that trends in trips into the city centre vary across different modes of transport. Note that the 2020 TfGM surveys were undertaken in February and March 2020 and some, in particular the rail surveys carried out in mid-March, were significantly affected by measures taken to combat the pandemic.

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Figure 6.5:

Trips into Manchester city centre (7.30–9.30am) by various modes of transport



Source: Manchester city centre cordon count, TfGM © Crown Copyright 2021

Note: No data is available for 2007 and 2008 *Counted in February/March, which includes a period at the beginning of the COVID-19 lockdown



Since 2015, the following trends have been noted in travelling into the city centre:

- **Car travel** has seen the most significant decline in recent years, the number of trips falling by 9% between 2015 and 2019; a 3% annual rise in 2020 has contributed to an overall reduction of 7% since 2015. Car travel's share of city centre trips fell from 26% to 21% in 2019 but rose again to 26% in 2020.
- Bus travel has declined by 6%; a 2% reduction was noted between 2015 and 2019, followed by a further 4% reduction in 2020. Overall, bus travel's share of city centre trips fell from 24% to 20% in 2019 but rose again to 24% in 2020.
- Rail travel increased by 13% between 2015 and 2019, but a 49% annual reduction in 2020 has contributed to an overall reduction of 42% since 2015. Rail's share of city centre trips was 26% in 2019 but reduced to 16% in 2020.3
- Metrolink trips increased by 73% between 2015 and 2019, but a 22% annual reduction in 2020 has contributed to an overall increase of 36% since 2015. Metrolink's share of city centre trips has increased from 11% to 17%.
- Walking and cycling trips increased by 27% and 19% respectively between 2015 and 2020. Walking trips into the city centre have increased from 11% to 15%, while cycling trips into the city centre remain at 2%. Although starting from a low base, cycling trips into the city centre increased from 1,648 in 2015 to 2,477 in 2019, but reduced to 1,954 in 2020. Further work on the walking trips is

3 TfGM rail surveys undertaken in mid-March were significantly impacted by measures taken to combat COVID-19

needed to determine how many are made by people parking outside the city centre and walking in, and how many are made by those who live nearby and walk into the city centre.

Pre-pandemic changes are likely to have been driven by a range of factors, including:

- Improvements in public transport, particularly on the Metrolink network, which has expanded significantly in the past ten years. The decline in bus travel is of concern, but recent investments in Manchester's Bus Priority infrastructure should go some way to reverse this trend in the future.
- Changing patterns of where people live and work. There have been increases in the city centre workforce and population, and more people now live in locations where public transport and active travel are attractive commuting options.
- Increasing journey times on the road network, which are likely to have made commuting by car and bus a less attractive option. While car traffic into the city centre has reduced, elevated journey times may be due to disruption from major roadworks in and around the city centre, alongside the rise of online deliveries, which have added to congestion. TfGM figures show that there have been increases in freight traffic in the past five years, including a 4% increase in van and HGV trips into the city centre.

The COVID-19 pandemic has had a huge impact on the use of public transport and on highway usage. It remains to be seen how long-lasting these changes will be, and we have already seen significant increases since lockdown measures eased. TfGM figures for the whole Greater Manchester network

Since those mid-April lows, usage has rebounded to differing degrees across different modes. By 30 June 2021, highways usage had almost returned to pre-pandemic levels, rising to only 4% below the pre-lockdown baseline. Metrolink, rail and bus usage has trended upwards in a very gradual way, with passenger numbers still below the pre-lockdown baseline: -55% on Metrolink, -34% on buses, and -55% on rail.

The extent to which public transport can regain mode share is likely to be dependent on a range of factors, including confidence in hygiene and cleanliness, the effectiveness and adoption of face coverings by passengers, and overall prevalence of COVID-19 in the community, as well as messaging and communication from public bodies and transport operators.

The initial messaging during spring 2020 was to avoid all non-essential use of public transport, which was successful in deterring passengers. Temporary revenue support funding was provided for Metrolink and bus operators in order to partially offset the almost total absence of fare revenue. Service frequency was cut severely, with a phased return to normal timetables currently underway. It is too soon to forecast how long it will take for

show that at the lowest point of demand, in mid-April 2020, compared to the early March 2020 pre-lockdown baseline:

• Metrolink usage was down 97%

• Bus usage was down 96%

Rail usage was down 95%

Highway usage was down 73%.

public transport usage to return to pre-COVID-19 baseline levels. Greater Manchester districts and TfGM are considering various scenarios in assessing options and implications regarding key strategies, such as Places for Everyone, TfGM 2040 Transport Strategy, and the Council's Climate Change Action Plan. A recovery scenario in which public transport's mode share remains indefinitely lower than pre-COVID-19 levels and in which private-car trips are increased would be significantly damaging for air quality, congestion, place-making, road safety and carbon reduction; and the strategic policy direction for Greater Manchester remains to continue to shift to more sustainable transport.

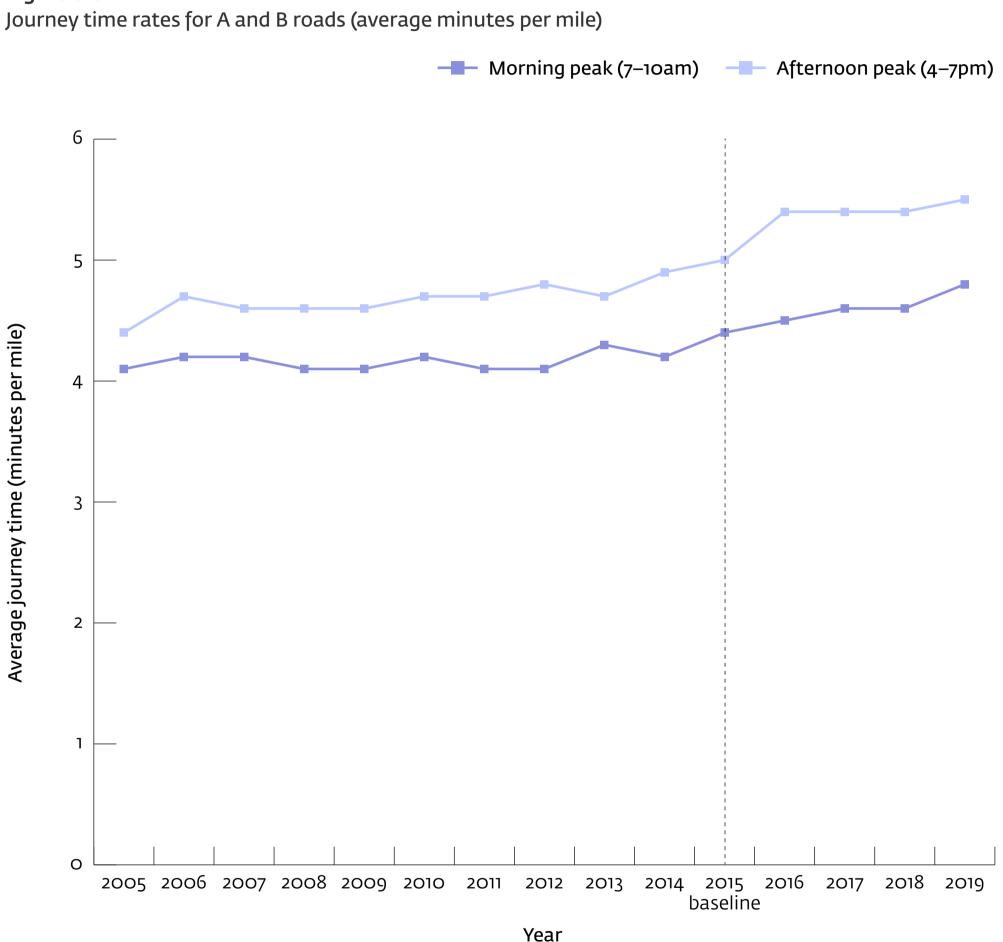
Congestion

Figure 6.6 shows that average journey times on our network of A and B roads had been gradually increasing since 2005, with a greater increase in the afternoon peak, although this growth has stabilised since 2016. Journey times are an indication of the level of congestion on our roads.

It is assumed that most of the increase is due to more vehicles on the road and the amount of construction work underway across the city. The growth in delivery traffic is thought to be a major contributor to the additional traffic levels. Construction work is often an inevitable consequence of living in a successful and thriving city. Work is presently underway to improve the operation of the Manchester and Salford Inner Relief Road (MSIRR).

With increased congestion, the average speeds on A and B roads are reducing, albeit only marginally, from 15mph in the morning peak (7–10am) and 14mph in the afternoon peak (4–7pm) in 2005, to 12mph and 11mph respectively in 2019.

Figure 6.6:



Source: TfGM © Crown Copyright 2021

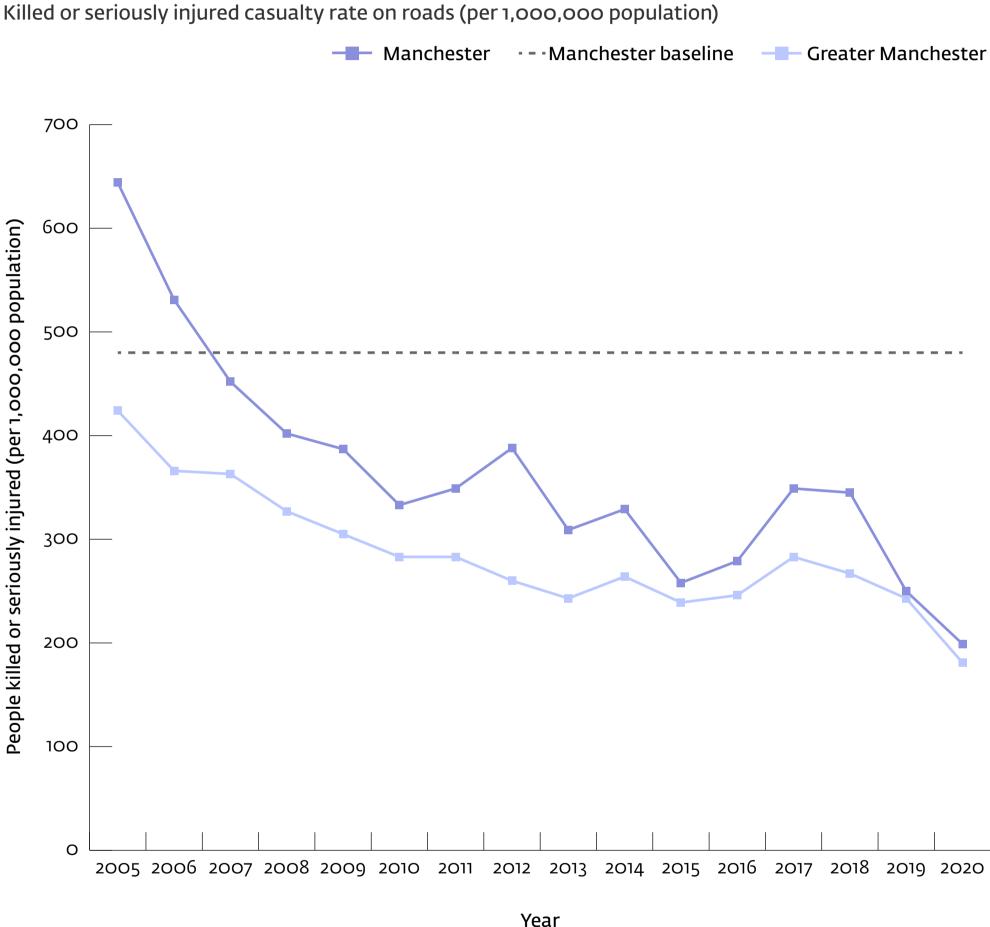
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The COVID-19 pandemic and resulting lockdown measures resulted in highway usage reducing by 73% from the pre-lockdown baseline. However, private motor-vehicle trips have risen more quickly and more significantly than public-transport trips as lockdown measures have eased, and on 30 June 2021, traffic levels were only 4% lower than the early March 2020 pre-lockdown baseline.

Road safety

The Council works in close partnership with TfGM and Greater Manchester Police to improve the safety of our highway network, including investment in infrastructure to reduce accidents, and targeted enforcement operations to prevent dangerous driving. The data shown in Figure 6.7 suggests that road safety in Manchester was moving in the right direction, with a 60% decrease in the rate of people being killed or seriously injured on our roads between 2005 and 2015. However, between 2015 and 2018 there was a marked increase of 34%, with a rate of 345 per one million population killed or seriously injured in 2018, equating to 188 people. The rate has reduced significantly since, reaching 199 per one million population, equating to 110 people killed or seriously injured on Manchester's roads in 2020. Figures remain below the Manchester baseline figures of 480 per one million population or 222 people killed or seriously injured (based upon an average of the five years 2005 to 2009) and is now slightly above the Greater Manchester rate of 181.

Figure 6.7:



Source: TfGM © Crown Copyright 2021. During 2020, traffic flows on highways have been affected by COVID-19 restrictions, impacting the number of reported injury collisions

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Becoming a digitally inclusive city

Manchester is already one of Europe's fastestgrowing technology cities. The city has a strong and resilient digital sector, acknowledged as 'the UK's second technology city', consistently outperforming 'all cities outside of London' (The Data City, 2019). This is significant, not only in terms of the scale of the sector, but also in terms of its scope in covering both established and emerging technologies and providing a talent pool of digital and creative skills supporting consistent growth across all parts of the sector. The recent Tech Nation report 2021 'UK Tech for a Changing Nation' demonstrates the strengths of certain parts of the sector in Manchester, including Service Design, eCommerce, Cyber Security, AI and Data Science, as well as in advanced materials. In 2021. Manchester was named as a prime location to start and scale a financial technology (FinTech) firm, ranking 34th globally in the Global FinTech Index by Findexable. The Government commissioned the 'Kalifa Review of UK FinTech' to publish its findings in 2021 and identified Manchester and Leeds as a 'Pennines' FinTech cluster with the highest cluster count outside of London.

It is of fundamental importance to our future success that everyone in Manchester is equipped with the skills and technology to make the most of our rapidly digitising world. Over the past year this has become increasingly more important as people have relied on reliable broadband connections to work, learn, access vital services and socialise from home due to the restrictions that COVID-19 has imposed on the lives of everyone.

Fast and reliable digital connectivity is needed not only to support and underpin growth across all sectors of the economy, but also to address socioeconomic

challenges, transform public services, and drive social inclusion. The many benefits of the city's digital expansion must be made available to all residents and businesses, not only through greater investment in the introduction of full-fibre and 5G coverage across the city, but also by ensuring access to this is taken up where it is available.

In order to encapsulate the cross-cutting contribution that improvements to reliability and accessibility of the city's digital infrastructure could make to achieving Manchester's ambition to be a leading international city, work has begun to develop a Digital Strategy for the city based around four pillars:

- Smart people ensuring that everyone can gain and sustain the skills, aspirations and confidence to fully participate in the digital world, providing the basis for Manchester becoming an inclusive, diverse, successful and ethical smart city
- Digital places digital neighbourhoods providing access, connectivity and support for all residents and businesses, and digitally enabling enhanced health and wellbeing
- Future prosperity enabling the digital economy and ecosystem to grow, continue to attract new digital businesses and sectors, and support a resilient and inclusive economy
- Sustainable resilience using digital imaginatively for innovation to meet zero-carbon goals and create open and inclusive connectivity with enhanced digital infrastructure as a utility, not just a commodity.

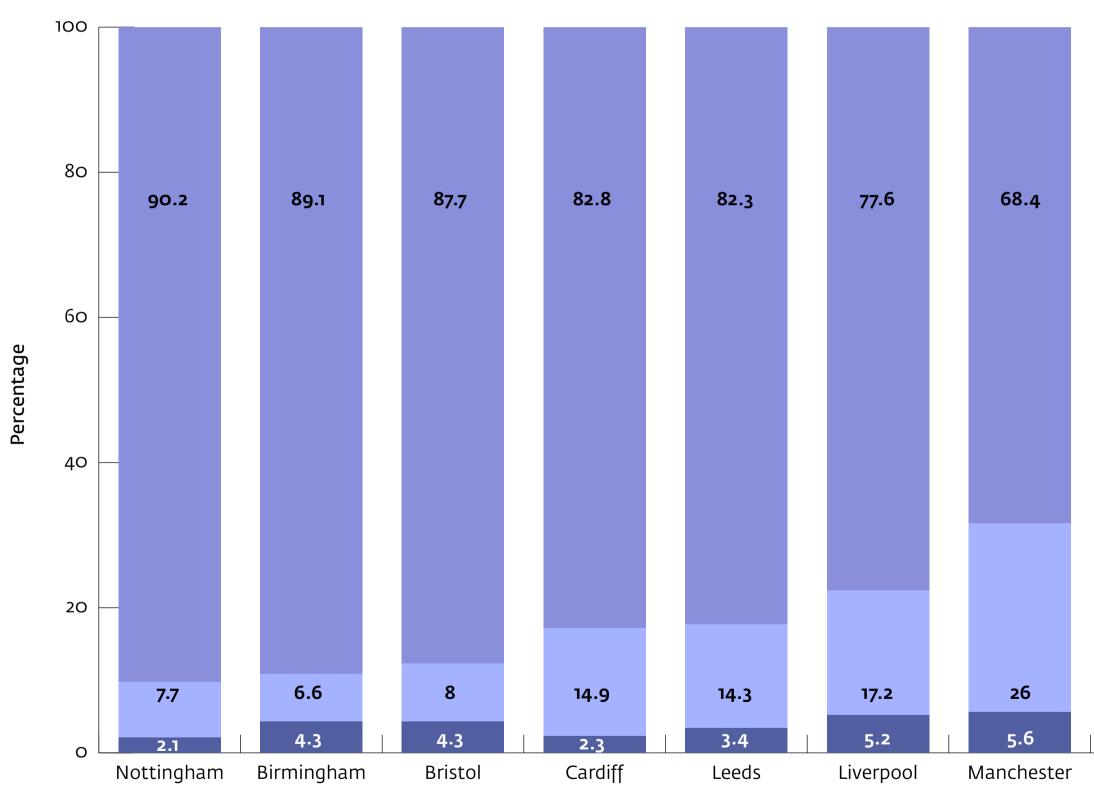
According to Ofcom, consumers are upgrading to higher-speed broadband packages but do not always take the fastest packages available to them, estimating that around 60% of premises in the UK that are able to receive superfast broadband (>30Mbit/s) actually take up a superfast or faster service. Although 94.4% of premises in Manchester have access to superfast broadband, only 73.5% of them have an active broadband service that delivers a download speed higher than 30Mbit/s. However, this has increased from 66.1% in 2019.

Figure 6.8 shows that ultrafast broadband (>300Mbit/s) was available to 68.4% of Manchester's homes and businesses in 2020. This compared well to the UK average of 58%, but Manchester was lagging behind other Core Cities such as Nottingham, where 90.2% of homes and businesses had available speeds of more than 300Mbit/s.

However, Figure 6.9 shows that only 3% of homes and businesses in Manchester signed up to an ultrafast broadband service in 2020. In addition, 26.5% of the city's residential and SME premises have failed to take advantage of the superfast broadband speeds available to them. A similar picture is reported across all Core Cities, despite superfast and ultrafast broadband availability being much higher.

Digital infrastructure

Figure 6.8: Fixed broadband coverage by speed (Mbit/s), 2020



Core city

Source: Ofcom 2020 Connected Nations report

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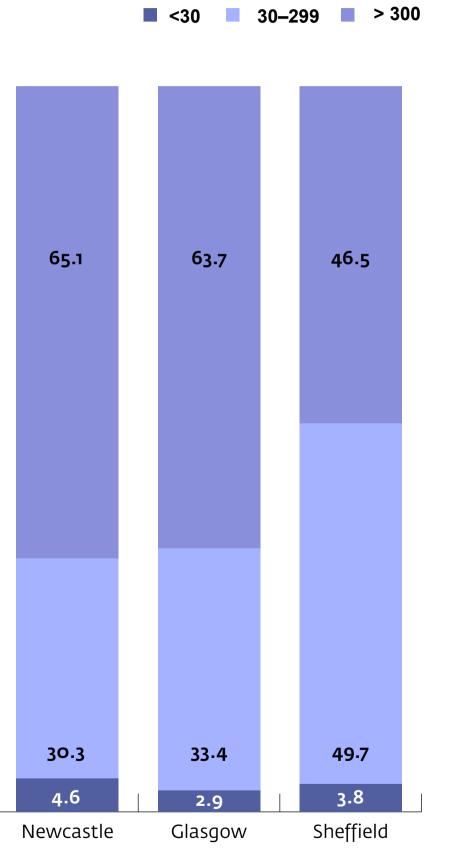
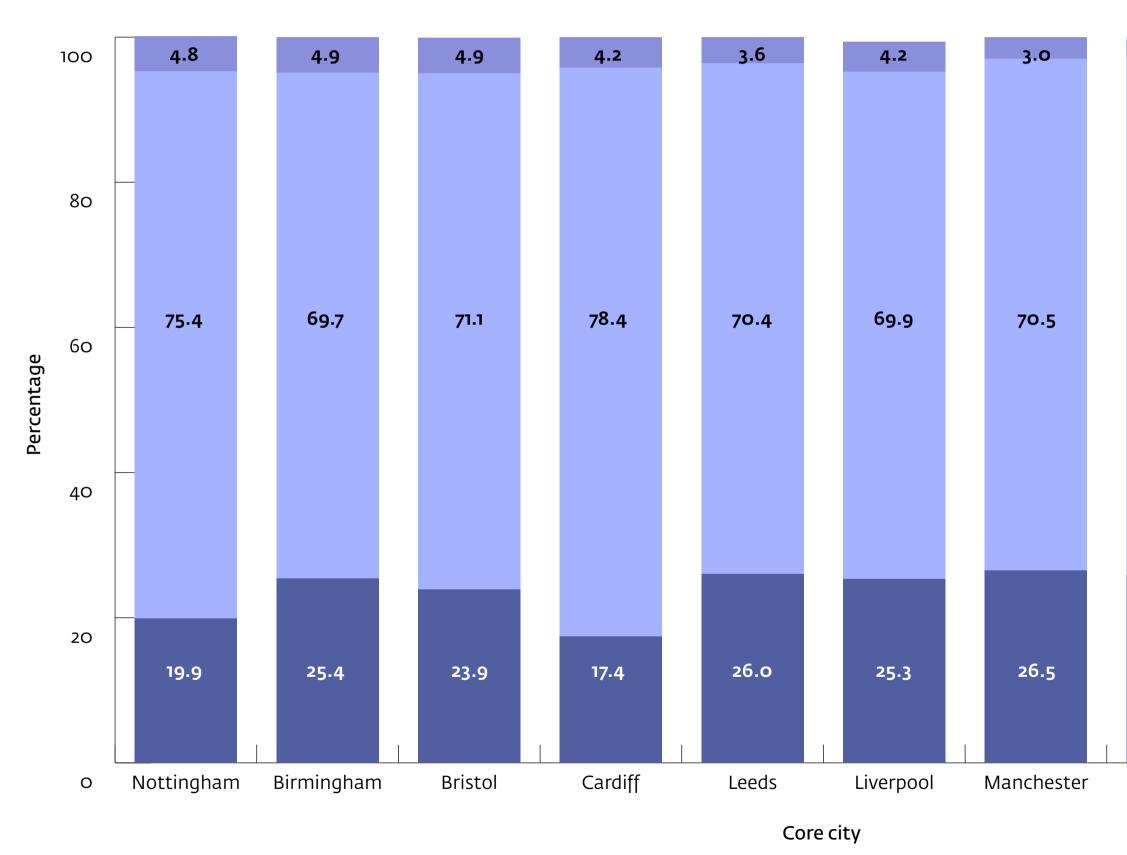


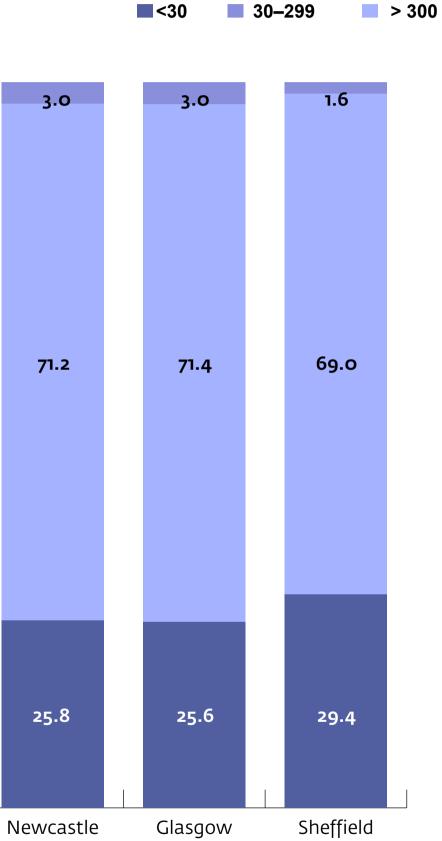
Figure 6.9:

Fixed broadband take-up by speed (Mbit/s), 2020



Source: Ofcom 2020 Connected Nations report

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Progress has been made in Manchester over the past five years; the take-up of superfast/ultrafast broadband by residential and SME premises has more than doubled, increasing from 34% in 2015 to 73.5% in 2020. Avrage download speeds have also improved, rising from 28.6Mbit/s in 2015 to 72.8 Mbit/s in 2020; and more premises are taking up the opportunity to connect to services providing speeds of 300 Mbit/s or above, rising from zero in 2015 to 4,944 in 2020.

Alongside increasing the availability of ever-faster broadband speeds, there is a need to ensure that the take-up of these ever-faster speeds is maximised in order to secure the city's status as a leading digital centre; this includes ensuring that the broadband packages being offered are affordable for all consumers, and investigating why the current take-up rate of ultrafast broadband is so low.

This will be assisted by the Greater Manchester Combined Authority's (GMCA's) appointment of Virgin Media Business in March 2020 to deliver its £23.8 million Local Full Fibre Network Programme, which aims to deliver up to 2,700km of new fibreoptic broadband infrastructure serving 1,700 sites across the city region. Despite the challenges of COVID-19 (work was due to start as the UK's first national lockdown was announced), rapid progress has been made and it is estimated that the work delivered a local economic benefit of £11.8million.4 The work has also supported local employment, with 75% of the workforce working on the delivery of the full-fibre network being based in Greater Manchester. Also, Virgin Media Business have

contributed to the establishment of the Greater Manchester Technology Fund, which supported over 1,300 digitally excluded young people with the technology and connectivity to continue learning from home when their schools and colleges were closed during the year.

Further investment in full-fibre broadband and the development of a 5G network is needed for all businesses, not just those in the digital and tech sectors. It has the potential to deliver productivity and innovation benefits for existing businesses, accelerate the growth of new business start-ups, and enable the city to remain at the forefront of innovation. Manchester's digital innovation and its growing digital and tech sectors are discussed in more detail in the 'A thriving and sustainable city' chapter.

Digital and social inclusion

Digital exclusion exists where a person lacks one or more of the following: access to the internet, skills/ confidence to use the internet, or motivation to go online. Being digitally excluded can result in residents having to pay more for life essentials, difficulty accessing health and wellbeing services, increased feelings of loneliness or social exclusion, a lack of voice and visibility, less access to employment and learning opportunities, and an increased risk of falling into poverty – resulting in further widening of the social-inequality gap.

The impact of COVID-19 has meant that the scale of the digital divide and the importance of tackling the challenge to grow a fair and more inclusive society have had national recognition. The challenge of reducing this level of digital exclusion can only be met by continuing to adopt a more holistic Our Manchester approach.

The majority of those who are digitally excluded or have low-digital skills are also socially excluded, experiencing a number of interrelated barriers. Therefore, the Council has used an Our Manchester approach to create the Digital Inclusion Action Plan with external partners and different teams within the Council to reduce the levels of digital exclusion. The action plan co-ordinates the delivery of a diverse programme of activity across eight workstreams – building on existing action and creating new approaches where there are gaps to drive digital inclusion across the city.

Over the next 12 months the action plan will support the digital inclusion team to:

• Create stronger, more targeted key messages and support organisations to better promote their offers of support

• Develop a deeper understanding about the scale of digital exclusion in the city and residents' digital capabilities, aiming to build better intelligence to deliver more data-driven interventions

• Build the capacity of community organisations delivering digital skills and inclusion support

• Learn from existing device and Wi-Fi schemes and use this intelligence to inform more innovative, green, scalable and sustainable solutions to reduce digital poverty

 Continue to grow and influence a more holistic approach to support families to become digital citizens

• Better embed the agenda across the Council with other key resident support services

⁴ https://www.greatermanchester-ca.gov.uk/news/ greater-manchester-digital-infrastructure-investmentdelivers-12m-economic-benefit-in-first-year/

 Showcase the Council's pioneering approach to tackling exclusion to other key stakeholders locally, regionally and nationally.

Progress against some of the Digital Inclusion Action Plan workstreams is detailed below.

The Manchester Digital Inclusion Working Group

There has been a diverse range of key stakeholders involved in delivery of the action plan, with specific stakeholders leading on workstreams that align to their organisational priorities, including MHCC and Citizens Advice.

The cross-sectoral Digital Inclusion Working Group now has more than seventy members who meet every two months to share resources and learning and to gain a better understanding of resident barriers to collaboratively improve access to provision. The majority of members are third-sector organisations that are at the heart of positively engaging with residents to be online, including Yes Manchester, Shelter, adult learning providers, registered providers, healthcare partners, and private-sector businesses. The group has been crucial in helping to deliver the action plan, so far supporting the Census, informing the Manchester Digital Device Scheme, and supporting the delivery of digital skills and inclusion support, despite being heavily impacted by the COVID-19 pandemic.

Manchester Digital Exclusion Index

The Council has developed the Manchester Digital Exclusion Index. This is to ensure we have data and local intelligence on the extent of digital exclusion in the different neighbourhoods across Manchester – previously data was only available at a national level. The Digital Exclusion Index will be available to use by the Council and its partners during 2021.

Case study: Yes Manchester

Paul had been unemployed since 2016, having left his previous role to act as a full-time carer for a family member. Following a change in circumstances, Paul felt that he was ready to return to work; however, he soon realised that the process for applying for a job had changed dramatically over recent years, and that he was going to need some help.

In February 2020, Paul visited the Job Centre, which referred him to Yes Manchester in Higher Blackley for support. The Yes Manchester team helped Paul to explore various pathways and employment options, helping him to create a new CV and build a tailored action plan to help him achieve his goals and get back on track.

Being a first-time IT user, Paul was enrolled on the ESF-funded Digital Champions programme at Yes Manchester for one-to-one digital skills support and training. The programme taught Paul basic computer skills, and with the confidence gained he was able to independently search for work and apply for jobs online. Paul also successfully completed the Learn My Way computer basics course for beginners. Programme leader Marika commented: "It was a long pathway for Paul, but he was learning something new every day, and made fantastic progress." When Yes Manchester centres were forced to close due to the first COVID-19 lockdown, Marika kept in contact with Paul through regular telephone calls. Paul did not have internet access or a smart device at home; however, with thanks to the Good Things Foundation and the Devices Dot Now freedevice initiative, Marika was able to secure a free tablet and Wi-Fi access for Paul, allowing him to continue his learning from home.

Over the following months, Paul continued to develop and grow his digital skills and confidence, receiving interview skills and employability support from the wider Yes Manchester team. After much perseverance, in October 2020 Paul successfully secured a full-time job as a warehouse operative. This was a huge achievement for Paul. He now feels happier, healthier and less stressed, and enjoys his new working life and meeting new people. The progress Paul has made since his first appointment at Yes Manchester has been fantastic to see, and testament to his hard work and determination.

Case study: Manchester Digital Exclusion Index

The Manchester Digital Exclusion Index helps to mitigate the challenge of evidencing digital exclusion in Manchester. The index pulls together a number of different data sets that either directly or indirectly demonstrate levels of digital inclusion across households in the city. These data sets are used as metrics (of which there are 17 across nine categories, including age, language, phone usage, internet usage, deprivation, internet knowledge, and health), which together create a 'digital inclusion score' for each ward and Lower Super Output Area (LSOA) in Manchester. The higher an LSOA's score, the more at risk its population is of digital exclusion. Multiple scoring methods have been used to reflect the diversity of the data sources, and the appropriate weighting required for each metric, making the model extremely robust and unique, compared to others regionally and nationally.

The index is presented as an interactive map and interface that show each area of Manchester as having a particular level of digital exclusion and an accompanying score. The map shows the city both on ward level and LSOA. Alongside the map the index also provides a breakdown of metrics for each area, thus showing which particular metrics are contributing most towards an area's digital-exclusion score. Key findings so far include:

- 25% of Manchester LSOAs are within the highest-scoring groups on our Digital Exclusion Index (32–43) with a very high risk of being digitally excluded
- Three out of the top five highest-scored wards are within north Manchester (Miles Platting and Newton Heath, Harpurhey, Clayton and Openshaw) and two are in the central area of the city (Gorton and Abbey Hey, and Longsight)
- Data shows there is a strong link between digital exclusion and neighbourhoods with communities that have English as a second language and/or low skills.

The index will serve as a tool for partners across the city to identify need, specific challenges and barriers. In particular, it will be helpful to our third-sector organisations, which are at the heart of tackling the digital-exclusion challenge. The index will enable partners to adapt and direct service provision as appropriate, as well as tailor their service for particular demographics. Furthermore, the index will allow all partners to demonstrate the challenges they are facing, and as a result will assist them in attracting additional resources towards their service. As the challenge of digital exclusion is extremely complex and ever-changing, we will be testing the tool with a number of key partners, including Health (through working with our Integrated Neighbourhoods Teams (INT) and Manchester Health and Care Commissioning), communitybased learning providers (through the Digital Inclusion Working Group) and Housing (with One Manchester).

The index is a complex tool, and we will continue to develop this tool and model over time. We will regularly update the metrics to ensure the most up-to-date data is provided, thus allowing key partner organisations and decision-makers to work more effectively with residents who most require digital-inclusion support. Supporting residents who have internet access but are without the skills or confidence to use it Many residents don't have the skills and/or the confidence to use the internet effectively. The Council's COVID-19 Response Hub promoted digital support as one of its services, so the Work and Skills team and Libraries launched a digital-support telephone service to provide that support for those who made contact.

We developed a service that involves residents receiving digital support over the phone from a Digital Champion on things such as how to turn on a device, setting up an email account, making video calls, doing online shopping, and accessing health information. Support is given by Libraries staff, the Work and Skills Team, MAES, Citizens Advice, Yes Manchester, and other UK online centres. We have also recruited more than seventy volunteers so far, from a combination of MCRVIP and Macc. Most residents access the service themselves by texting 07860064128, but referrals can be made by partner organisations. Diversity is at the heart of this service and we have been mindful to ensure that our volunteers come from a range of backgrounds, and we can offer support in up to 25 languages.

Over 900 residents have been supported through this initiative since May 2020, and the model that has been developed is sustainable, as libraries (for whom digital inclusion is a key priority) continue to manage the service and provide staff to support it. Members of the working group also continue to staff the service, and additional volunteers are continuing to be recruited. There is now also a volunteer training programme led by Manchester Adult Education Service; the five-hour course offers a blended model of live meets and guided independent tasks. This course has been established to ensure all volunteers have the same basic understanding and to provide them with the opportunity to develop their skills, knowledge and approaches so they can become a confident volunteer digital mentor.

Through early analysis of the intelligence coming through the evaluation process of the device scheme led by MMU, we have been able to identify a number of trends. For example, the largest number of referrals initially came from those contacting the Council for food support and the most popular referral route is now through the text number. In addition, referrals are most common from areas of the city where digital exclusion is most prevalent – the more deprived areas of the city where the overall majority of residents are presenting with a health condition.

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Case study: The Resonance Centre, Longsight

The Resonance Centre is a holistic wellbeing centre in Clayton, which saw the need for digital inclusion and realised that the only way to assist people during the pandemic was digitally. They felt a strong need to deliver activities in all possible ways to support residents with physical and mental-health concerns. They quickly established a timetable of free classes, which they delivered via Zoom. This gave people the opportunity to not only take part in a beneficial activity for at least one hour a day, seven days a week, but also the chance to be part of a growing online community. Ultimately, this ensured that people felt both supported and connected to one another throughout.

The classes offered by The Resonance Centre included vinyasa, Yin Yoga, meditation and pranayama, as well as art, plant-based cooking, a book club and a weekly 'mindset meetup'. All the sessions proved extremely beneficial to those who took part, and in some cases the online timetable became guite pivotal in many people's daily lives, providing a sense of consistency and self-care for their new routine. However, this action alone did not benefit members of our community who were not already digitally included. Therefore, The Resonance Centre felt it was important to take their work with digitally excluded residents further and began working alongside the Council's Digital Buddy volunteer programme to offer digital-skills support.

Since summer 2020, the centre has taken referrals for residents in need of digital assistance, and continues to provide one-toone support via telephone and in person where needed. This work has proved invaluable, particularly for elderly or more vulnerable residents, as many people would simply be unable to get online, send email, access Zoom, or use a tablet without some in-person support.

To date, The Resonance Centre has delivered over 1,000 classes to hundreds of online participants. It has also given personal support to more than a dozen local residents, helping them connect to their families, friends, GPs, energy providers and the outside world.

The Resonance Centre's help and provision over the past 12 months has attracted additional funding for its ongoing work, and it now looks forward to opening a new Digital Inclusion Hub inside the centre in summer 2021.

To be eligible for a device, residents have to be aged over 19, be a resident of Manchester and have no fit-for-purpose internet access at home. They also have to meet one or more of the following: be disabled, have a long-term health condition, be over 65, or have low income. Each resident was allocated a Digital Champion, who acts as a one-to-one 'buddy' to the resident, offering personalised digital-skills support.

The MMU evaluation also assessed the digital capabilities of recipients and the success of the initiative. Volunteers reported that residents who had never used the internet now use it numerous times a day and that the scheme really supported links into advice services and increased support. Several residents who were reporting they were 'not at all confident' at using the internet reported they were 'fairly confident' after only a couple of weeks.

The success and significant impact of this pilot project has led to further funding. The Council, One Manchester, MHCC, MHCLG and Citizens Advice have already contributed to the extension of the scheme and provided additional resources into workstreams focusing on health and advice.

Supporting residents without home access to the internet

The pandemic has highlighted and increased the disadvantages felt by residents without access to the internet at home. We have increased the number of residents with home access to the internet through donating internet devices to priority residents. It is expected that between October 2020 and December 2021 a minimum of 1,000 internet-connected devices will have been donated. We are now moving into phase two of the device scheme and had supported over 2,000 residents to access data and/or Wi-Fi by August 2021.

Conclusion

Political priorities, environmental concerns, changes to social expectations, and technological advances, are all transforming the way people connect. The likely scale of transformation that will be seen over the coming years is starting to become more apparent within Manchester. The pandemic has further highlighted the need to ensure connectivity – both physical and digital – for all our residents and communities.

Changes are still needed to tackle congestion, reduce journey times, improve air quality, and reduce emissions. Although more needs to be done and significant further investment is needed, progress is being made, such as the continuing trend of more people travelling into the city centre by sustainable transport. Major infrastructure investments in rail and rapid transit are long-term projects requiring cross-boundary co-ordination delivered by Government funding. The Council will continue to work collaboratively with partners and lobby the Government to prioritise the right investments in Manchester's connections across the North of England to the wider world.

Transport is one of the key elements of the city's response to the COVID-19 pandemic. Economic and social recovery will only be possible if safe ways can be found to enable people to move around on public transport; beyond that it may be necessary to accommodate our residents' changes in behaviour, eg. by enabling safer walking and

cycling into and around district centres. Digital connectivity may become even more important as home working becomes more prevalent and the city's growth sectors adapt to and create a different spatial structure. However, we are in the early days of scientific understanding of the SARS-CoV-2 virus, even as we navigate the second year of restrictions, and should be wary of making assumptions about the long-term impacts at this stage.

Although Manchester offers good transport connectivity and continues to increase capacity, it is very important that the network serves people's changing needs, and that public transport in particular is affordable and accessible, so that all residents can benefit fully from living in a truly connected city.

The city's credentials as an aspiring global digital city and the continuing strength of the digital and tech sector may be adversely affected by the availability and take-up of superfast/ultrafast broadband by residential and SME premises which, although improving, is still lower than many other major UK cities. While work in this area is ongoing, a particular challenge regarding the provision of digital infrastructure is ensuring all residents can access it both physically and financially. Not only is it necessary to improve connectivity throughout all the city's neighbourhoods, but also to ensure that this provision is affordable so that all residents have the ability and the digital devices to be able to access it. However, simply providing access is not enough, as digital disengagement is a complex problem involving cultural, social and attitudinal factors. Only when all this is addressed will digital exclusion be reduced and inclusive growth be supported, enabling all residents to benefit fully from living in a truly connected city.

The Digital Inclusion Action Plan provides a cohesive plan of action for the next year, and the range of funding streams supports the sustainability of citywide co-ordination and partnership work. Through this plan we have committed to:

It is essential for us to take a more holistic approach to tackle the digital divide by embracing the ideas of digital connectivity being a utility and digital skills for all, both during the pandemic and in the future.

New services and strong delivery models have been developed with an Our Manchester approach to tackle the digital-skills divide. This has supported us to make great steps within a short period of time towards reducing the numbers of those unable to access the internet. Since May 2020 we have supported over 1,260 residents to become and remain digital citizens at a crucial time. It is clear that we still have a long way to go, and it is now essential we sustain efforts through more co-ordinated approaches.

 Better understanding the complexity of the challenge at local level through use of the Digital Exclusion Index

 Tapping into residents' motivations through a range of skills provision, and ensuring that pathways into learning opportunities are strengthened for those most in need

• Building on what is already working well

 Sustaining and centralising projects around connectivity and access

 Sharing positive stories and experiences of residents' digital learning journeys, and the impact being digitally enabled has had on them

• Raising further investment to sustain and grow our approach.