DESTINATION:
BEE NETWORK

Bus Service Improvement Plan

October 2021

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The future of bus travel in Greater Manchester

Our ambition is that bus should form a key part of a fully integrated sustainable transport network for travel over the whole of Greater Manchester.

We are branding that network as the 'Bee Network', reflecting this longstanding symbol for the people of Manchester and the surrounding area. The Bee Network includes bus, tram, train, cycling, and walking. We see the Bee Network as a vital tool for levelling-up in Greater Manchester.

We will make journeys by bus quicker, cheaper, greener, more reliable and more pleasant. We will improve the whole journey – including pre-trip information, the journey from home to bus stop and bus stop to destination, in-journey passenger information, customer care, integration with other services, and the waiting experience.

The scale of the improvement needed is significant – but so is the reward from achieving it

Our ambitions for the future of GM Bus

BSIP Themes	GM Ambitions for Bus
Customer Experience	Providing customers with a safe and seamless travel experience
Services	Turn up and go frequencies on major routes
Information	Readily available, easy to use, live, and up-to-date
Network Management	Improvements to journey times and reliability
Infrastructure	Significant increases in bus priority, and improvements to waiting environments
Fares and Ticket	More affordable journeys, integrated with other modes
Fleet	Zero emissions, high quality buses

How our approach to bus aligns to GM customer priorities and UK bus strategy

	Customer Priorities	National Bus Strategy Objectives
Customer Experience	• An improvement of the whole package • A focus on security • Improvements to cleanliness	• The local bus network is presented as a single system that works together, with clear passenger information • Service patterns integrated with other modes • Give bus passengers more of a voice and a say
Services	• More frequent • Quicker journeys	• Intensive services and investment on key corridors with routes that are easy to understand • More demand responsive services and socially necessary transport
Information	• More information available pre-trip • Better in-journey information	• The local bus network is presented as a single system that works together, with clear passenger information
Network Management	• More reliable • Faster	• Significant increases in bus priority
Infrastructure	• Improved reliability • Better journey times • Better safety and security • Improved accessibility	• Longer term transformation of networks through Bus Rapid Transit and other measures • Significant increases in bus priority
Fares and Ticket	• Better value for money	• Lower and simpler fares
Fleet	• Better cleanliness • Better reliability • Safer	• Modern buses and decarbonisation

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Foreword from the Mayor of Greater Manchester and 10 Local Authority Leaders

In Greater Manchester, we are uniquely placed to deliver significant, tangible improvements to our bus system within this spending period.

As the first city-region to take forward the powers in the Bus Services Act 2017, we now have the opportunity - and the responsibility - to deliver a radically improved bus system for our residents, with the ability to make a greater return on Government's investment than any other place.

Buses are already at the heart of public transport in Greater Manchester: three-quarters of all public transport journeys in our city-region are taken by bus, and thousands of people here rely upon buses, particularly for essential day-to-day journeys and where they have no other alternative means of travel - including the one-third of households here with no access to a car. We also know that those who depend more on the bus network to access work tend to be lower paid, live in areas of deprivation, and have fewer employment opportunities due to transport limitations (**Transport and Inequality Report**).

But at present, our bus system does not match the world class city-region we are building. Fares are too expensive and too complicated; fleets are not fully accessible and too many still rely on polluting diesel engines; and our bus network does not provide the coverage or frequency of service to make it a viable or attractive alternative to the car.

Greater Manchester's commitment to working in partnership with Government to level up is articulated by the Levelling Up Deal we have put forward through the Spending Review process. In a context of enhanced local accountability, we believe there is a clear opportunity for Government and Greater Manchester to work together in a unique way to deliver for our communities, anchored around accelerated decarbonisation and a world class, fully integrated transport system – with buses at its heart.

Greater Manchester is currently building the Bee Network that by 2024, will bring bus, tram, cycling and walking together into one fully integrated system, with commuter rail services to follow by the end of the decade. Buses are the form of transport with the greatest potential to help create a clean, easy-to-use, affordable and accessible transport network to help level up our communities, decarbonise our economy, and build a more prosperous, more sustainable, healthier and fairer Greater Manchester.

Our plans are ambitious, and rightly so. And our level of ambition is a reflection of how far behind we are in terms of the quality and affordability of bus travel enjoyed in London and other major cities across Europe. But, by making urgent progress, supported by the right levels of funding, we can deliver the first phase of the Bee Network - bus and tram integrated with a single multi-modal ticket and a price cap - before the end of this parliament.

Working closely with Government, our experience of introducing a franchised system and driving significant improvements will provide a blueprint for other areas across the UK to

transform a city-region's bus offer at pace and as part of an integrated London-style transport network.

To level up on bus, investment is needed in all aspects of the customer experience. Our plans, funded by the BSIP and CRSTS, will deliver:

- More affordable journeys with daily and weekly capping across bus and Metrolink and, with the right revenue support, London-level fares too – it cannot be right that a single, 20 minute journey can cost £4.50 in Greater Manchester, whilst £1.55 buys unlimited pay-as-you-go journeys for an hour in London.
- A simplified fare structure that is easy to understand. At present, we have over 150 types of ticket and thousands of unique single fares; in London, there are just five.
- A transition to a 50% electric fleet by 2027, with the right capital support, and an ambition to have a fully electric fleet by 2032. This would reduce carbon emissions by approximately 1.1 million tonnes of CO_2.
- All new buses specified with the highest standard of AV announcements, and a new standard of live multi-modal passenger information across all parts of the network, giving older and disabled people the ability to travel with confidence on any route and bus in Greater Manchester. A Customer Charter will set standards to help ensure a high quality, safe and seamless customer experience at all points in a journey.
- A significant increase in bus priority measures, including another 50km of high-quality bus transit routes to connect better our key towns not just by bus but also by walking and cycling. They will also see a new 10-minute service frequency standard introduced across many routes, so that, just like on Metrolink, a customer can arrive at a stop without consulting a timetable and know a bus will be there shortly.

With the final decision to implement franchising now made, we are on track to see the first franchised bus services operating in the West and North West of Greater Manchester – in Wigan and Bolton – in 2023.

Together with Greater Manchester's £1.4bn proposal for a City Region Sustainable Transport Settlement, we are advancing a clear, robust and ambitious investment plan for bus over the coming years. Given the strength of the case we are making, we are asking Government to match it with a fair level of long-term capital and revenue investment.

As Greater Manchester's Leaders, with the right support from Government, we are focussed on using all powers at our disposal to deliver our plans for bus at pace and implement the spirit, ambition and policy agenda encapsulated in the National Bus Strategy. In doing so, we will make a major, city-region wide contribution to the national priorities of Levelling Up, transitioning to Net Zero, and building a strong, prosperous and productive UK Plc.

[**TO BE SIGNED BY THE MAYOR OF GREATER MANCHESTER AND 10 LOCAL AUTHORITY LEADERS SUBJECT TO APPROVAL**]

Executive Summary

Greater Manchester welcomes the opportunity to respond to the National Bus Strategy and present a Bus Service Improvement Plan (BSIP) for Greater Manchester that helps us deliver our vision for the "Bee Network" transport system:

'The Bee Network is an integrated 'London-style' transport system which will join together buses, trams, cycling and walking and other shared mobility services by 2024, with commuter rail incorporated by 2030, to transform how people travel in Greater Manchester.'

By designing and delivering public transport, active travel and shared mobility services as one system with local accountability and through direct engagement with people the Bee Network will transform the travelling experience and make sustainable, low carbon transport an attractive and affordable option for all. The Bee Network will support seamless end-to-end journeys within Greater Manchester, irrespective of the destination. The public transport component of the Bee Network will be accessible, affordable and easy to use, with Greater Manchester-wide multi-modal ticketing and a daily fare cap.

Greater Manchester is strongly aligned with Government in recognising the potential for buses to play a central role in supporting sustainable economic growth in our city and town centres and major development areas; in supporting levelling up across Greater Manchester by enabling the most excluded groups to access jobs, education and other opportunities; and in driving decarbonisation of our transport system to tackle the climate emergency.

This is why increasing bus travel is a central part of Greater Manchester's pathway to a "Right Mix" vision of zero net growth in motor vehicle traffic from 2017 to 2040 with at least 50% of trips by active travel or public transport. It is why Greater Manchester has decided to pursue a franchised bus system to enable buses to be better integrated into the wider sustainable transport network. And it is why investment in transformational bus infrastructure and passenger facilities is a central component of our Five-Year Transport Delivery Plan and our City Region Sustainable Transport Settlement prospectus. Greater Manchester is therefore uniquely placed to deliver a radically improved bus system in the coming years, subject to agreeing a clear deal on funding and powers with Government.

Buses in Greater Manchester

Over recent decades, buses in Greater Manchester have not fulfilled their potential in terms of providing an attractive and credible alternative to car travel. Bus travel in Greater Manchester has declined from a peak reached around 1950. During the 1980s, the decline accelerated following deregulation in 1986. Declining bus patronage set in motion a self-reinforcing cycle of reduced bus patronage, reduced service-frequencies, higher operating costs and higher fares, which has left far too many of our communities with insufficient local bus services. The result has been that bus travel is now seen by too many people as a 'choice of last resort', and levels of car dependency have dramatically increased. The decline

in bus use and increased use of private vehicles has been both a cause and a consequence of adverse trends in Greater Manchester, such as the decline of town centres; growing social and economic inequalities; and increased greenhouse gas emissions, noise and air pollution from transport.

However, buses continue to play a vital role in the lives of many people who live, work, and visit Greater Manchester. They make up about 75% of public transport trips and are particularly important for people making everyday trips to work, education, and for shopping. Women, young people, those from mixed ethnic backgrounds, Black or Black British people, and those with a disability or mobility impairment are also disproportionately more likely to travel by bus ((Greater Manchester Travel Diary Surveys (GMTRADS) 2017-2019)); these groups are more likely to experience multiple forms of disadvantage and social exclusion and therefore could particularly benefit from improvements to the bus system.

The Leigh - Manchester Busway service, which provides bus rapid transit between Leigh, Salford, Manchester City Centre and the Oxford Road corridor, has already demonstrated the potential of buses to attract new customers in Greater Manchester and the National Bus Strategy presents an exciting opportunity for Greater Manchester to build on this work to achieve a step-change in bus service-quality and patronage throughout the City Region.

Specifically, we need buses to provide attractive, accessible and affordable services to all communities in Greater Manchester to allow everyone to access jobs, essential services, and other opportunities, particularly for those people who don't have access to a car. We also need to improve buses so that people can choose car-free or low-car lifestyles and also to leave their cars at home for many more journeys. In addition, buses are positive for promoting more active lifestyles through the walk to and from the bus stop.

We need clean buses to support our ambitions for clean air, and a carbon neutral transport system by 2038. Buses also need to play an important role in our local economies by supporting the 24-hour economy and more attractive urban places. We need buses to provide good access to Metrolink and rail services to allow longer journeys to be made easily by public transport and we need new developments to be well served by bus services.

Our Ambition and Plan

Our ambition specifically for bus within the Bee Network is set out in the Greater Manchester Transport Strategy 2040. We believe this ambition to be highly consistent with that set out in the National Bus Strategy.

Our Ambition: To develop a modern low-emission accessible bus system, which is affordable, fully inclusive and is integrated with the wider Greater Manchester transport network on which everyone will be willing to travel regardless of their background or mobility level.

In order to achieve our ambition for bus, we will need to bring about a significant improvement to the quality of our bus offer by delivering what people tell us they want. Based on research with bus users, we will make journeys by bus **quicker, cheaper, greener,**

more reliable, more accessible and more attractive, with the aim of improving **the whole journey** – including pre-trip information, the journey from home to bus stop and bus stop to destination, in-journey information, customer care, the physical and digital integration with other services, and the waiting experience.

The scale of the improvement needed is significant – but so is the reward from achieving it. It is why Greater Manchester has decided to implement a franchised bus network to allow buses to be operated in a model similar to London, with bus services taken under the direct control of Greater Manchester Combined Authority, which would set routes, timetables, fares and standards and with bus operators bidding competitively for contracts to run services on behalf of the Greater Manchester Combined Authority (GMCA).

We anticipate that bus services in the Bee Network will reflect the requirements of creating sustainable communities in each part of Greater Manchester. The mix required to achieve sustainable transport and land-use will lead to different requirements for bus in different places. In some locations, bus will provide the main form of public transport; in others, it will focus on complementing and feeding rapid transit services or being better integrated with other modes including active travel modes. High-frequency turn-up-and-go services will be provided where there is sufficient potential patronage; in other locations, services will be less frequent, requiring a particular focus on punctuality.

In the BSIP we have set ourselves the challenge of meeting our interim-year 2030 "Right Mix" target for bus travel (as set out in Our Five Year Transport Delivery Plan 2021-26). This has been made more challenging by the Covid-19 pandemic, which has had a profound impact on public transport patronage and implies an increase in bus travel of more than 30% by 2030 from the expected patronage levels in 2022. This will not be easy and will require a transformational uplift in the customer experience of using buses in Greater Manchester, as part of the wider, integrated London-style Bee Network. If we can achieve this target, however, the prizes are significant. In particular, achieving our right mix targets will enable Greater Manchester to remove c. 450,000 tonnes of carbon tailpipe emissions over the period to 2030. It will also help to level up Greater Manchester's economy by improving everyone's access to employment, education, healthcare, leisure and cultural opportunities.

Our Approach to Achieving our Ambition for Bus

Our ambitions for bus are summarised around the following seven thematic areas:

- **Customer Experience:** This is the golden thread that runs throughout BSIP with all the improvements targeted at providing customers with a safe and seamless travel experience, supported by a Mobility as a Service platform to provide a digital one-stop-shop for all travel needs. The Customer Charter will set out the standards that customers can expect when using bus services in Greater Manchester;
- **Services:** Stabilising and then strengthening services and routes to a minimum 'turn up and go' frequency (at least every 10 minutes on Monday to Saturday daytimes) on

major routes to form a 'London-style network' to ensure that all of Greater Manchester's diverse populations and geographies are able to access the bus network;

- **Infrastructure:** Significant increase in bus priority including Quality Bus Transit on main corridors, and the removal of congestion 'hotspots' for buses, plus investment in bus passenger facilities and multi-modal mobility hubs.
- **Information:** Readily available; live and up-to-date; multi-modal information that is integrated with the purchase of travel and is provided in a variety of ways to reflect the needs of all customers ensuring its use is captured and used to inform service design.
- **Fares and ticketing**: More affordable journeys, with attractively priced and simply structured fares for 'hoppers', travelcards, daily and weekly capping for all bus travel, and for trips interchanging between bus, Metrolink and other modes including some elements of Active Travel.
- **Fleet:** Introducing a full fleet of zero emission high quality buses within Greater Manchester alongside associated support infrastructure by 2032, with 50% of the fleet to be zero emission by 2027 and a further 330 zero emission vehicles will be required to meet the passenger demand generated from the service enhancements (270) and fares reduction initiatives (60).
- **Network Management:** Prioritising bus passenger journey times and reliability consistently across Greater Manchester.

These ambitions are supported by a series of specific targets, which are aligned to our Greater Manchester Transport Strategy 2040 Key Performance Indicators, and which focus not just on the performance of the network but, importantly, on the customer experience and levels of satisfaction with travelling by bus in Greater Manchester.

Implementing the Bus Service Improvement Plan

One of the core aims of the introduction of a franchised bus network is that this will enable GMCA and TfGM (overseen and managed by democratically accountable elected Members and the Greater Manchester Mayor) to determine the bus network and its services, timetables, fares and ticketing and the overall quality of the passenger offer. This will enable a much more integrated and coherent customer experience, as part of the wider Bee Network ambition, and ensure that buses play their full role in supporting sustainable economic growth, levelling up and a decarbonised transport system. Whilst these new arrangements delivered by franchising are an essential pre-condition to achieving our ambitions, they will not on their own deliver a London-style transport network within Greater Manchester and will need to be part of a carefully co-ordinated package of measures to transform the customer experience of travelling by bus.

Many different partners will have a role to play in helping us transform the bus network within Greater Manchester, including: TfGM; Greater Manchester's 10 local authorities; Greater Manchester Police, public transport operators, and neighbouring local authorities. We will also, critically, need support from Government to ensure we have the funding and powers in place to support the delivery of the plan.

In terms of the substantial capital and revenue funding that will be required to transform buses in Greater Manchester, this BSIP sits alongside our **City Region Sustainable Transport Settlement Prospectus**, which sets out an ambitious and costed plan for investment in Greater Manchester's Bee Network infrastructure (aligned with our Five-Year Transport Delivery Plan). This will need to be matched by significant investment in our bus fleet both from a decarbonisation and passenger information perspective. Revenue funding will be needed to deliver service enhancements in key locations across Greater Manchester; to enable affordable fares to be charged to attract more people back onto buses and to give people the opportunity to access employment; to cater for this increased demand; alongside improvements to the customer experience offer for bus, including additional resources to make the bus network safer and more secure and to allow increased enforcement of parking and loading restrictions at key congestion hotspots.

This funding will help build upon the significant local investment that has already been made over recent years and continues to be made within the bus network and associated infrastructure. This includes revenue funding as follows: £134.5 million committed funding up until 2025/26 towards the establishment of a franchised bus network; an annual statutory charge of up to £86.7 million to fund the provision of subsidised services; accessible transport and the costs of concessionary travel on bus; and £16 million per annum to support the ongoing Our Pass pilot.

In addition, Greater Manchester has a unique track record in committing local funding in partnership with Government for investment in locally prioritised sustainable transport infrastructure, to support delivery at scale and at pace. This has included the ground-breaking Greater Manchester Transport Fund (GMTF): a c.£3 billion capital investment programme (jointly funded 60% by Government and 40% from Greater Manchester local contributions) which represented the largest 10-year local transport programme outside London. The delivery programme has continued in recent years through the Growth Deal, Transforming Cities Fund programme and Active Travel funding, but at a lower level of investment than GMTF. Notably from a bus perspective this programme has delivered the Leigh-Salford- Manchester guided busway, the Greater Manchester Cross City Bus Package, including the transformation of the Oxford Road corridor and a number of new transport interchanges.

With the role of an elected and accountable Mayor of Greater Manchester now firmly in place and a decision taken to implement a franchised bus system (subject to the outcome of the judicial review), we are in a strong position to make the case for further devolution of powers from Central Government to take greater control of our transport network. These include devolving powers for moving traffic offences such as the blocking of yellow box junctions, which cause congestion and delays to bus services within our towns and cities, to local authorities.

Finally, we will keep the plan under regular review, drawing on regular engagement with customers, including non-users and ongoing monitoring of the performance of the network, tracking progress towards our stated targets, and adjusting course as appropriate.

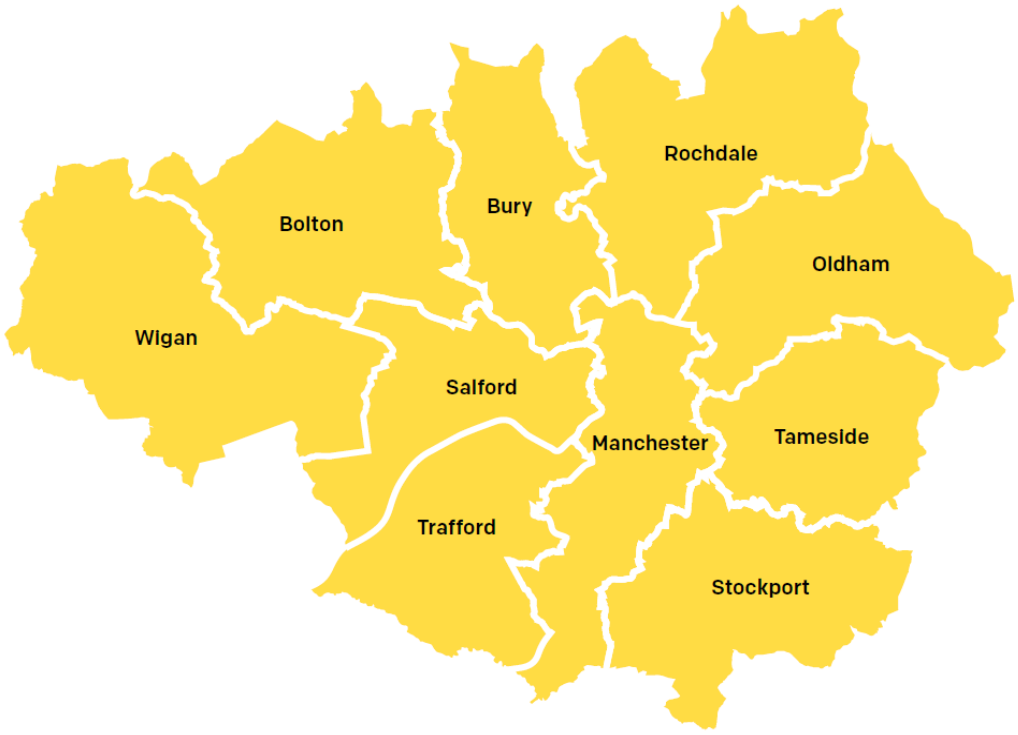
1. Introduction and Overview

1.1 Introduction

This document sets out Greater Manchester's long held ambition to provide a customer focused bus network as part of a wider London-style integrated and inclusive transport system, including the proposal to franchise the bus network within Greater Manchester over the next 4 years. It reflects and responds to insight gained through customer research, carried out over the last few years, as to what people want to see improved when using the bus, and it aligns to the National Bus Strategy: Bus Back Better. It also recognises that Greater Manchester is in a unique position to deliver a radically improved bus system in the coming years, subject to agreeing a clear deal on funding and powers with Government.

In summary we need better buses - services that people want to use - to support Greater Manchester's ambition to be the best place in the world to grow up, get on and grow old. Buses can do that in many different ways.

This BSIP covers the whole of Greater Manchester including the ten local authority areas of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan; and aligns with our recent City Region Sustainable Transport Settlement submission for a five-year capital programme of improvements to our transport network (April 2022 – March 2027).



Greater Manchester's BSIP fully aligns with Greater Manchester's Transport Strategy 2040 and Delivery Plan published in January 2021 **Greater Manchester Transport Strategy 2040 | Transport for Greater Manchester (tfgm.com)** and the Right Mix Vision for zero net growth in motor vehicle traffic from 2017 to 2040, with at least 50% of trips made by active travel or public transport.

Greater Manchester's BSIP will be reviewed on an annual basis in conjunction with the 2040 Transport Strategy and Delivery Plan to ensure that Greater Manchester's ambition for Bus remains in step with the development and delivery of the wider transport network.

1.2 Overview of Strategic Context

Greater Manchester's transport policy objectives stem from three documents:

- The Greater Manchester Strategy;
- Places for Everyone (draft) and Stockport's Local Plan; and
- The Greater Manchester Transport Strategy 2040.

The Greater Manchester Strategy explains our ambitions for the future of our City Region and the 2.8 million people who live in the towns, cities, communities and neighbourhoods that make up Greater Manchester. It covers health, wellbeing, work and jobs, housing, transport, skills, training and economic growth.

The Places for Everyone Joint Development Plan Document 2021 (the PfE Plan) is a draft spatial plan that sets out strategic land use and planning policies for nine of the ten Greater Manchester local authorities covering the period up to 2037 which, alongside the emerging Local Plan for Stockport, will define the proposed locations of homes and jobs to inform land-use planning decisions.

The Greater Manchester Transport Strategy 2040 (GMTS 2040) demonstrates our strong commitment to provide a transport system which: supports sustainable economic growth, is well maintained and resilient, and reliably enables people and goods to access opportunities and markets; improves the quality of life for all by being integrated, inclusive, healthy, safe and secure; protects our environment and supports our target to be Carbon Neutral by 2038 as well as improving air quality; and capitalises on new technology and innovation. GMTS 2040 sets out seven mutually

reinforcing "Network Principles" which are to be applied consistently as we improve Greater Manchester's transport system to ensure that it meets the needs of all customers (see graphic above). These principles underpin all our ambitions for improving bus in Greater Manchester, as set out in this document.

Greater Manchester welcomes the National Bus Strategy and has developed a BSIP which includes its vision for bus and its plan for implementing that vision. At the time the National Bus Strategy was published, Transport for Greater Manchester, (TfGM), was preparing a Local Bus Strategy. Many of the key elements of that draft Local Bus Strategy have been incorporated into this BSIP document. Greater Manchester has also recently adopted a "Streets for All" Strategy which is focused on ensuring that our streets are welcoming, green and safe spaces for all people, and on encouraging and facilitating more travel by walking, cycling and public transport. Buses play a central role in our approach to delivering streets for all.

We have been developing a more detailed set of ambitions for a fully integrated sustainable transport network for travel over the whole of Greater Manchester and refer to this as our 'Right Mix' vision. We are branding that network as the 'Bee Network', which includes public transport, cycling, and walking and which will enable people to travel much more easily to the places they need to go without needing a car. We see the Bee Network as a vital tool for levelling up Greater Manchester towards London standards, for levelling up within Greater Manchester and for decarbonising our transport system, which we know are also high priority agendas for Government.

Extensive dialogue took place with local bus operators during development of the BSIP though a number of multi-operator, themed discussion sessions as well as meetings held with a number of bus operators individually. In addition, input was received from the ten local authority areas of Greater Manchester.

This Bus Service Improvement Plan is structured as follows:

- An overview of what we are intending to deliver which reflects the requirements as set out in the Department for Transport (DfT) BSIP guidance issued in May 2021;
- Objectives (the 'why?');
- Vision, ambition, and plan (the 'what?'); and
- Implementing the plan (the 'how?').

BSIP Overview Table

Name of authority or authorities:	**Greater Manchester Combined Authority**
Franchising or Enhanced Partnership (or both):	**Franchising**
Date of publication:	31 October 2021
Date of next annual update:	31 January 2023
URL of published report:	TBC

Targets	**2018/19**	**2019/20**	**Target for 2024/25**	**Description of how each will be measured (max 50 words)**
The targets set out below are considered to be ambitious and yet realistic. They reflect the current situation and therefore the impact of the Covid 19 pandemic and longer term downward trend in patronage and customer satisfaction; and the fact that by 2024/25 we will still be in the early stages of implementation of BSIP interventions and franchising. All targets are discussed and detailed further in Section 3.4 including our longer term targets for 2030. As more clarity is gained on funding availability we will review and shape our targets to better reflect the expected outcomes.				
Journey time: Main corridor speeds: Wholly outside M60 Inside/intersect M60 Other route speeds: Wholly outside M60 Inside/intersect M60	 No available comparable data	 12 mph 10.6 mph 12.1 mph 11.4 mph	 12.4 mph 11.0 mph 12.3 mph 11.6 mph	This will be measured using the average of all end-to-end journey times as shown by bus Automatic Vehicle Location (AVL) data. 2019/20 data taken from scheduled times as no AVL data available pre-April 2021.
Reliability: High Frequency EWT (minutes) Low Frequency Start point Mid-point The targets for 2024/25 are subject to refinement on receipt of a greater level of AVL data	 1.8 mins 88.1% 81.9%	 1.8 mins 88.4% 79.9%	 1.5 mins 86.9% 76.1%	Excess Waiting Time (EWT) is the difference between the average time people wait and the average time they were scheduled to wait, for services at least every 10 minutes between 0700 and 1900 on weekdays. All others: proportion of services departing less than 1 min early and 5 minutes late. (AVL data)

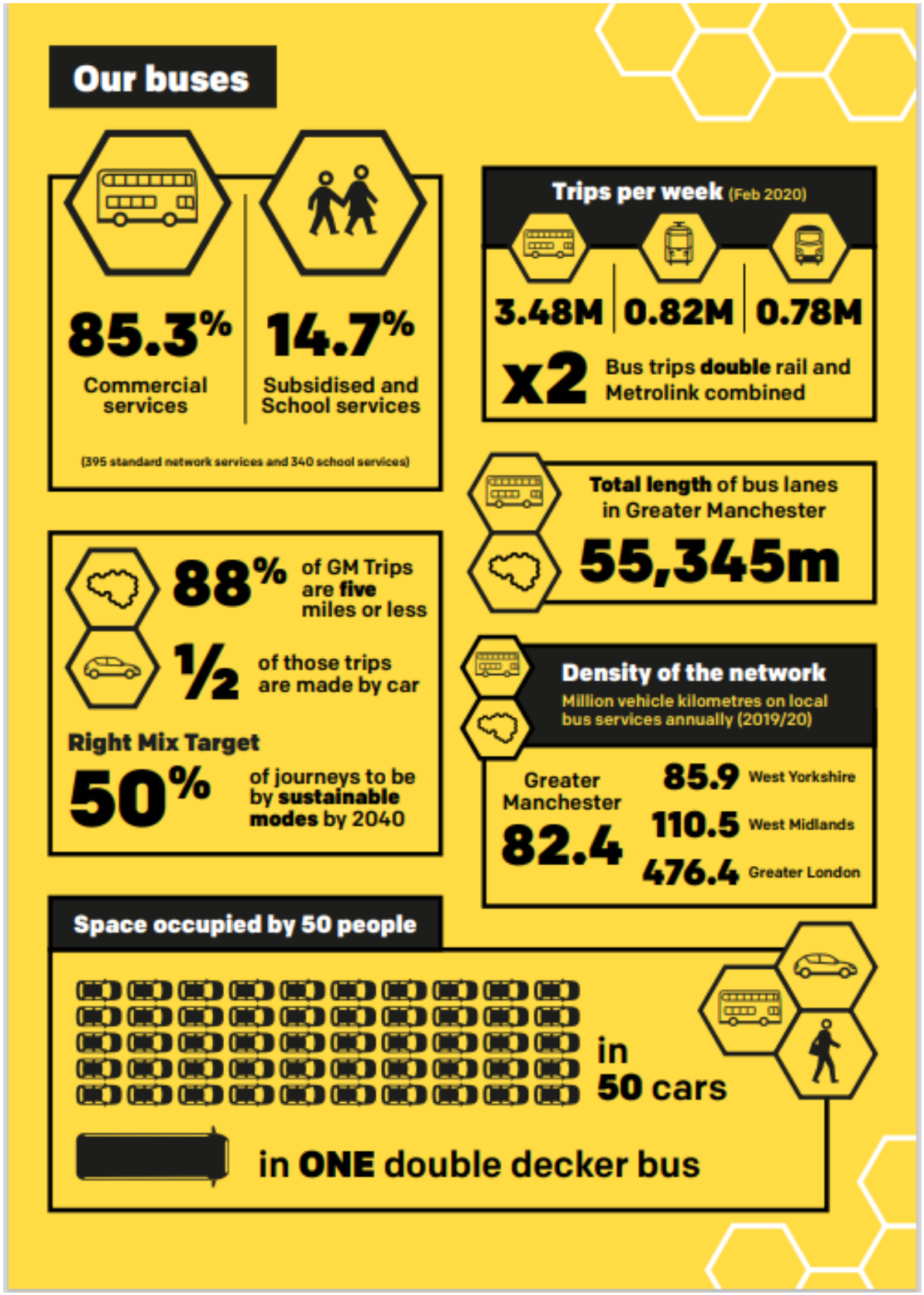
Targets	2018/19	2019/20	Target for 2024/25	Description of how each will be measured (max 50 words)
Passenger numbers	189 million	177 million (pre-pandemic)	171 million (Reflects pandemic impact: 155m expected in 2022)	This will be measured through ticketing data, validated by automatic passenger counters on buses.
Average passenger satisfaction: Greater Manchester residents, mix of users and non-users from National Highways and Transport Network Survey (NHT) May-June, annually.	64% 2019 63% 2018	60% 2020	66% 2025	Currently minimum approach is 10 individual Local Authorities continue full NHT Annual postal survey, weighted by age, gender, ethnicity, work status, population. GM sample ~7,000, satisfaction with local bus service overall (weighted score), could supplement with smaller November survey for 6 monthly data or if new survey approaches emerge.

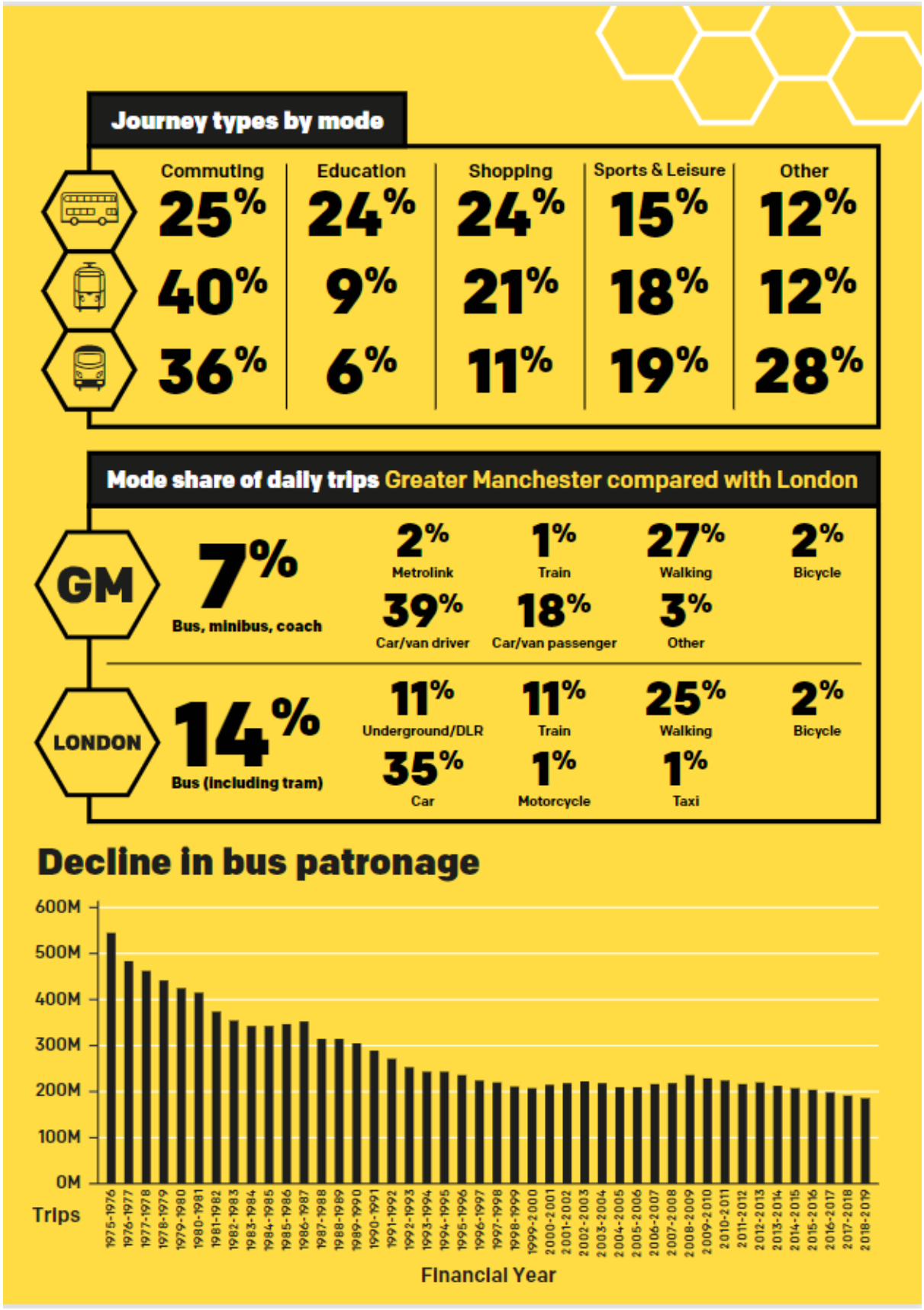
Delivery - Does your BSIP detail policies to:	Yes /No	Explanation (max 50 words)
Make improvements to bus services and planning		
More frequent and reliable services		
Review service frequency	Yes	Section 5.3 sets out our plan to stabilise the bus network and build an improved network of London-style turn up and go services. The aim is for 10-min frequencies on main corridors and targets for the percentage of population living within 400m of a frequent service to a major centre.
Increase bus priority measures	Yes	Section 5.4 sets out our programme of bus priority measures. As well as addressing pinch points it features co-ordinated Quality Bus Transit corridors, whole route bus priority, upgrades to bus stops, and bus, cycling and walking only streets.
Increase demand responsive services	Yes	Section 5.3 sets out our plan to expand Greater Manchester's current demand responsive service offering and integrate it better into the wider network. Specific improvements to the existing services (with increased capacity) will be followed by

		development of an integrated Demand Responsive Transport (DRT) offer.
Consideration of bus rapid transport networks	Yes	Section 5.4 sets out our plan for Bus Rapid Transit schemes with physically segregated busways, as well as Quality Bus Transit corridors where co-ordinated programmes of infrastructure deliver better journey times on key routes. These, together with other corridor upgrades will deliver a bus rapid transport network across Greater Manchester.
Improvements to planning / integration with other modes		
Integrate services with other transport modes	Yes	Integration of bus with the wider transport network is central to our overall ambition to deliver an overall integrated, inclusive and accessible transport network - the Bee Network. Throughout our BSIP we set out how through service enhancements, infrastructure improvements, better information and a commitment to an improved customer experience for the end-to-end journey this will be achieved.
Simplify services	Yes	Section 5.3 sets out our principles that include simplification. As well as limiting the reductions in services (such as in the evening, on Sundays), franchising will enable the review of services to remove currently overlapping services to get more value from the network. More direct services will be prioritised.
Review socially necessary services	Yes	Section 5.3 sets out our plans for review of, and improving provision of, socially necessary transport (including supported services, our Local Link, Home to School and Ring & Ride). With a more comprehensive, sustainable core network Greater Manchester will support specific employment centres, isolated communities with efficient services and demand responsive transport.
Invest in Superbus networks	Yes	Section 5.4 sets out our plans for Bus Rapid Transit which build upon the model of the successful Leigh-Salford-Manchester Guided Busway. Our BSIP identifies how the proposed bus priority infrastructure will be supported by the BSIP fares offer and higher frequencies to give a 'Superbus' service on a number of corridors in Greater Manchester as shown in Appendix B.
Improvements to fares and ticketing		
Lower fares	Yes	Section 5.6 sets out our ambition for fares. Most significantly we propose within the new fare structure to reduce overall fares by approximately 25%, to help transform the attractiveness of bus travel in Greater Manchester, including a new hopper flat fare at £1.55 adult/80p child. We will also work with operators with the aim of accelerating our half price fares policy for children between 5 – 16 and to improve the price of the multi-operator day product during the franchising transition period. In addition, we will introduce an offer for Apprentices and people returning to employment which will comprise of free bus or Metrolink travel for 28 days. All of the above will support better access to employment opportunities across Greater Manchester.

Simplify fares	Yes	Section 5.6 sets out how we will introduce a radically simplified fare structure, with a London-style flat fare for single trips, that will be a 'hopper' replacing a huge variety of single fares, and attractively priced one day and one-week travelcards.
Integrate ticketing between operators and transport	Yes	Our BSIP fare ambition (Section 5.6) offers an integrated experience across bus and Metrolink. From 2024, we will start to extend the existing Metrolink contactless Pay As You Go (PAYG) capping to bus such that customers will be able to benefit from day and week capping. Fares for multi-modal travel will be reduced.
Make improvements to bus passenger experience		
Higher spec buses		
Invest in improved bus specifications	Yes	Section 5.7 sets out plans to improve fleet specification to improve the customer experience, including cleaner and better equipped more accessible buses. We will also improve standards of cleaning to improve the customer experience and confidence.
Invest in accessible and inclusive bus services	Yes	Section 5.7 sets out how we will invest in new fleet and ensure they have the highest standards for accessibility. Our improvements to on-board information (both audio and visual information) to inclusive transport hubs, bus stops and to demand responsive transport will create an inclusive and accessible system.
Protect personal safety of bus passengers	Yes	Section 5.2 sets out how we will both enhance the response to incidents and support customers in feeling safe on the bus network. Additional TravelSafe Officers will be recruited to deploy to hotspot areas identified through better data/analytics. We will also strengthen the TravelSafe Partnership tools by introducing a new real time reporting system which will facilitate more reactive targeting of resource and issue resolution.
Improve buses for tourists	Yes	Improvements to information provision, simpler and more affordable fares, branding, connectivity to and integration with the wider transport network and the overall customer experience plus partnerships with key visitor destinations will make the bus network much easier to understand for everyone, including tourists.
Invest in decarbonisation	Yes	Section 5.7 sets out our plan for decarbonising Greater Manchester, prioritising areas where change will have most impact on air quality and carbon emissions. We set out our current short-term intentions to introduce 25 ZEBs that will run on our Guided Busway and 170 ZEBs that will convert all services run from Stockport bus depot ((subject to Zero Emission Bus Regional Areas (ZEBRA) funding)). In addition, we intend, subject to funding, to make 50% of our overall fleet, all our Ring and Ride vehicles zero emission by 2027 as well as from service enhancements / fares reduction.

Improvements to passenger engagement		
Passenger charter	Yes	Section 5.2 sets out our Customer Experience approach and corresponding standards of service will be set out in a Customer Charter. It will list clear, consistent commitments of what a customer can expect from bus travel in Greater Manchester. There will be information on what to do if the customer's experience doesn't meet these commitments.
Strengthen network identity	Yes	Through franchising and the development and implementation of the Bee Network, Greater Manchester will be able to bring a single network identity for buses and other forms of public transport to make the network more understandable and attractive. The Bee Network reflects the longstanding symbol for the Manchester area.
Improve bus information	Yes	We plan to accelerate the roll out of on-board audio-visual information across the fleet by 2025 (Section 5.7), as well as improving information at stop and pre-trip via the roll out of a central platform where the customer can access information and purchase tickets across all modes. (Section 5.5)


Our buses
85.3%
Commercial services
14.7%
Subsidised and School services
(395 standard network services and 340 school services)
Trips per week (Feb 2020)
3.48M
0.82M
0.78M
x2
Bus trips double rail and Metrolink combined
Total length of bus lanes in Greater Manchester
55,345m
88% of GM Trips are five miles or less
½ of those trips are made by car
Right Mix Target
50% of journeys to be by sustainable modes by 2040
Density of the network
Million vehicle kilometres on local bus services annually (2019/20)
Greater Manchester
82.4
85.9 West Yorkshire
110.5 West Midlands
476.4 Greater London
Space occupied by 50 people
in 50 cars
in ONE double decker bus


Journey types by mode
Commuting
Education
Shopping
Sports & Leisure
Other
25%
24%
24%
15%
12%
40%
9%
21%
18%
12%
36%
6%
11%
19%
28%
Mode share of daily trips Greater Manchester compared with London
GM
7%
Bus, minibus, coach
2% Metrolink
1% Train
27% Walking
2% Bicycle
39% Car/van driver
18% Car/van passenger
3% Other
LONDON
14%
Bus (including tram)
11% Underground/DLR
11% Train
25% Walking
2% Bicycle
35% Car
1% Motorcycle
1% Taxi
Decline in bus patronage
600M
500M
400M
300M
200M
100M
0M
Trips
1975-1976
1976-1977
1977-1978
1978-1979
1979-1980
1980-1981
1981-1982
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2015-2016
2016-2017
2017-2018
2018-2019
Financial Year

Those from disadvantaged groups are disproportionately more likely to travel by bus

	All Trips	Bus Trips	Car Driver Trips	Train Trips	Tram Trips	Taxi Trips
Female	54%	**58%**	50%	45%	51%	59%
Black	4%	**10%**	3%	1%	2%	4%
Any disability or impairment	9%	**14%**	6%	3%	6%	22%
19 or younger	11%	**29%**	1%	10%	19%	15%

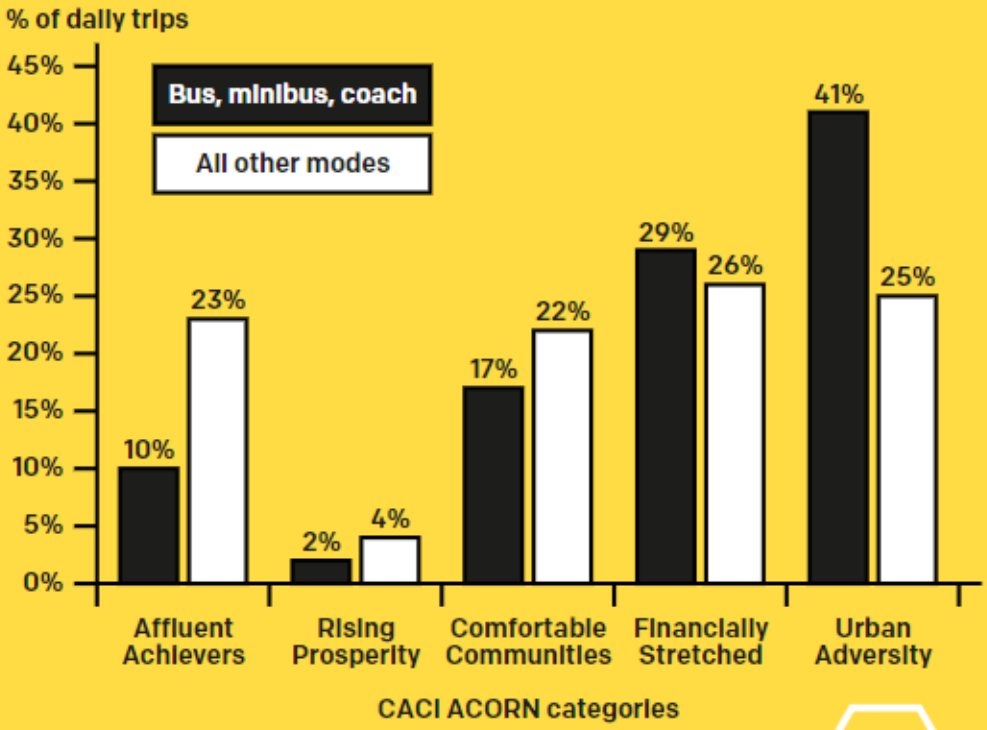
Number of households **without access to a car**

31%

Proportion of employee jobs that are **low paid*** (2017)

19%

* below two thirds of UK median hourly pay



CO_2 Distribution of different contributors to GM's annual carbon emissions (Source: BEIS)

A. Industry and Commercial
3350 $ktCO_2e$

B. Domestic
3350 $ktCO_2e$

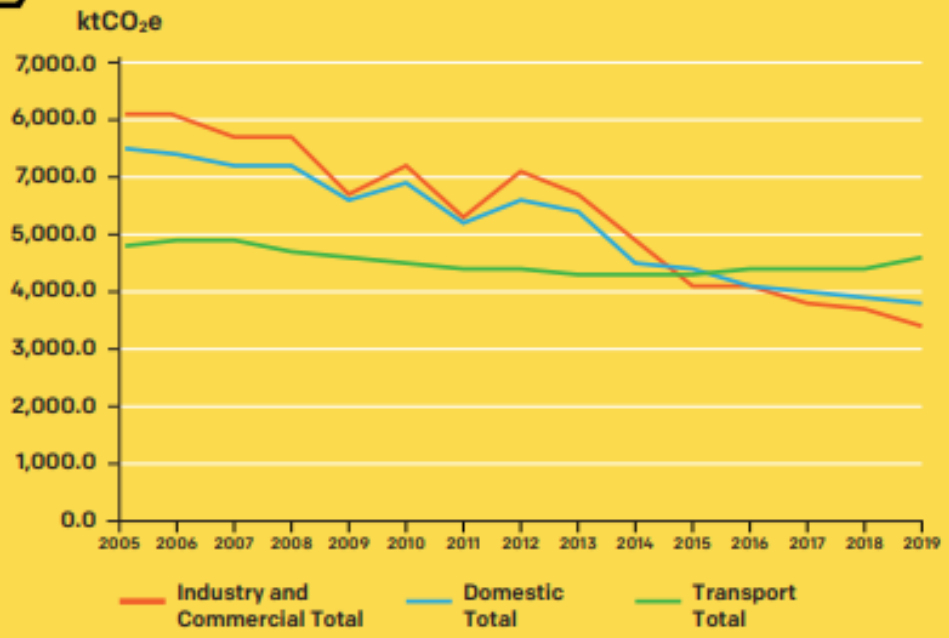
C. Transport
4564 $ktCO_2e$

Road Transport
97%

Other Transport
3%

Transport makes up the greatest contribution to the GM carbon footprint

CO_2 GM annual CO_2e by sector



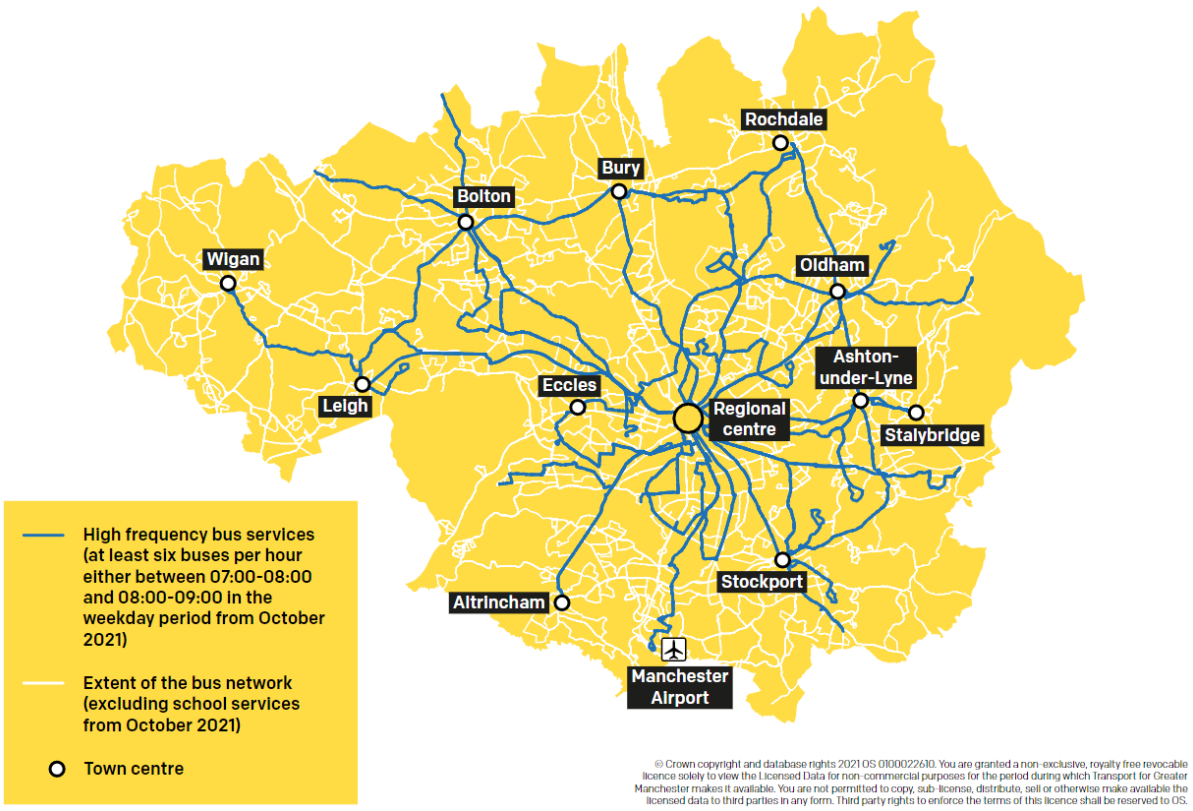
2. The Strategic Context

This section of the document sets out the 'why?' of the BSIP, explaining the current state of bus travel in Greater Manchester and why this needs to change. In this section, we set out:

- The current role of bus in Greater Manchester;
- The customer experience as it is in Greater Manchester;
- The impact of Covid 19 on buses in Greater Manchester;
- The current position regarding franchising; and
- The strategic fit with local and national strategy.

2.1 The Role of Bus in Greater Manchester Today

Buses are by some way the most important element of Greater Manchester's public transport network. Our bus network covers the whole of Greater Manchester, reaching the parts of the City Region that other public transport modes cannot, providing an inclusive transport network available across all 10 local authorities. The map below illustrates the extent of Greater Manchester's timetabled bus network.



In addition to this, Greater Manchester operates Demand Responsive Transport Services, which cover some of the less densely populated areas of the City Region, filling gaps which cannot be filled by timetabled services; and operates school services, fulfilling an important element of Greater Manchester's public transport commitments.

The scale of Greater Manchester's bus offer is substantial and is illustrated by the previous infographics. Briefly:

- Buses provide essential access for people who would otherwise have no other feasible means of travelling, with three quarters of all public transport trips in Greater Manchester being made by bus.
- As of June 2021, there were 7,248,432 scheduled bus kilometres per month across Greater Manchester.
- Just over a quarter of bus kilometres are on frequent services; just under three quarters are on non-frequent, and less than a quarter of one percent are on night services.
- There are 395 standard network services registered within Greater Manchester with a further 340 school services.
- As of September 2021, 85.3% of Greater Manchester's bus mileage is operated commercially, with the remaining 14.7% subsidised directly by Greater Manchester, including school services.
- Through Covid Bus Service Support Grant (CBSSG) subsidy, Greater Manchester has been able to continue to provide bus services across the City Region. This has meant that from April 2020 all previously commercially operated services have been supported by central government funding with operators being returned to a non-profit/loss position.
- Ongoing expenditure on bus services represents the largest element of the local transport budget with the Local Authorities of Greater Manchester funding £86.7 million per annum for local and national concessions and supported services; a further concessionary scheme, 'Our Pass', which provides free bus travel for 16- to 18-year-olds is funded by a Mayoral precept with an annual budget of c.£16 million;
- There are 35 fully electric buses in Greater Manchester, out of a fleet of 1,911 buses.
- Greater Manchester has approximately 55km of dedicated bus priority routes across the highway network.

Bus is the largest single element of Greater Manchester's public transport network:

- In February 2020 (i.e. immediately prior to the pandemic), there were 3.48 million bus trips a week in Greater Manchester. This compared with 823,000 trips per week on Metrolink and 780,000 trips per week on rail.
- Pre-Covid 19, bus trips accounted for 75% of public transport trips in Greater Manchester. During the Pandemic bus continued to play a key role in moving people and in mid October 2021 was carrying approximately 75% - 80% of its overall pre-Covid 19 passengers – demonstrating the importance of bus services to communities within the City Region, many of whom are reliant on these services to carry out their daily lives.
- However, while bus trips are still the most significant element of public transport trips across Greater Manchester, the overall mode share is small. The mode share of bus in Greater Manchester in 2019 was around 7%, with car trips accounting for around 60%. Although some of Greater Manchester's bus demand has been abstracted to light rail following the expansion of the Metrolink network over the last fifteen years, the impact of this in the context of overall bus trip numbers across Greater Manchester is relatively

small (making a difference of less than 1 percentage point to overall demand shares). This also reinforces the need to invest in all modes as part of an integrated public transport network. This is comparable to other metropolitan areas outside London but is far below the mode share of bus in London, which is around 14%.

As the above makes clear, bus travel is central to the delivery of Greater Manchester's ambitions for a transport network which is accessible to all, affordable, high-quality, and fully integrated. Delivery of this ambition has the potential to quickly, and meaningfully, tackle some of our most significant economic, social and environmental challenges, supporting national and local strategies.

2.2 Customer Experience today

Bus Travel's Share of the Total Market for Travel – who uses buses, and who doesn't?

Bus is the most widely used public transport mode in Greater Manchester, accounting for four out of every five public transport trips. In any given year, over half of Greater Manchester's population will travel by bus. It is a highly versatile mode which has the potential to serve everybody.

What journeys are made by bus?

Bus is used in journeys of all scales, from short hops on local services to longer trips across the City Region. Bus is, however, most relevant for short and middle-distance trips of up to 6km, as figure 2.1 below shows. After this point, numbers of trips drop off rapidly as in-vehicle journey time becomes an increasing factor.

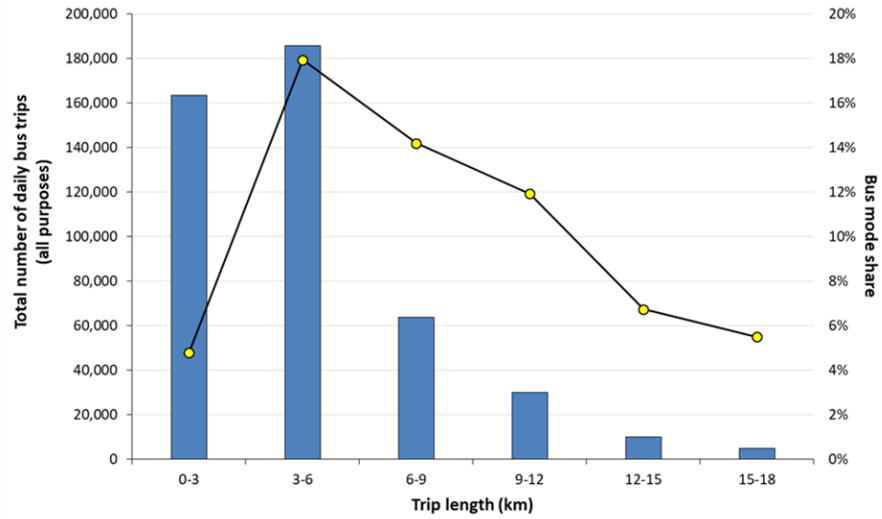


Figure 2.1: Graph showing distribution of bus trips by length of trip (Source: GMTRADS travel diary survey for 2015-17

As figure 2.2 below illustrates, for trips of between 2km and 5km, bus accounts for up to 16% of all trips. This might include, for example, trips to the Regional Centre from within the M60, or trips to Greater Manchester's main town centres from their respective suburbs.

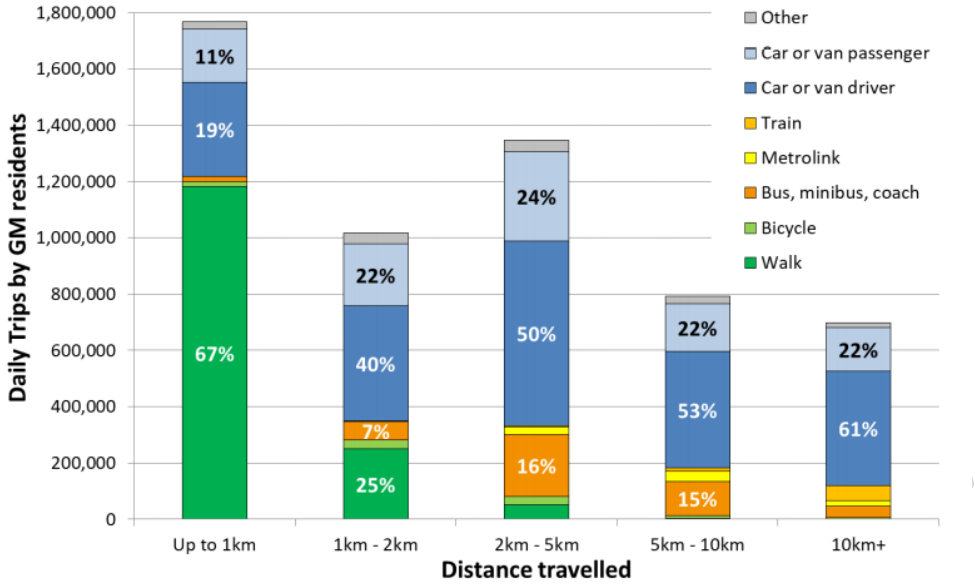


Figure 2.2: Graph showing proportion of transport mode by trip length (Source: GMTRADS travel diary survey for 2015-17)

Bus is also relevant for slightly longer trips; while it accounts for fewer trips overall, it still accounts for 15% of trips of between 5km and 10km. However, the dominant mode for trips of this length remains the car. Therefore, there is potential to grow bus use significantly by improving the quality of the bus offer across Greater Manchester.

Bus is used for many types of trips, with a fairly even split between commuting, education, shopping and leisure. This contrasts strongly with the split of trip purposes for other public transport modes, which are much more focused on commuting trips.

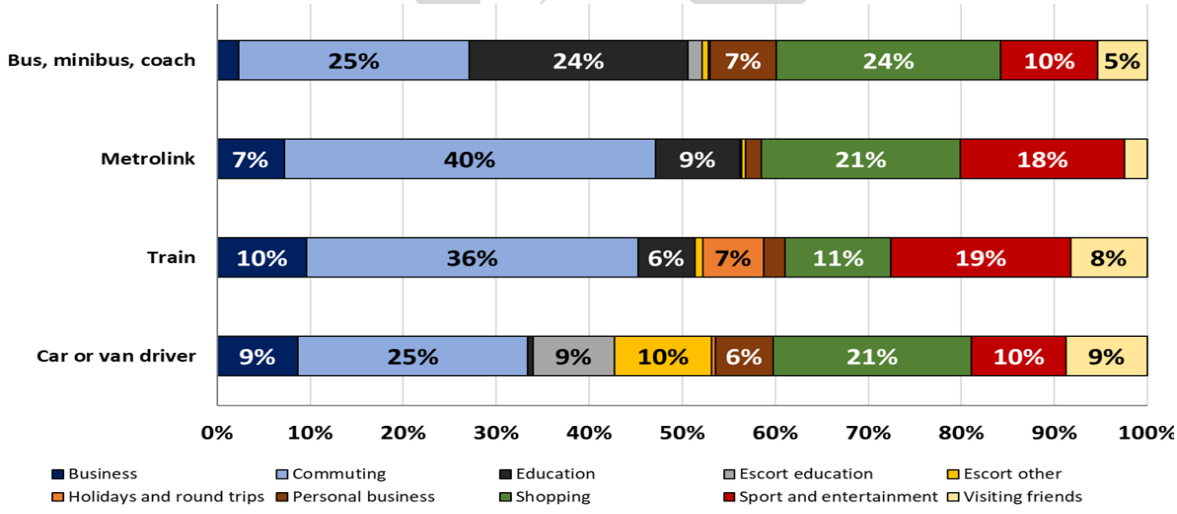
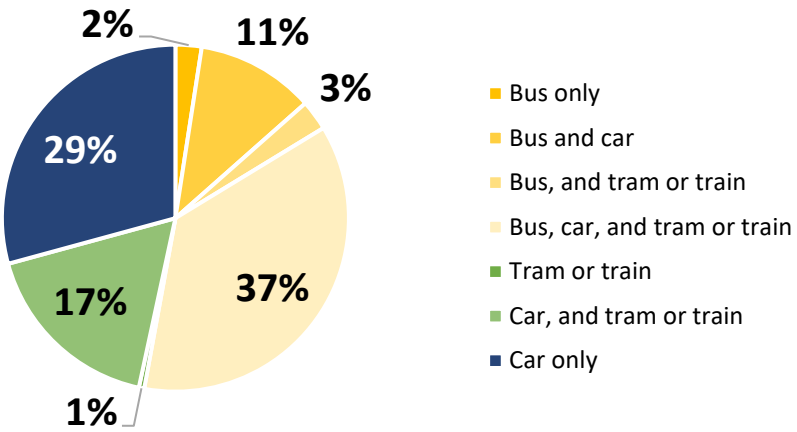


Figure 2.3: Chart showing trip purpose by transport mode (Source: GMTRADS travel diary survey for 2017-19)

Again, this emphasises the centrality of bus in Greater Manchester's public transport offer – and shows that bus is less exposed than other modes to potential future loss of demand due to changing commuting patterns.

Who uses bus?

Figure 2.4 shows that most people 'mix-and-match' their transport choices, and there is a constant turnover in the bus market. This presents an enormous opportunity to build patronage by providing a great first experience.



[1] Used mode once a year or more

Figure 2.4: Proportions of Greater Manchester residents who use various combinations of modes[1]. Source: GMTRADS 2017-2019

It is also the case that there is a bias amongst bus passengers towards poorer socio-economic groups – not least towards those in the 31% of Greater Manchester households without access to a car. Bus accounts for over 40% of daily trips among the poorest Acorn categories, compared to only 10% among the richest (Acorn is a powerful consumer classification, which categorises postcodes into one of 6 Categories, 18 Groups and 62 types. It is used to understand lifestyles, behaviour and attitudes, together with the needs of communities, Source: Acorn consumer classification (CACI)).

"[I'd like] The 217 route kept going... I have a disability and it was a lifeline to get me to work safely and without the crowds that are on the 216/231/230 routes."

Bus user 5+ days a week pre-COVID-19, TfGM Covid Recovery Survey 2020

Buses provide essential access for people who would otherwise have no other feasible means of travelling. Although our BSIP aims to widen the scope of bus travel to a more diverse range of people, we will also aim to improve the effectiveness of bus in providing non-car access to all localities in Greater Manchester. The bus network presents several barriers to existing users that can affect some people more than others, such as cost, personal security, physical access, information availability and network coverage. For instance, 30% of bus users who don't have a concession say they cannot afford to travel by public transport as much as they'd like to. A high-quality affordable bus offer will therefore play an important part in fulfilling Greater Manchester's aims of a transport system available to everyone and opportunities available to everyone – including those who do not have access to a car or who are unable to drive.

Women, young people, those from mixed ethnic backgrounds, Black or Black British people, and those with a disability or mobility impairment are also disproportionately more likely to travel by bus (GMTRADS 2017-2019). Any shortcomings with Greater Manchester's bus offer therefore has the greatest impact on those who are often also the most disadvantaged.

Customer attitudes to Bus

In carrying out research into customer attitudes to bus, we have grouped existing and potential customers of bus in Greater Manchester into five categories, illustrated and explained by Figure 2.5 below.

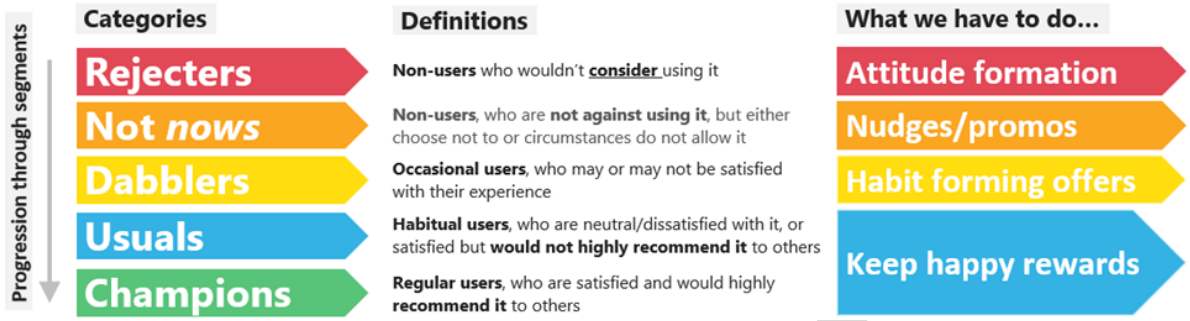


Figure 2.5 – Customer Categories – Definition and Application (TfGM, Sales Funnel 2021)

Only a minority of people (less than 20%) currently completely reject bus use – the 'Rejecters' category. A far larger group (over 50% of the Greater Manchester population) has either no objection to buses in principle, but doesn't use it ('Not nows'), or doesn't use it regularly ('Dabblers'). These are clear potential target markets and should be more readily convertible to regular customers than 'Rejecters'. We will use our detailed demographic analysis of all these groups, along with the unique opportunity provided by franchising to shape the bus offer to move everybody along: from influencing 'rejecters' to just 'not now'; nudging those on to 'dabbler' then, via a continuously positive customer experience, to retaining satisfied customers.

What Greater Manchester residents think of the current bus offer

We directly seek residents' views and track satisfaction of different aspects of bus services using a survey based on a representative sample of the Greater Manchester population (Network Principles Survey). This approach ensures frequent users aren't over-represented and helps expose weak areas, often masked by overall satisfaction, that can limit our ability to increase patronage. We ask about the whole journey from pre-trip information to alighting and the onward journey (Figure 2.6).

Figure 2.6: Customer satisfaction with stages of the bus journey. Source: TfGM Network Principles Survey 2021

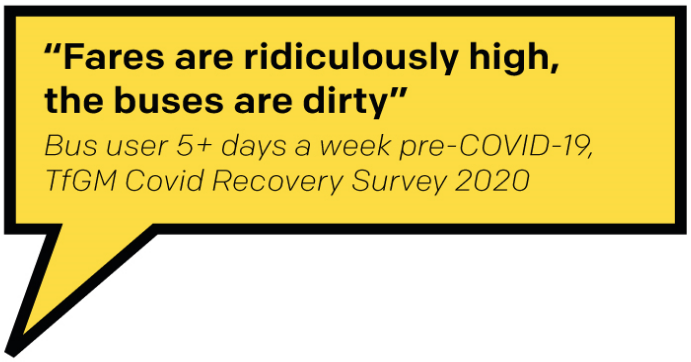
Figure 2.6 shows that satisfaction amongst all bus users varies at different stages of the journey, with low points discussed in more detail below. Improvements seen since the previous Network Principles survey in 2018 were driven by increased levels of satisfaction amongst infrequent users more likely to be travelling for leisure or recreation off-peak. Frequent bus users have lower levels of satisfaction than infrequent users across most points of the journey. This analysis indicates action is required to improve:

- personal security at night (particularly when waiting at stop);
- condition of waiting environments;
- punctuality of services;
- cleanliness on board; and
- information (both at stop and onboard).

Lower satisfaction at various stages of the journey for some specific groups (e.g. women, young people, those with disabilities – including physical access to vehicles) indicate action is required to address their specific issues.

Bus users are relatively satisfied with their personal security throughout a daytime journey. However, there is a sharp fall in satisfaction at night, which is most pronounced for women. Low satisfaction levels are also reported when seeking information, particularly pre-trip, and with the punctuality of the bus arriving at the stop. This suggests that not knowing when the bus will arrive, or if it will come at all, plays a large part in dissatisfaction, which may explain the strong desire for easy-to-access real-time information (Customer Travel Information research, 2019).

Another major concern is value for money, with only 67% of people saying it was good value. Low fares are crucial for affordability, but they must be seen in the context of the quality of the service. Even when satisfied overall, people feel fares are too high for the service they receive. A positive impact can be made by adding value, as the Vantage services on the Guided Busway have done (see case study, Section 4), achieving 87% satisfaction with value for money in post-opening research.



TfGM's tracking data is complemented by the National Highways & Transportation (NHT) survey for the Local Authorities. Like the Network Principles Survey, this is an all-population sample, but with less detail about buses. Its larger sample of people enables comparisons by Greater Manchester Local Authority area, which show that overall satisfaction with bus services varies considerably – from 60% in Manchester to only 42% in Oldham. It also shows lower satisfaction with ease of getting on and off buses, the quality of bus stops, and raised kerbs at stops amongst those with a disability.

Transport Focus Bus Passenger surveys ceased in 2019, but the historical data provided further detail on attributes of the 'customer journey' and some comparisons with other areas using the same questionnaire. Our methods differed slightly – Transport Focus samples from customers on-bus and asks about the journey just made, whereas ours asks about experience in general. The lack of non-customers and higher representation of frequent users mean Transport Focus Bus Passenger Survey (BPS) findings may not be as good a guide to what prospective customers want, but they do corroborate the findings of TfGM's own research: overall satisfaction scores, perceptions of value for money, punctuality and time waiting at the stop are very similar; frequent users are generally less satisfied in both surveys. Only satisfaction with cleanliness differed much – our lower figure (from 2021) may be due to Covid-19, which is a factor we consider further in Sections 3.2 and 5.2.

'What people want' is nothing extraordinary. Like any other product or service, buses must consistently perform as advertised at a price people consider reasonable for the quality. Greater Manchester's BSIP has used this valuable feedback to shape what we would like to do to improve the bus offer to customers and integrate bus into the wider ambition of an inclusive, accessible London-style transport network.

2.3 Impact of Covid-19 on buses

The Covid-19 pandemic had a devastating short-term effect on public transport patronage, with bus usage in Greater Manchester falling to as low as 15% of its pre-Covid level

following the lockdown of March 2020. Since that time, bus services have been sustained by the government's Covid-19 Bus Service Support Grant (CBSSG) subsidy. They have played a vital role in keeping businesses and public services operating during the pandemic and facilitating essential trips for key workers.

Up to mid October 2021 bus patronage in Greater Manchester was at around 75-80% of its pre-Covid level albeit with a number of variations on different services across the City Region as whole. This boost to patronage, from August levels (approximately 65% of pre-covid levels), was as expected as schools returned and as working from home has reduced. However, we expect some of the effects of Covid-19 on bus patronage to persist in the medium and longer term and are aware that the network may need to change over time in order to reflect changes to patronage flows or to capture new trends.

Pre-Covid, 24% of bus trips were shopping trips (source: GMTRADS household travel diary surveys). The pandemic accelerated the shift to online shopping and the closure of many shops, especially in town and city centres where bus travel is important. This means that many of our towns are now developing regeneration proposals to diversify their offer in order to remain key destinations and therefore are likely to need better bus services at different times of the day and week.

Pre-Covid, 25% of bus trips in Greater Manchester were commuting trips (source: GMTRADS household travel diary surveys). The increase in home-working during the pandemic is expected to persist to some degree in the long term. Reduced commuting to busy centres releases road capacity for driving and parking, improving the competitive position of car relative to bus. We currently estimate that bus patronage in Greater Manchester will return to roughly 83% of its pre-Covid level once conditions have settled down after the pandemic in the relative short term. The long-term effects of the pandemic on bus patronage can be viewed at least in part as an acceleration of trends that were already underway. For that reason, it is therefore vital that we invest in bus services and overall customer experience on bus, alongside wider town centre regeneration, to halt this decline and start to encourage a greater use of bus by many more people within Greater Manchester and the continued growth of the Greater Manchester economy.

2.4 Overview of Franchising in Greater Manchester

Since 1986 bus services in Greater Manchester have been deregulated. That means the buses are run by commercial bus companies who decide the routes, timetables, fares and standards. The bus companies receive the revenue from fares and retain the profits. Some services which cannot be operated for sufficient commercial return have continued to be supported financially by Greater Manchester (slightly less than a fifth of the overall bus network mileage in Greater Manchester, at an annual cost in excess of £30 million, including provision for schools services).

Greater Manchester has sought to change this and move to a model similar to London. This means taking bus services under the direct control of Greater Manchester Combined

Authority – whereby TfGM, on behalf of GMCA, would set routes, timetables, fares and standards. Bus operators would competitively bid for contracts to run services on GMCA's behalf. GMCA will retain the fares and use other available local and central government funding (e.g. for concessions) to pay operators to run services.

This will allow the GMCA to determine fare structures for all buses in Greater Manchester, allowing radical simplification and ensure value for money. The network will be able to be planned as a whole and coordinated across modes. Customer service and standards will be co-ordinated across all of Greater Manchester, and information provision improved to make buses more attractive as a transport mode and better joined up with other modes.

Full details of GMCA's intentions to implement a franchised bus scheme can be found on the **GMCA website** **Bus reform decision March 2021 - Greater Manchester Combined Authority (greatermanchester-ca.gov.uk)** . Two periods of consultation have been undertaken across Greater Manchester – delivered by TfGM on behalf of GMCA – with statutory consultees as well as the public, businesses and representative bodies, and the responses received have shaped the current proposals. Based on a comprehensive evidence base, the Mayor of Greater Manchester took the decision in March 2021 to implement a franchising scheme (with this decision the subject of an ongoing judicial review).

The franchising scheme is proposed to be delivered in three phases. The current timeline for implementation of franchising is set out below and aligns to that set out during the second consultation. It balances the need to bring benefits to passengers with giving time to operators and TfGM to balance resources, learn lessons and give time for mobilisation. Consideration can be given to accelerate the implementation of the scheme. This will initially require an amendment of the existing legislation and a decision by GMCA to consult with the public and bus operators on a proposed new timeline. The outcome of any such consultation and reasons for acceleration would then be considered by GMCA and the Mayor.

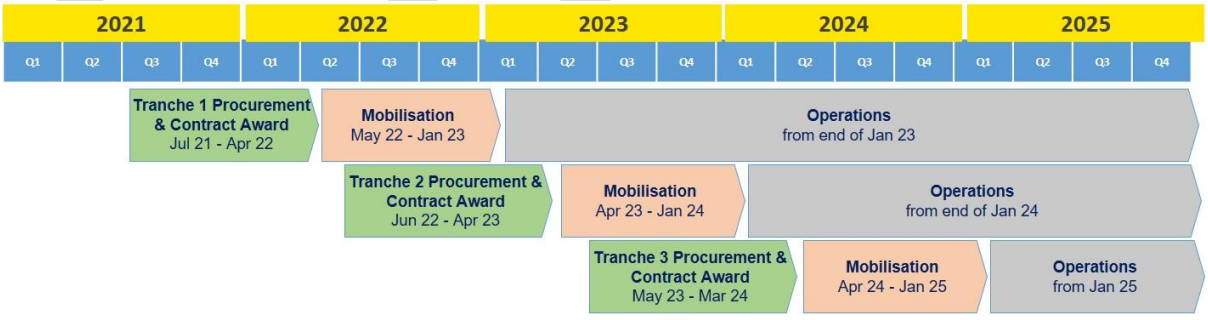


Figure 2.7 Current timeline for implementation of bus franchising

TfGM will also explore how to ensure a smooth transition by engaging with bus operators through a range of potential partnering arrangements for this period. Such arrangements could cover areas such as information flow and transition, but also how operators can engage and benefit from measures taken by TfGM (such as infrastructure or concessions) during the procurement and implementation period to improve bus services.

In order to transition to the Greater Manchester wide bus franchising scheme we have committed to providing incremental local funding of £56.5 million and the application of £78 million of Greater Manchester's locally controlled funding that had been 'earned back' following the 2014 Devolution Deal, within an overall implementation funding package of £134.5 million. The local funding commitment over the implementation period, of £56.5 million reflects a mix of a one-off contribution from the ten Local Authorities, business rates pooling funding and a requirement from the Mayoral precept.

2.5 Why we need to improve Bus in Greater Manchester

Greater Manchester Transport Strategy 2040 (GMTS2040) and the Right Mix

GMTS 2040 sets out four goals:

- Supporting sustainable economic growth
- Protecting our environment
- Improving quality of life for all; and
- Developing an innovative City Region.

GMTS 2040 is supported by Greater Manchester's Right Mix vision which defines the travel patterns in 2040 that will be needed to achieve the goals of the strategy. The Right Mix vision is for zero net growth in motor vehicle traffic between 2017 and 2040, which we expect to achieve by increasing non-car mode share from 39% of trips in 2017 to 50% of trips in 2040. Bus will play a vital role in achieving the Right Mix vision set out in Figure 2.8.

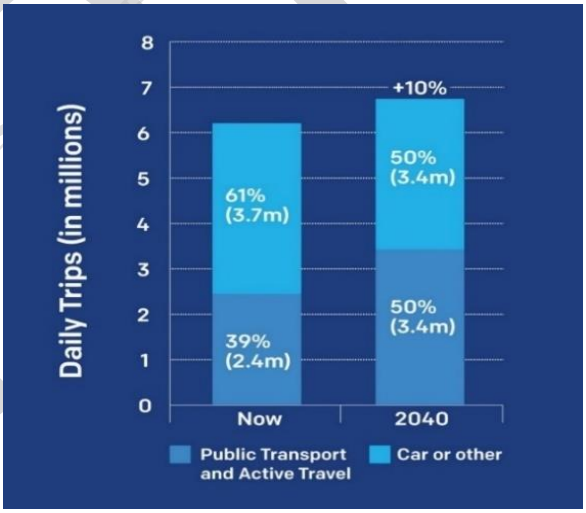


Figure 2.8: Right Mix Targets

Within the Right Mix, we have set targets for volumes of bus trips in Greater Manchester for three time-horizons: 2025, 2030, and 2040. For the purpose of the BSIP, 2025 is likely to be too ambitious for many of our proposed interventions to have their full effect, whereas the targets for 2040 are subject to many uncertain factors. The BSIP will focus on achieving the **2030 Right Mix target in Section 3**.

Greater Manchester's Objectives for Bus

Greater Manchester's objectives for bus define the role of bus in achieving the Right Mix. We have categorised bus by local bus services, bus rapid transit and express bus services.

Local bus needs to:

1. Provide non-car access to all localities in Greater Manchester;
2. Facilitate car-free lifestyles (or one-car rather than two-car households);
3. Encourage people to leave their cars at home in favour of travelling by bus, especially for trips of less than 6km in densely populated urban areas. In areas which are less densely populated these would continue to be served either through local networks, strengthened where appropriate, enhanced Demand Responsive services or a combination of the above;
4. Provide access to rapid transit and inter-urban public transport;
5. Support the 24-hour economy;
6. Support and serve new developments;
7. Encourage walking by people who might otherwise be inactive, where possible;
8. Support attractive urban places; and
9. Avoid adverse effects on public health and the environment.

Greater Manchester's objectives for both bus rapid transit and express bus reflect those for rapid transit in general, which in Greater Manchester is mostly rail-based and includes Metrolink. Objectives include:

- Supporting the growth of Greater Manchester's Regional Centre, comprising Manchester City Centre and surrounding densely developed areas; and
- Serving a wider range of destinations by rapid transit, including town centres, through orbital services and network hubs including HS2 stations.

These objectives reflect the need for particular locations to attract trips from a large catchment area, increasing the number of middle-distance trips. Bus rapid transit has been identified as being particularly relevant for serving the growth area of Manchester Airport, in circumstances where existing rail-based infrastructure cannot be utilised.

Ambitions for Bus and the National Bus Strategy

Our ambitions for bus align closely with the National Bus Strategy, particularly in terms of how improvements in buses can help avoid a car-led recovery from Covid-19. Greater Manchester's view of the role of bus in achieving challenging environmental targets as it has in London is set out below.

Clean Air

One of our objectives for local bus is to avoid adverse effects on public health and the environment. Greater Manchester local authority areas have worked together to develop and approve a joint Clean Air Plan. This will bring nitrogen dioxide levels on local roads

within legal limits as soon as possible. The plan includes a "Category C" Clean Air Zone, supported by more than £120 million clean vehicle funding from government to help local businesses prepare. This means that those vehicles which do not meet emissions standards will need to pay a daily charge to drive in the Greater Manchester-wide Zone, from the 30 May 2022. From this date, buses with a Euro V or earlier diesel engine will be charged £60 per day to travel into and within the Greater Manchester Clean Air Zone.

The Greater Manchester Clean Air Plan includes the Clean Bus Fund, to support the Greater Manchester bus fleet to upgrade to cleaner buses. As part of this £14.7 million has been awarded to Greater Manchester from government to retrofit non-compliant buses operating on registered bus services within Greater Manchester.

It is estimated that there are nearly 350 non-compliant buses operating on registered bus services within Greater Manchester that cannot be retrofitted. Government has awarded £3.2 million to support the replacement of non-compliant vehicles for small and medium sized bus operators, operating on registered bus services in Greater Manchester.

Carbon Reduction

The Climate Emergency declared by the GMCA calls for urgent action to put Greater Manchester on the path to carbon neutrality by 2038 meaning that carbon needs to be at the forefront of transport strategy development. Greater Manchester agrees with the National Bus Strategy on the potential of bus to draw people away from car travel.

People who live in areas of high population density travel much less by car because there is less need to do so, due to generally having less access to cars and because public transport and active travel is more attractive. Greater Manchester has increasing residential density in and around its main urban centres resulting in very low growth in motor vehicle traffic in the past fifteen years, despite considerable growth in population and economic activity.

Local bus objectives to 'serve new developments' and 'support attractive urban places' support low-carbon land-use. It is very important that new developments are planned with bus service provision to reduce car dependence. Local bus is essential in supporting attractive urban places, with buses' efficient use of scarce urban land facilitating high-density places that incorporate an attractive public realm.

The role of bus rapid transit and express bus in serving Greater Manchester's Regional Centre and town centres is also important for carbon reduction. These centres have a relatively high mode share for public transport and active travel. Growth of these town centres (and repurposing, to reflect the post-Covid world) can support carbon reduction.

Bus fleets must also rapidly transition to zero carbon technologies. Whilst great progress has been made across the industry in Greater Manchester towards improving the environmental performance of an already "green" mode, the response to climate emergency across the transport sector needs to be accelerated. Greater Manchester welcomes the emphasis of the National Bus Strategy on zero-emission buses, and our ambitious plans to accelerate the decarbonisation of the fleet is set out in Section 5.

Achieving our right mix targets will make a significant contribution to our carbon ambitions but will not on its own fully decarbonise our transport system. Other interventions will also be needed including: reducing the need to travel, decarbonisation of freight movements; reducing embodied carbon in transport infrastructure and vehicles; and transitioning rapidly to zero emission vehicles. We are currently undertaking additional work to understand how the Right Mix contributes towards achieving Greater Manchester's carbon budgets, alongside other measures to decarbonise the transport network, such as electric vehicles; and in light of the DfT's new Transport Decarbonisation Plan ("**Decarbonising transport: a better, greener Britain", DfT, July 2021**) as confirmed in HMG's Net Zero Strategy, October 2021. It is likely that we will need to reduce motor vehicle traffic in Greater Manchester, as well as decarbonising a large part of our transport system. This will be very challenging and will need co-ordinated action at both a national and a local level. We look forward to working with Government on this critical agenda and to the publication of the DfT's Local Authority Toolkit for decarbonising transport.

City Centre Transport Strategy

The new City Centre Transport Strategy (CCTS) **(**https://tfgm.com/city-centre-transport-strategy**)** which was published in 2021, guides how city centre transport will be improved across the next two decades. The vision set out in the CCTS is for a well-connected, zero-carbon city centre at the heart of the North, offering our residents, employees and visitors a great place to work, live and visit. The central aim is for 90 per cent of all trips to the city centre in the morning peak to be made by public transport, cycle or on foot, before 2040.

The strategy sets out proposals to further improve the city centres public transport and active travel networks and reduce car-based trips over the longer term, leading to the cleaner, greener, healthier, inclusive and integrated transport network that supports the growth of the city centre.

The CCTS sets out the ambition for buses to become zero-emission, quieter and to have integrated ticketing. It also sets out proposals for longer operating hours for public transport to support the night-time economy, and those travelling for work outside traditional hours. It continues to be important that passengers are able to use buses to get as close as possible to their destinations within the city centre.

3. Ambition

3.1 Our Overall Ambition – The Bee Network

Bus travel is central to the delivery of Greater Manchester's ambitions for a London-style transport network which is integrated, accessible to all, affordable and high-quality. It is a key component of our Greater Manchester "Bee Network" - reflecting the longstanding symbol for the Manchester area. Our vision for the Bee Network is set out below.

'The Bee Network is an integrated 'London-style' transport system which will join together buses, trams, cycling and walking and other shared mobility services by 2024, with commuter rail incorporated by 2030, to transform how people travel in Greater Manchester.'

By designing and delivering public transport, active travel and shared mobility services as one system with local accountability and aligned to national and local priorities, the Bee Network will transform the travelling experience and make sustainable, low carbon transport an attractive option for all.

In doing so, it will see Greater Manchester make a vital contribution to the national challenges of decarbonisation and levelling up and to tackling the climate emergency. It will foster a stronger, more efficient and resilient City Region economy; connect people to homes, jobs, learning, leisure and culture; and create opportunities for all of Greater Manchester's communities – from urban to rural, city to town and village.

Accessible, affordable, and easy to use, with a daily fare cap and Greater Manchester-wide multi-modal fares, the Bee Network will support seamless end-to-end journeys within Greater Manchester, irrespective of the destination. To achieve our vision for the Bee Network, bus cannot be considered in isolation: it only makes sense as part of a multi-modal network that includes – very importantly – walking and cycling.

Greater Manchester sees the delivery of a franchised bus network and the proposals set out in our BSIP as key drivers to increasing bus travel which ultimately forms part of Greater Manchester's pathway to our Right Mix vision of zero net growth in motor vehicle traffic from 2017 to 2040 with at least 50% of trips by active travel or public transport. It also aligns to our ambition to improve the bus offer in Greater Manchester to our customers through having a greater level of control over routes, timetables, fares and the quality of service provided.

We need better buses - services that people want to use - to support Greater Manchester's ambition to be the best place in the world to grow up, get on and grow old. Buses do that in many different ways and will play a central role in enabling our shared ambitions with government around sustainable economic growth, levelling up (particularly improved quality of life and social inclusion), and decarbonisation.

Figure 3.1 below gives a conceptual view of the Bee Network based on how it could serve a typical large Greater Manchester town centre. Concepts within Figure 3.1 are also explained below.

Integration of Bus with Active Travel

Most bus trips begin and end with a walking trip to a bus stop or interchange / station, along all-purpose streets. Greater Manchester's Streets for All strategy and Active Neighbourhoods aim to make Greater Manchester's streets work better for all people who use them.

Within the "Streets for All" approach are our programmes of Quality Bus Transit and Bus Corridor Upgrade improvements, both of which are set out in summary terms in Section 5.4. Where feasible, all bus infrastructure measures will be fully integrated with active travel, as set out in the Greater Manchester active travel design guide (**Greater Manchester Interim Active Travel Design Guide (greatermanchester-ca.gov.uk)**) and in accordance with Local Transport Note (LTN) 1/20, and include bus stop bypasses, cycle lanes within bus lanes and cycle parking at bus stops. The first phase of the committed Mayor's Challenge Fund active travel Bee Network schemes will deliver 140 miles of network plus 21 active neighbourhoods, when complete, including 34 Greater Manchester developed cyclist friendly junctions and over 50 other crossing improvements. The above image provides a conceptual example of what a typical Quality Bus Transit corridor could look like. A further tranche of Active Travel schemes have been included in our CRSTS prospectus upto a value of £63 million.

Many of the streets within the Quality Bus Transit and Bus Corridor Upgrade programmes are identified as 'Busy Beeway' connections that will provide high-quality, safe cycle networks along busy corridors. Besides achieving a step-change in quality for bus users, Quality Bus Transit and Bus Corridor Upgrades will integrate coherent, high-quality facilities for walking and cycling along corridors: that will in some cases mean focusing improvements for cyclists on different routes - within the same corridor - from those followed by buses. Within these programmes we will also improve active travel access routes to the bus network.

Integration of local buses with rapid transit

In large urban areas such as London and Greater Manchester, many trips are too long for local bus to be an attractive option. However, local bus services have potential to feed rapid transit services for longer trips. By 'rapid transit', we mean public transport services mainly focused on middle-distance trips – typically longer than 6km. The modes of rapid transit in Greater Manchester are light rail (Metrolink), National Rail suburban services, and bus rapid transit. There is at present only one bus rapid transit service in Greater Manchester, linking

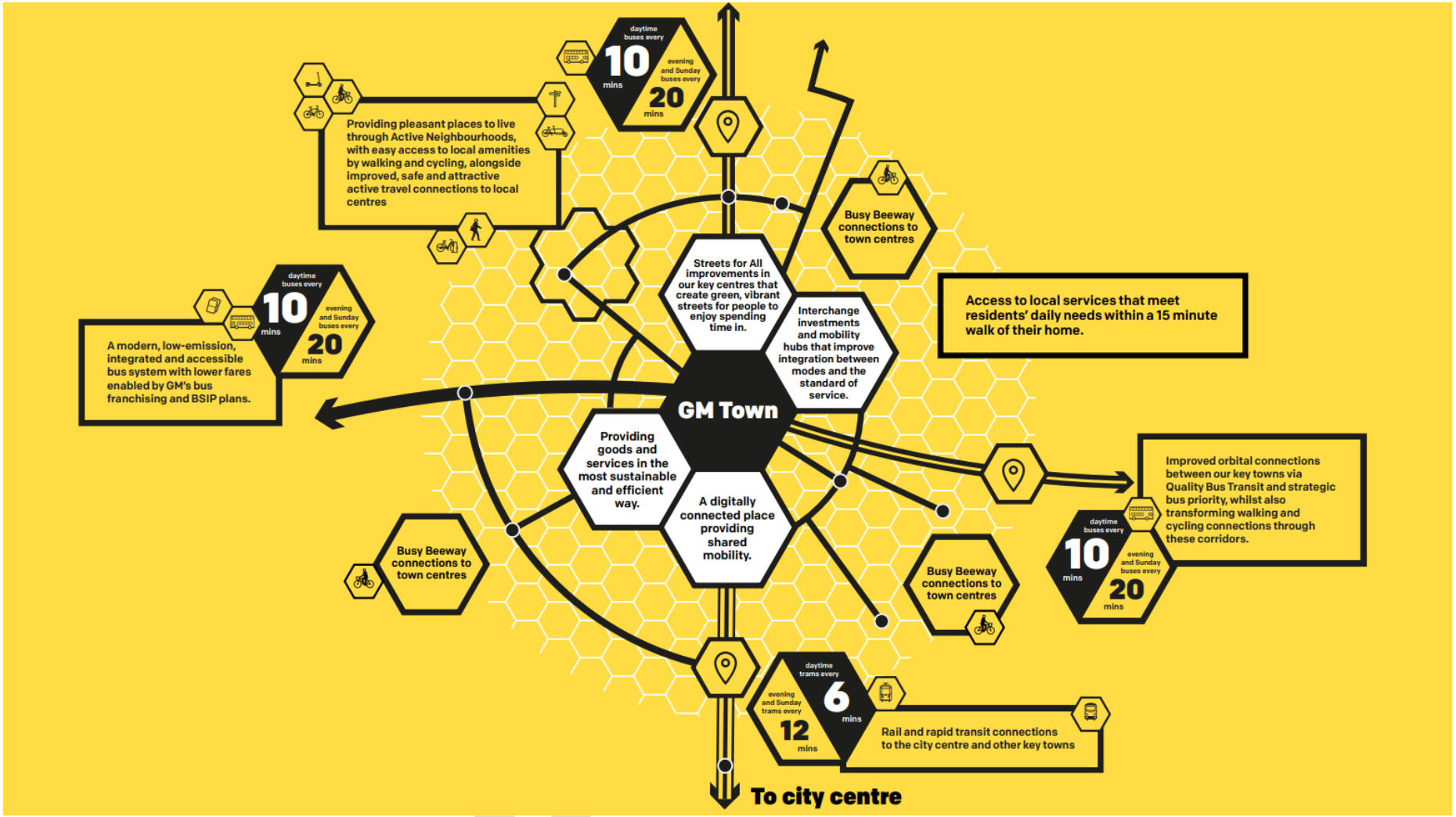
Leigh and Atherton with Greater Manchester's Regional Centre and Oxford Road corridor via a segregated busway and significant lengths of dedicated 'on highway' bus lane.

Integration of local buses with rapid transit is partly about integrated fares: this is covered in Section 5.6 'Fares and Ticketing'. Bus services often converge in places that are well-served by rapid transit and therefore make good interchange locations: the town centres of Altrincham, Ashton-under-Lyne, Bolton, Bury, and Oldham are good examples. However, there is room for improvement in how the bus and rapid transit networks integrate. It is recognised that the franchising of the bus network will help us make strides to addressing the integration challenge across modes.

Greater Manchester has several town-centre interchanges that connect local bus services with rapid transit. We are also developing the concept of 'Travel Hubs', which are an evolution of our existing approach to park and ride, to improve multi-modal access to the rapid transit network. Our plans for improvements to interchanges and Travel Hubs are described in Section 5.4 'Infrastructure'. Work to consider how best to accommodate terminating bus services within the Regional Centre as well as looking at facilitating longer trips between towns which will need to navigate through the Regional Centre is ongoing.

Greater Manchester has a strong track record in delivering the kinds of infrastructure that the Bee Network will need, including bus infrastructure, which is set out in Section 4.

Figure 3.1: How bus will support an integrated Bee Network and will better connect our towns



3.2 Our ambition for bus: based on what customers tell us

Why customers choose bus and why others don't

The decline in bus patronage is well understood following decades of study, which has repeatedly identified the same needs outlined in the National Bus Strategy section 'the buses we want'. The priority people place on these needs varies according to local circumstances, but in Greater Manchester the following consistently rank highly:

- More reliable;
- More frequent;
- Cheaper; and
- Faster.

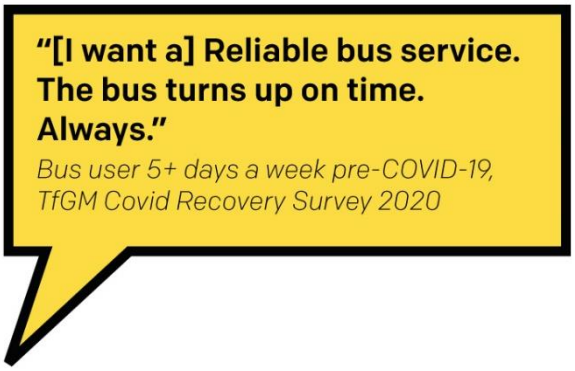
Research also identifies perceptions of safety as an area where we can make a significant difference. It is one of the areas of greatest dissatisfaction with bus journeys, and an area which puts many people off using the bus. In particular, there is a perceived lack of safety around waiting environments and during the walk from home to the bus stop or from the bus stop to the final destination.

This ranking doesn't necessarily mean that other attributes are unimportant. They may rise in priority as the most prominent areas of concern are addressed or circumstances change. For instance, whilst operators have invested in a range of interventions to improve cleanliness and the perception of it throughout Covid and subsequent Build Back Better activity, it is likely that this will continue to be a significant factor for people when deciding whether to use the transport network as shown in both our and Transport Focus' 2021 research.

Improved accessibility for all is a key ambition highlighted in the BSIP. Satisfaction with the ease of getting on the bus is lower for those who have a disability compared to those who don't have a disability. Frequent bus users with a disability are also significantly less satisfied with the condition of bus stops and raised kerbs at local bus stops (than those without a disability). Infrequent or non-users are also less satisfied with several aspects of the bus service, including how easy buses are to get on and off and the number of bus stops which are available locally (non-users with a disability also highlight raised kerbs at local stops). Approximately 5% of non-users, cite 'access issues' as a reason for rejecting using the bus (TfGM, 2021 Sales Funnel research). However, this figure excludes those who already stated that they have a disability or health condition which prevents their use of a bus, so the figure for access exclusion may well be even higher.

While our research highlights variation in needs amongst customers, getting the basics right (set out above) will please everybody, including those who currently reject bus use.

In short, there is no 'silver bullet' that can fix one thing that will make everybody happy.

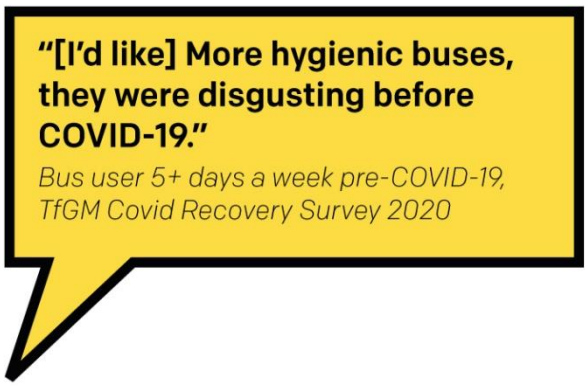


Like any other product or service, buses must perform as advertised at a price people consider reasonable for the quality, and they should do this the vast majority of the time – failure to satisfy should be rare, not an everyday experience. When things do go wrong, a high-quality service is distinguished by how that is handled. As shown in Section 5.2, our Customer Charter will provide the basis for our customer experience commitments.

Covid-19 Shifts

Following the fall in bus use during the pandemic we have sought to understand to what extent customers will return, and what might encourage or discourage them. From the research it appears that those expecting to use bus less relative to pre-pandemic are equally balanced by those expecting to use it more. 11% in both cases. 76% of people questioned felt they would use the bus to the same degree post-pandemic. 2% didn't know how they would be impacted. Specifically, Covid-related factors were spontaneously mentioned as reasons for making fewer bus journeys three times more frequently than a change in work or learning patterns, and at least four times more than various service-related reasons such as fares or reliability.

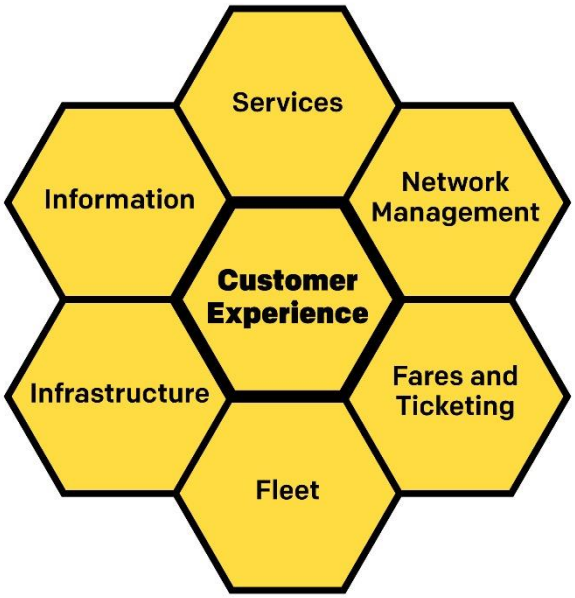
We have also seen an increase in mentions of cleanliness in the improvements people would like to see. In 2018, other than 'rejecters', cleanliness barely registered as a concern. In 2021, it ranks only just below the consistent top three improvements in reliability, frequency, and fares for the key segments of 'usuals' and 'dabblers'. Reasons for using buses more suggest an increase in leisure or social trips, including a probable desire to simply get *out and about*. A risk here is that this may be a short-term increase, whilst the hygiene fears may remain for the longer term. Covid-19 doesn't change the basic areas in need of improvement; it adds a new barrier. Where pre-Covid dissatisfaction with 'cleanliness' simply reflected a general distaste for a dirty or uncared-for travelling environment and probably not a threat to health, 'cleanliness' post-Covid has new, more serious connotations. Hence, we cannot afford to be complacent about an apparent evenness between those using more and less: cleanliness must be more actively managed.



To summarise the findings on customer priorities: buses need to improve on the basics of reliability, frequency, cost, and on-bus journey-time. Particular attention also needs to be paid to information (including pre-trip, during), night-time security, and - following the Covid-19 pandemic – cleanliness.

3.3 Our ambitions for Bus

Our seven ambition themes for Bus in Greater Manchester are set out below, each of which will support our central 'customer experience' ambition and are aligned clearly with the National Bus Strategy. These seven ambitions form the structure of our BSIP set out in Section 5 and are based on delivering our overall ambition of a London-style transport network.



The seven ambitions are:

- **Customer Experience:** This is the golden thread that will run throughout BSIP with all the improvements targeted at providing customers with a safe and seamless travel experience, supported by a "Mobility as a Service" platform to provide a digital one-stop-shop for all travel needs. The Customer Charter will set out the standards that customers can expect when using bus services in Greater Manchester.
- **Services:** Stabilising and then strengthening services and routes to a minimum 'turn up and go' frequency (at least every 10 minutes on Monday to Saturday daytimes) on major routes to form a 'London-style network' to ensure that all of Greater Manchester's diverse populations and geographies are able to access our bus network.
- **Infrastructure:** Significant Increase in Bus Priority including Quality Bus Transit on main corridors, and the removal of congestion 'hotspots' for buses, plus investment in bus passenger facilities.
- **Information:** Readily available; live and up-to-date; multi-modal information that is integrated with the purchase of travel and is provided in a variety of ways to reflect the needs of all customers ensuring its use is captured and used to inform service design.
- **Fares and ticketing**: More affordable journeys, with attractively priced and simply structured fares for 'hoppers', travelcards, daily and weekly capping for all bus travel, and for trips interchanging between bus, Metrolink and other modes including some elements of Active Travel.

- **Fleet:** Introducing a full fleet of zero emission high quality buses within Greater Manchester alongside associated support infrastructure by 2032, with 50% of the fleet to be zero emission by 2027.
- **Network Management:** Prioritising bus passenger journey times and reliability consistently across Greater Manchester.

The seven ambitions for bus fit strongly with the earlier 'Vision for Bus' set out in the Greater Manchester Transport Strategy 2040, which was categorised under the headings, network integration; simplified and integrated fares; a great customer experience; and value for money.

Figure 3.2 below shows how the seven ambitions fit with Greater Manchester's customer priorities and also how they align with National Bus Strategy - Bus Back Better objectives. Details of how we plan to tackle each of the ambition themes are provided within Section 5.

Ambition	Customer Priorities	Bus Back Better Objectives
Customer experience	All, including cleanliness and personal security (particularly evening and night-time)	Give bus passengers more of a voice and a say
Services	Frequency	Intensive services and investment on key corridors, with routes that are easier to understand Service patterns integrated with other modes More demand-responsive services and 'socially necessary' transport
Fares and ticketing	Value for money	Lower and simpler fares
Information	Pre-trip and during journey information	The local bus network is presented as a single system that works together, with clear passenger information
Fleet	Cleanliness, reliability and safety; accessibility for those with a disability	Modern buses and decarbonisation
Infrastructure	Reliability, on-bus journey-time, safety and security, accessibility	Significant increases in bus priority Longer term transformation of networks through Bus Rapid Transit and other measures
Network management	Reliability, on-bus journey-time	More reliable bus services

Figure 3.2: Comparison of Greater Manchester Ambitions with Customer Priorities and the National Bus Strategy Objectives

3.4 Greater Manchester's Targets for Bus

We want the Greater Manchester bus network to be 'London-style'. That will include turn-up-and-go services, simple fares that offer good value for money and network-wide branding and marketing.

We have set ambitious yet realistic targets for bus to meet customer priorities and will measure the effectiveness of the experience at each stage of the journey. As per government guidance, we will publicly report on targets every 6 months, where possible. These targets correspond to Key Performance Indicators (KPIs) that TfGM is already measuring. As a subset of our existing strategic indicators, additional BSIP success measures will also be identified. Targets will be reviewed annually and refined in future BSIP iterations as we have more certainty over what can be delivered against the available funding. In all cases, we will use targets intelligently so as to avoid unwelcome outcomes, for instance bus timetables that are excessively slack to meet punctuality targets in isolation.

Customer satisfaction target

Our existing customer focused KPIs sit within our GMTS 2040 Network Principles derived from extensive consumer research and stakeholder consultations. They form part of how we will track the progress of our GMTS 2040 (**Greater Manchester Transport Strategy 2040 | Transport for Greater Manchester (tfgm.com)**). Each mode is expected to contribute to these attributes, and the current performance of buses in these respects for 2021 is summarised in Section 2, with the detailed Key Performance Indicator (KPI) results published in our GMTS 2040 delivery plan (see Appendix C in **Delivery Plan 2021-2026 Jan 2021 Final.pdf (ctfassets.net)** for 2018 results).

The headline indicator of **Greater Manchester Residents' satisfaction with their local bus service overall** allows us to take account of all existing and non-bus users. This will be supported by customer ratings of specific indicators within key areas such as fares, information, punctuality, personal security and cleanliness. Our BSIP reporting will draw on the existing annual National Highways and Transport Network survey (NHT, May), which could be supplemented on a smaller scale each November if required.

Greater Manchester's current satisfaction result is 60% (Greater Manchester residents, NHT 2020). The target for overall customer satisfaction at the area level is based upon comparing with the best. Using the same method, high performers such as **Brighton & Hove City Council achieved 73%**; **Nottingham City Council 78%** (NHT, 2020).

The **Greater Manchester satisfaction targets of 66% by 2024/25 and 80% by 2030** are highly ambitious, based on the current levels of satisfaction, the planned interventions and associating timing and reflecting the long-term lack of any improvement in recent years and the decline seen between 2019 and 2020 (residents' satisfaction with local bus service overall, Figure 3.3).

Figure 3.3: Satisfaction with local bus service overall (Source: NHT Survey, indicator reference Public Transport Benchmark Indicators (PTBI) 6)

% weighted satisfaction score using 5-point rating scale	2018	2019	2020
Greater Manchester Residents (mix of users, non-users)	63%	64%	60%
Frequent bus users (at least once a week)	62%	63%	61%

In our 2021 Network Principles survey, the highest levels of 'very dissatisfied' customers were seen for the following key aspects of the bus service: fares, information, punctuality, personal security, cleanliness (on board, at stop). We will report on levels of dissatisfaction for detailed aspects, with the aim of taking action to reduce the proportion of 'very dissatisfied' customers on an ongoing basis.

As context, Greater Manchester's Vantage bus services (Section 4.2 case study), achieved an overall passenger satisfaction with the journey made of 89%, compared with 85% on the services that had existed 3 years previously, with greater increases seen in specific aspects of the service such as frequency, reliability, driver behaviour, cleanliness onboard. This level of satisfaction reflects the whole package improvement approach that was introduced as part of this scheme on one key route and was adversely influenced by overcrowding on buses and the inability at times for customers to get on the bus due to the popularity of the service. To address this the frequency of the services was increased, particularly at peak times.

Also Transport Focus' Bus Passenger Survey (halted due to COVID-19) showed only a 1% increase to 87% between 2017-2019 for overall satisfaction with today's journey (Greater Manchester bus users, on board interviews). Both these examples show the challenges with increasing overall satisfaction scores given the current position, which this BSIP aspires to change.

Customer Experience performance targets – these will provide detailed diagnostics (including operational output data and customer perceptions) of what is influencing overall satisfaction and measure the effectiveness of the activities a customer needs to complete to make a satisfactory bus journey e.g. ease of planning a journey, simplicity of purchasing a ticket, trust in the accuracy and reliability of real-time information.

We will have separate **reliability targets** for high-frequency services (where people can 'turn up and go' without reference to a timetable) and for less frequent services.

'Turn up and go' will be defined as services with buses at least every 10 minutes between 0700 and 1900 on weekdays. This will be measured as the average excess waiting time (the difference between the average time people wait and the average time they were scheduled

to wait). Targets for excess waiting time will be finalised following the establishment of franchising on a route by route and network wide basis.

Based on our BSIP and using knowledge of London's targets in this area it is envisaged that our target for 2025 will be 1.5 excess waiting time minutes and 1.0 minutes excess waiting time for 2030. This will be refined as more AVL data becomes available from the bus operators to ensure the targets remain challenging and ambitious. The proposed targets are based on the assumption that the proposed level of investment in bus priority, enhanced frequencies, plus improved operational control and highways management are delivered. We estimate that 50% of bus trips in Greater Manchester are made on high-frequency services.

Less frequent services will be measured by the proportion of journeys that depart less than 1 minute early and less than 5 minutes late, at (i) their starting point and (ii) at a mid-route timing point. **Our targets for 2030 are (i) 91.3% and (ii) 81.5%**. This is based on bringing all services up to the standard of our best-performing 20%. Our averages for start and mid-point (September 2021) were 84.2% and 72.8% respectively.

Noting the requirement for separate targets and reporting by each of an LTA's cities and towns, we have considered that the interconnectedness our main centres and our ambition for a unified network means a single figure for the above targets is more appropriate. However, in the case of **journey times**, allowing for significant differences in traffic conditions, we will distinguish between services that operate to some extent within the M60, and those that operate wholly outside it. We will also separate high-frequency services from the rest, assuming that bus priority investment included in our CRSTS prospectus will be concentrated on key corridors (estimated to account for about 25% of bus trips in Greater Manchester). Our target will be an **average speed for buses of 13.1 mph on all key corridors wholly outside the M60 by 2030** and 11.6 mph on those at least partially inside. This would represent an increase of 9%. For all other routes, with a lower concentration of interventions, based on our pinch point programme we could achieve an average speed increase from 12.1 mph to 12.5 mph outside the M60 and 11.4 mph to 11.8 mph inside.

This has been based on time savings from a sample of previously implemented highway interventions and modelled savings of proposals within our CRSTS prospectus and BSIP. Our targets for 2024/25 assume a constant rate of investment and improvements in operational management will lead to a constant rate of improvement in the indicators.

Due to a lack of available AVL data prior to April 2021, the baseline average speeds were calculated using the scheduled times for May 2019. We are moving towards full use of AVL that will enable reporting by route and identification of the worst-performing ones for priority treatment.

3.5 Right Mix Targets for Bus to 2030

In our Bus Service Improvement Plan we have set ourselves the challenge of meeting our 2030 target for bus travel in the Right Mix (see Section 2.5). This requires us to reverse the

trend of decline, and then increase bus travel in Greater Manchester to approximately 10% above its pre-Covid level. We expect bus travel to be around 83% of its pre-Covid level once patronage settles down following the pandemic, reflecting the longer-term adverse effects of increased home-working and online shopping. That implies we will need to increase bus travel by approximately 30% by 2030. Achieving the targets described in Section 3.3 will contribute to that patronage target, as will the fares offer described in Section 5.6.

To achieve that growth is more challenging than it might appear to be at first sight. The necessary re-purposing of town centres – with much less focus on comparison shopping and more focus on serving local communities – will reduce the role of bus travel in those locations. In addition, public transport patronage will need to be seen in the context of the highly beneficial growth of cycling. However, there are also opportunities for bus: for example the trend to increasing population density in the inner part of Greater Manchester will facilitate – and require – a higher mode share for bus in and to/from those places and in particular within the Regional Centre.

Our patronage target for Bus – by year - is set out below in Figure 3.4. Implementing the BSIP interventions (including those funded by City Region Sustainable Transport Settlement - CRSTS) will take time, and it will also take time for travel behaviour to change in response to those interventions. These dynamics are reflected in the modelling work on which the targets are based.

Figure 3.4: Our Patronage Targets resulting from our BSIP Interventions

Year ending (March)	2022 (expected)	2023	2024	2025	2026	2027	2028	2029	2030
Patronage target (millions of trips per annum)	155	156	161	171	185	194	198	201	202

We have carried out elasticity modelling to estimate the effect of the improvements to bus reliability, speed, and also the proposed fares ambition set out in Section 5.6. The analysis indicates that the full BSIP package will be sufficient to achieve the targets set out above.

3.6 Summary of our Ambition for Bus

Our seven ambitions for Bus reflect what customers have told us they want. The key message was to focus on the basics: reliability, frequency, cost, on-bus journey-time. These basics feature prominently in the improved customer experience that we aim to provide

through the delivery of our BSIP and also the delivery of our wider London-style transport network.

We have set targets for reliability and on-bus journey time that reflect our ambition, with targets becoming more ambitious over time and ultimately contributing to an increase in patronage.

Bus forms a central part of the Greater Manchester Bee Network: a sustainable transport network that provides access to all localities in Greater Manchester without the need for a car and the BSIP includes improvements to the integration of bus with other modes of travel, including walking in order to help deliver this overall network ambition.

Our bus patronage targets reflect Greater Manchester's Right Mix vision of zero net growth in motor-vehicle traffic between 2017 and 2040. The year-by-year patronage targets allow for the timing of the interventions in our BSIP and the time taken for travel behaviour to respond to an improved bus offer.

4. What We Are Already Doing

4.1 Introduction

Greater Manchester has seen significant transport investment in the last fifteen years which has enabled us to establish and operate the City Region-wide Metrolink network (the largest light rail network in the UK, with 99 stops across eight lines), deliver the first section of guided busway for Greater Manchester connecting Leigh and Salford with the City Centre, and provide new multi-modal transport interchanges across our City Region. All these interventions have promoted a significant shift from commuting by car to key employment centres, notably the Regional Centre, in support of sustainable growth. Over the last five years alone, the Greater Manchester authorities have together delivered a capital programme of around £900 million, with another £350 million additional transport capital expenditure – excluding highways maintenance - already committed from 2021.

In addition to the above we have continued to invest heavily in the bus network over the last five years, including: ongoing funding of the tendered bus service network (in excess of £30 million per annum); introductions of initiatives such as Our Pass which has facilitated free travel for 16-18 year olds since summer 2018 at a cost of c£16 million per annum and our commitment of £134.5 million o to transition to franchising. All of these initiatives have been delivered in very challenging financial conditions.

Notwithstanding this track record, Greater Manchester continues to challenge itself and look forward, as exemplified by our unique active travel programme and our decision to pursue bus franchising – the first transport authority outside London to do so.

We have set out below a few of the schemes that have played a key role in positively shaping bus travel in Greater Manchester over the last few years and which have influenced our thinking as we have set out our ambitions for bus travel in the future.

4.2 Bus Priority

The Greater Manchester Bus Priority Programme delivered in full in 2017, consisted of two schemes: Leigh-Salford-Manchester Guided Busway; and the Cross City Bus Package. Both schemes, through the delivery of £122 million of improved infrastructure to aid reliable services with shorter journey times; service enhancements – new services and/or more frequent services; new high-quality vehicles on selected routes; and affordable everyday fares, have delivered a marked improvement in customer experience. They demonstrate that if the full package of improvements can be delivered, transformational changes in bus travel and significant modal shift from private car can be achieved. A brief case study for the Leigh-Salford-Manchester Guided Busway is provided overleaf.

Case Study: Leigh-Salford-Manchester Guided Busway

Greater Manchester's first bus rapid transit service opened in April 2016 linking Leigh, Atherton and Tyldesley in the west of Greater Manchester with Salford, Manchester City Centre and Manchester's Oxford Road corridor.

The scheme provides a dedicated 7km stretch of kerb-guided bus lanes, together with integrated walking and cycling facilities in the form of a recreational path alongside the guided section, used by over 220,000 people per year. The Oxford Road section includes segregated cycle lanes and widened footways and the removal of general traffic from a mile-long section of the road.

Pre-pandemic the Busway service was carrying over 60,000 passengers per week, equating to over 3 million passenger journeys per annum. Passenger surveys carried out in 2016 and 2019 indicated that 20-25% of those surveyed had stopped using their cars for the same journey and had actively switched to the bus. This equates to over 600,000 car trips being removed from the highway network per annum. High levels of passenger satisfaction were recorded on the service in both surveys.

Guided Busway Users:

"It has been an enormous benefit to us and to many people-frequent, fast and reliable."
Male 45-54

"Its a brilliant service for my commute & takes half the time of driving."
Female 45-54

Key factors in achieving this level of modal shift and passenger satisfaction include:

- Significant lengths of bus priority to facilitate reliable services with shorter journey times;
- High frequency 'turn up and go' services for much of the day;
- A fleet of high quality, branded, modern Vantage branded buses which are accessible, clean and offer a high level of passenger comfort;
- High quality infrastructure along the route including fully accessible stops; real time passenger information and CCTV at stops on the guided section; cycle parking and 450 park and ride spaces; and
- The fares charged for the Busway service were standard network fares – making this is a premium product for an affordable price.

We believe that the success of the Busway service reflects the attention paid to the delivery of a complete package of improvements that addresses the basics of reliability, frequency, journey time and price, complemented by high quality comfortable vehicles with strong branding.

In addition, and more recently, a package of £33 million of improvements to enhance bus travel throughout areas in Bolton and Salford in the west of Greater Manchester has been delivered as part of the Salford Bolton Network Improvement Programme (SBNI).

The programme comprises a multi-modal package of local network interventions which is focussed on making short and medium trips by walking, cycling and bus safer and more attractive, quicker and more reliable, for both direct access to employment and Metrolink/rail hubs for wider employment opportunities. The programme is particularly focussed on delivering sustainable economic growth in local towns such as: Bolton, Farnworth, Walkden, Swinton and Pendleton.

4.3 Transport Interchanges

Over the last decade significant investment has been made in the provision of new modern transport interchanges within our towns including: Altrincham, Ashton-Under-Lyne, Bolton, Rochdale, Wigan and Wythenshawe. This investment has created pleasant, accessible, safe and attractive places for people to access the public transport network; made it easier for people to connect from one type of transport to another and has played a key role in stimulating regeneration within the towns and communities that the interchange facilities are within.

Case Study: Ashton-Under-Lyne Interchange

Opened in summer 2020 the new interchange in the heart of Ashton town centre provides a modern, accessible transport facility that connects bus and Metrolink services allowing seamless travel between modes and provides easy access to the town's train station as well as the many retail, leisure, employment and education destinations within the town.

The facility is easily accessed by foot and by bicycle and is playing a key role in both facilitating and complementing the regeneration of the wider town centre thereby stimulating wider economic growth and access to jobs.

In addition to the historic programme of investment, work has recently commenced on the latest town centre interchange in Stockport that will not only incorporate a greatly improved transport facility better connecting bus and rail services but will also facilitate and include significant regeneration of the town centre in the form of residential units and a public park, all of which is planned for completion during 2024.

4.4 Bus Stops and associated Infrastructure

There are over 11,000 bus stops within Greater Manchester. Over the last 3 years, there has been a drive to make as many of these stops as accessible and attractive as possible to customers utilising raised kerbs, bus stop markings and clearway restrictions and shelters wherever practical, as part of wider bus priority schemes, such as the Greater Manchester Bus Priority Programme and SBNI. In addition, a dedicated bus stop upgrade programme is also being progressed across Greater Manchester whereby £3.65 million is being invested in similar types of improvements to those above at 400 priority stops. These improvements not only benefit customers accessing the network they also play a key role in improving bus journey time reliability and reducing lost time at stops, through buses being able to access and exit the stops more efficiently and effectively.

4.5 Park and Ride and Travel Hubs

Investment in Park and Ride facilities across the transport network in Greater Manchester has been primarily focussed around support for the Metrolink and Rail network and in recent years this has resulted in improvements at 19 stops and/or stations with the creation of almost 3,000 additional parking spaces. Whilst the development and delivery of further similar enhancements on the Metrolink and rail network will continue, the construction of the Leigh-Salford-Manchester Guided Busway has seen the introduction of approximately 450 bus based park and ride spaces which in advance of the Pandemic were all being fully utilised on a daily basis. This is in addition to the bus based park and ride facility at Hazel Grove on the busy A6 corridor. This bus based park and ride offer will be built upon as part of the proposed bus corridor enhancements and also through the creation of strategically located travel hubs.

4.6 Highways and Network Management

In March 2018 the Greater Manchester Congestion Deal was launched and included a number of measures that have since been implemented to improve the way Greater Manchester manages its highway network. This includes significant investment in active travel measures to encourage travel by sustainable modes; the introduction of designated corridor managers whose role is to work with highway authorities and local stakeholders to better manage the highway network; the roll out of a 24/7 Control Centre to actively monitor and manage the highway network in partnership with bus operators and National Highways; and the introduction of modern technology at traffic signals to improve the efficiency of the traffic signals on key routes and in particular give late running buses priority

through the junctions. These measures have been and continue to be rolled out utilising existing funding sources and current initiatives such as the SBNI Programme which includes an extensive programme of traffic signal improvements.

4.7 Active Travel

We recognise that active travel has a significant role in supporting 'first and last mile' access to the public transport network and work is already well underway across Greater Manchester to create a multi-modal, fully-integrated public transport network which is founded on good active travel links.

The leading example of where active travel has been incorporated within a bus context is referenced above in the form of the Bus Priority Programme and in particular along the Oxford Road corridor. Opportunities to improve cycling and pedestrian facilities and access to local centres are considered at an early stage of all scheme development. One of the fundamental objectives of our Quality Bus Transit corridors is to support the integration of local centres and communities with access to a high-quality public transport and active travel network and all our new transport interchange facilities support active travel. The improvements proposed within our BSIP and CRSTS submission will also complement the significant investment being delivered in Active Travel schemes through our Mayor's Challenge Fund Active Travel Programme and our Active Travel Fund. All of these schemes as they are developed and delivered will consider the interfaces with other modes and in particular how added benefits can be provided to bus customers.

4.8 Fares and Ticketing

In July 2018 Greater Manchester launched a pilot initiative called **'Our Pass'** which has given almost 100,000, 16-18 year olds access to free bus travel in the Region, for a one off administration fee of £10. This pilot is ongoing and we are proposing as part of our BSIP to work with operators pre franchising with the aim of accelerating the introduction of a universal flat fare for children between 5 – 16. This will be in addition to the introduction of an offer for Apprentices and people returning to employment which will comprise of free bus or Metrolink travel for 28 days.

Early 2019 saw a major change to the Metrolink network with the introduction of a new zonal fares system that was designed to transform Greater Manchester's travel network in a similar way to London. The changes paved the way for a further improvement later the same year with the introduction of contactless capping across the Metrolink. A scheme that has seen significant upturn in usage since the return to work began towards the end of summer 2021. More recently, this scheme has also been enhanced to include 7-day capping, providing increased flexibility and the option to simply touch and go without the customer needing to plan in advance. We will use this experience to roll out similar initiatives across the bus network as part of BSIP.

4.9 Partnership and Engagement

Greater Manchester has a strong track record of working in partnership across a range of stakeholders and customers and in developing this BSIP has drawn on significant engagement exercises and public consultation carried out as part of Greater Manchester's bus franchising journey, culminating in the Greater Manchester Mayor's decision to progress with bus franchising announced in March 2021. In addition, in developing Greater Manchester's BSIP we have utilised a range of insight material which has been undertaken over the last five years and also more recently as part of the recovery from the Covid 19 Pandemic, which has influenced both our current and future proposals for bus travel across and within Greater Manchester.

Greater Manchester has a long history of working in partnership with bus operators and local authorities in order to deliver quality standard improvements across the bus network using both Voluntary Partnership Agreements (VPA) and more specifically on the Manchester to Stockport corridor a Quality Partnership Scheme (QPS). Both of these approaches have delivered some positive improvements to service delivery through the agreeing and setting of standards and monitoring regimes and in the case of the QPS have delivered positive outcomes in the form of vehicle investment and the protection of bus priority infrastructure.

A county wide Voluntary Partnership covering the whole of Greater Manchester was established in 2011 utilising a partnership approach which further improved service delivery levels by prescribing Greater Manchester-wide performance targets by agreeing individual punctuality, reliability and fleet-based standards with individual operators.

There are a number of cross-boundary services which also play a key role in serving attractors within Greater Manchester and where appropriate, we continue to work positively with neighbouring authorities and/or the commercial operators of such services to ensure that these services continue to be able to operate on a commercial basis or so that tendered journeys can be provided if appropriate.

User forums will be a key tool in ensuring that we design a Bee Network with people at its heart. These forums will provide an opportunity for people to engage with TfGM and Operators to feedback on their experience and provide input on proposals to improve the transport network.

The formulation of Greater Manchester's BSIP has utilised this practiced format of engagement to ensure that operators have been able to constructively input into the content of the document.

Greater Manchester will build on all of the experience above to help deliver a Bus Service Improvement Plan which will help make the ambition of a London-style transport network a reality.

5. The Plan

5.1 Overview of our Plan and Our 7 Ambitions

Greater Manchester's BSIP is founded on a set of 7 ambitions for transforming bus travel, which will help Greater Manchester achieve its ambition to deliver an integrated and accessible London-style transport network with customers at its heart. Together these address the overarching goal of the National Bus Strategy, to grow patronage - initially to build back after the pandemic and then to increase it.

5.2 Customer Experience

London in 2021:	**Greater Manchester in 2021:**
Buses are easy for people to understand: **one** guiding mind to plan the network; **one** livery, the famous red London bus.	In Greater Manchester, there are 10 different commercial bus operators, each doing things differently to each other and sometimes there is more than one operator running the same service, making things even more expensive and more confusing for the customer.

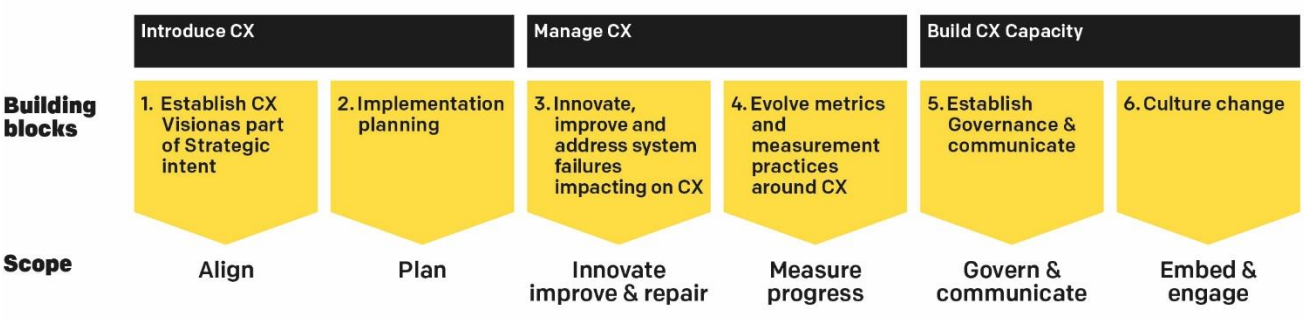
GM Ambition: "*Bus services will be designed and delivered with people, for people as a key component of the wider Bee Network, to deliver a seamless and safe end-to-end customer experience for everyone travelling in Greater Manchester"*

Our seven ambitions are interwoven, with customer experience central to the delivery of all, and focused not just on buses but on people's experience of using the Bee Network. The Bee Network is the new name for Greater Manchester's fully integrated sustainable transport network for travel across the whole of Greater Manchester without the need to own a car.

The Bee Network is designed, owned and run for Greater Manchester by Greater Manchester, and must be informed by a deep understanding of our residents and their transport needs whoever they are and wherever they live. There is no "one size fits all" when designing a truly inclusive and people-centric transport system.

To deliver seamless, safe and sustainable journeys for everyone, we must understand all stages of the customer journey and ensure that each stage in that journey is as easy and accessible as possible for different people using the transport system to access a range of different services. We need to ensure that all products, services (interfaces with the customer) are designed, developed, and implemented with people for people to enhance all aspects of the Bee Network customer experience (based on the approach set out below in Figure 5.1):

Figure 5.1: Our approach to delivery of Customer Experience (CX)



We know from our existing insight that customers expect their bus **service** to take them where they need to go **quickly** and **reliably** with a **frequent service** and **consistent journey time** for a **fair price** with one ticket or pass **(see section 5.6)**. They expect their bus to be **clean** and **accessible** and to have accurate and reliable **information (see section 5.5)** to back up these expectations including real time data to inform decision making. They want a consistent experience across Greater Manchester with clean accessible interchanges, bus stops and **infrastructure (see section 5.4)**, information provision and the knowledge the bus **network** will be managed to get them where they need to be on time and be more reliable than other options. They need to feel **safe** and **secure** throughout, with our people providing an informative, positive, safe environment and conversations. To summarise, we want to provide a customer experience in Greater Manchester comparable with bus travel in London and other European cities.

TfGM is currently developing a **Destination Bee Network Customer Roadmap** which will define what a fully integrated system must deliver for people at each stage of the customer journey, and at different milestones in the establishment of the Bee Network. Our approach to improving the Bee Network customer experience is underpinned by the following principles:

- **People-focused, inclusive decision making** – ensuring that decisions made about transport are informed by up to date insight from and listening to Greater Manchester residents, businesses and visitors, including with regard to their transport needs, perceptions and what they need, to make seamless, safe and sustainable end-to-end journeys; and
- **Continuously improving the services and outcomes for Greater Manchester**: the overall customer journey experience and attention to detail is essential. Our London-style Bee Network will be built incrementally but we need to deliver better journeys through continuous service improvements shaped by ongoing feedback from customers.

Bee Network Brand

The delivery of the branding of our Bee Network plays an integral part in the development of Customer Experience. The brand will provide a consistent look and feel, tone of voice and point of reference for customers providing reassurance, trust, stability and clarity when

travelling around Greater Manchester. We have conducted public research on brand values which is shaping the final brand development and, in the meantime, we are putting in place an interim brand to allow us to take customers with us on the journey and to ensure they are part of the brand development process: **Destination: Bee Network**.

Customer Charter

Our customer experience standards of service will be set out in a **Customer Charter to be developed and implemented during 2022**. It will list clear, consistent commitments of what a customer can expect when travelling by bus. There will be information on what to do if the customer's experience doesn't meet these commitments, how to complain or make suggestions for improvement and what to expect when they do.

The definition of the customer commitments and the Charter content will be developed through engagement with the Greater Manchester public to embed their priorities. A mechanism will be put in place for customer engagement and feedback on a regular basis to ensure the Customer Charter commitments are the most important ones to customers' experience. The Charter will be displayed physically across the Bee Network, digitally and with accessible formats available.

Mobility as a Service delivered through Account Based Mobility Services

To deliver a much more integrated customer experience and as part of our overall Bee Network offer, we will seek to develop a comprehensive Mobility-as-a-Service (MaaS) offer

in Greater Manchester (learning from the ongoing Future Transport Zone pilots and international best practice).

Mobility-as-a-Service (MaaS) is a digital offering that enables customers to plan, book, and pay for journeys through a single proposition that also provides real-time travel information relevant to their journey. It provides access to a range of transport services from different operators (typically including Metrolink and bus/DRT, cycle hire, plus any other shared mobility services which emerge over the coming years), so that multi-modal journeys can be made without the need for multiple user accounts and multiple payment transactions. By combining journey planning, real-time information, and payment through a single interface, our account based MaaS proposition has the potential to transform how customers access and experience transport services in Greater Manchester and promote greater uptake of sustainable travel behaviour.

Whilst services will continue to be delivered with a digital first approach, we also intend to implement a set of improvements to ensure our customer service proposition is effective and accessible to all customers. To enable and support customer self-service, there will remain a necessity to support our customers through the existing channels plus to deliver new channel improvements such as Live Chat and an Artificial Intelligent "chatbot," which will allow our people to focus on those customers that are not digital or have the most complex needs.

Safety and Security

We know that the customer experience on the bus network is underpinned by safety and security, both real and perceived. As is clear from recent customer insights data, one of the main barriers to people moving to, or returning to bus is concerns about personal safety.

Addressing safety and security on the bus network, including at bus stops and within interchanges covers five main areas which cut across each of the seven ambitions, these are: crime and anti-social behaviour; counter-terrorism; Cleaning and Coronavirus; health, safety and environment; security and resilience and business continuity. The following sections focus on these specifically in terms of how they affect the overall customer experience.

Crime and Anti-Social Behaviour

In Greater Manchester, the TravelSafe Partnership brings together public authorities and transport operators to work collectively to understand, address and tackle issues of Crime and Anti-Social Behaviour (ASB) on the transport network, including hate crime. Interventions delivered range from improvements to infrastructure (lighting, vegetation removal, CCTV), education and community engagement through to staff and policing deployments.

A key proposal to strengthen the current work of the TravelSafe Partnership is to commission a new incident reporting system. This will allow for real-time reporting alongside the ability to attach evidence such as CCTV or Body-worn camera footage. The new system will complement customer perceptions reporting and allow for these insights to shape our priorities for delivery.

To enhance safety on bus and within and around bus facilities we will recruit a team of Security Industry Authority (SIA) accredited TravelSafe Officers who will be deployed to hotspot areas across the bus network on both a proactive and reactive basis. These officers will provide a visible and reassuring presence to customers and will deal with any issues of crime and anti-social behaviour as they arise, working closely with the police.

Through the TravelSafe Partnership, we will ensure that greater clarity is provided on expected customer behaviours when travelling in Greater Manchester. This will be done through comprehensive communications campaigns (linking to wider national communication campaigns such as Stop Hate UK), with a code of conduct also built into ticketing products. The TravelSafe Officers will be out daily on the network, engaging with customers to reinforce safer travel behaviours. Customers will be given more information on how to report incidents, including the development of a reporting tool to capture perceptions of safety.

Those who feel more vulnerable travelling will have access to support through the adoption of the National 'Safe Places' scheme. Initially led through fixed infrastructure there is potential for this to be rolled out to an on-bus offer ensuring drivers have the enhanced training required. This would be complementary to other work ongoing to enhance women and girls' safety on public transport and in Greater Manchester.

All of the above will need to align with a wider set of initiatives to improve safety across the Bee Network.

Counter-Terrorism and Security

To ensure that customers feel safe from a security/counter-terrorism perspective, Counter-Terrorism and security best practice guidance (as well as regulatory requirements) will be reviewed and implemented where appropriate. Customers will be given additional clarity around how to report security concerns/suspicious behaviour.

Cleaning and Coronavirus

We know that clean and safe public transport is a key customer priority, particularly for those in clinically vulnerable groups, and will encourage people back onto the network. We will build on the interventions delivered by operators throughout the pandemic and continue to keep customers safe and able to travel with confidence by:

- Regularly disinfecting commonly touched surfaces across the public transport network, including on board vehicles;
- Keeping fresh air flowing on trams, buses and trains;

- Supporting people with hidden disabilities to give them the confidence to travel safely;
- Working through the TravelSafe Partnership to identify hotspot areas of customer concern/low compliance and delivering 'days of action' to engage and educate customers on safe travel behaviours; and
- Working together to ensure our bus stops and associated infrastructure and our interchanges are clean and maintained to a high standard.

Health, Safety and Environment

TfGM's health, safety and environment duty is delivered through implementation of a strong and robust management system, conforming to internationally recognised standards and based on 4 core values:

- Health, safety and environment protection is everyone's responsibility;
- Personal safety is our highest priority;
- Health, safety and prevention of pollution can, and will, be effectively managed; and
- Every work-related injury, illness or incident could, and should, have been prevented.

TfGM works to continually improve health, safety and the reduction of accidents, incidents and near misses through performance monitoring, Bus Operator Safety Forums, and safety campaigns.

Resilience and Business Continuity

Business continuity, disruption management and emergency procedures will be developed and built into TfGM's existing Incident Management arrangements. Through this and liaison with emergency services, we will ensure that the impact of disruptive events to customers will be minimised and that customers have access to the best possible real-time information on network disruption.

Commercial Partnerships

We already work closely with many cultural, tourism, leisure and sports venues to promote the public transport offer to visitors and have created successful commercial partnerships to support audience growth and promote sustainable travel modes. Partnership initiatives also support a regular and wide range of large major events across Greater Manchester, engaging the likes of the city's two world class football clubs, large cultural venues and exciting new developments such as The Factory and Co-op Live. Initiatives have included joint travel and venue tickets, targeted advertising campaigns for major events and public relations (PR) opportunities to inspire and entertain visitors in unique and fun ways, generating extensive PR and social media impact and reach. TfGM intends to deliver commercial partnerships activity in a similar way for bus, amplifying the public transport messages to drive patronage which should especially benefit harder to reach venues such as RHS Bridgewater.

5.3 Services

London in 2021:	**Greater Manchester in 2021:**
Greater London's buses travel about **470 million kms** every year. **675** bus services in London operated by **5x** more buses than Greater Manchester travelling over **5x** more distance	Greater Manchester's buses travel about **82 million kms** every year. **395** bus services in Greater Manchester

GM Ambition: "Stabilising and then strengthening services and routes to a minimum 'turn up and go' frequency (at least every 10 minutes on Monday to Saturday daytimes) on major routes to form a 'London-style network' to ensure that all of Greater Manchester's diverse populations and geographies are able to access our bus network."

Strengthening services across Greater Manchester to build back patronage following the Covid-19 pandemic initially, and then grow our patronage levels is a key priority within Greater Manchester's BSIP. We will continue to maintain and stabilise the network consistent with pre-covid level of services beginning in April 2022, to ensure there is no reduction in service provision across Greater Manchester. Through the implementation of bus franchising we will have a greater level of control over where, when and how frequently bus services operate. This will in turn allow us, in collaboration with operators, to:

- Continue to maintain and stabilise the network consistent with pre-covid level of bus services across Greater Manchester, in particular in light of Covid recovery;
- Provide a greater level of turn up and go services on key routes across the network, with a particular focus on connecting our towns and key centres as well as the Regional Centre **(Target of 70 additional routes brought up to a high frequency standard)**;
- Provide a network of services that is easier to understand for the customer and is available for longer including enhanced Sunday and evening services and on bank holidays and at Christmas and introduce a critical mass of 24 hour services **(Target of 15-20 key routes)**;
- Integrate our bus services with other modes of travel (Rail/Metrolink and Active Travel) to allow seamless journeys across modes;
- Local centre network improvements to enhance local connectivity and access into town and city centres in all Greater Manchester Local Authority areas, including demand-responsive services and 'socially necessary' transport;
- Encourage active travel to schools through a review of school services;
- Provision of new express services to areas unserved by rail or Metrolink **(Target 3 to 4 routes)**; and
- Aim to create a network that is intended to improve access to bus services for all our customers, in particular those that rely on them most.

The intention is for initial improvements in year 1 to evening and weekend services; followed by an incremental increase in daytime frequencies and services in Years 2, 3 with all enhanced services in place in year 4. This phasing is based on recovery and patronage demand growth and electric vehicle (EV) roll out and will be refined subject to funding availability.

We want to provide a joined-up and integrated network across Greater Manchester that plays a crucial part in the overall connectivity of the Bee Network. As part of this plan, the bus network will be enhanced to improve access to better bus services by enhancing the current services with a focus on improving connectivity; improving evening and Sunday services; and by ensuring that passengers are less reliant on the need for a timetable. Our vision is stated in the Figure 5.2 below.

Figure 5.2 – Bus Service Frequency Vision for Greater Manchester

Current (June 2021)	Aim (by 2027)	Minimum average frequency
43.6%	65%	Population inside M60 or near a key town centre within 400m of 10-min average frequency of a weekday daytime (7am-7pm) bus/Metrolink service
34.5%	60%	GM population within 400m of 10-min average frequency weekday daytime (7am-7pm) bus/Metrolink service
21.4%	60%	GM population within 400m of 20-min average frequency of an evening weekday (7pm-11pm) bus/Metrolink service
33.1%	65%	GM population within 400m of 20-min average frequency of a Sunday daytime (11am-6pm) bus/Metrolink service
83.7%	90%	GM population within 400m of 30-min average frequency weekday daytime (7am-7pm) bus/Metrolink service

Prior to franchising being implemented we will work closely with operators to develop service provision that can deliver these outcomes. This is in addition to the work we have already begun to review our bus network and supported services to bring patronage back to pre-Covid levels. Our seven Service Planning Principles which will be used to evaluate the network to identify deficiencies and take forward proposed improvements are:

	Why?	Our Plan
Comprehensive	To provide an accessible public transport network at all times.	Improve the ease by which residents can reach employment, education, health care, local retail and leisure destinations. Our network proposal aims to bring: • at least 65% of the resident population, inside M60 or near a key town centre, within 400m of a 10-min

	Why?	Our Plan
		average frequency weekday daytime (7am-7pm) bus or Metrolink service. • at least 90% of GM population within 400m of 30-min average frequency weekday daytime (7am-7pm) bus or Metrolink service. to a major centre, and key destinations such as workplaces and hospitals.
Simple	Make the network easy to understand and use.	We will simplify the network through: • Improving the number of routes in a given area including different evening and Sunday service patterns; and • Providing an integrated network customer experience (Bee Network).
Frequent	Reduce waiting time and remove the need to look at a timetable.	Improve frequency of services to increase the attractiveness of bus services through: • **Core routes operating a turn-up-and-go service –** Every 10 minutes or better on Monday to Saturday daytimes on radial routes into the Regional Centre, key orbital routes and strategic links between district centres. • **Service levels outside the core operating periods** – Improve frequencies in the evenings and on Sunday daytime. 24-hour operation introduced on selected core corridors to serve residents engaged in shift-based employment characterised by unsocial hours as well as support the 24hr economy.
Direct	Directness reduces the duration of passenger journeys and therefore the attractiveness of the network.	Improve directness of services through: • **Routes to key destinations**. The network should have arterial links into Manchester City Centre, local town centres and major orbital routes as directly as possible. • **Availability of fixed track alternatives.** Additional express services along key corridors, linked to additional bus priority measures to provide attractive end-to-end journeys.

	Why?	Our Plan
		• **Linked communities.** Improve 'feeder' bus services from residential areas to main routes, thereby improving end-to-end journey times.
Reliable	Unpredictable journey times deter bus use, and incur costs for customers, businesses, and public services.	Where monitoring identifies regular delays on routes, we will adjust and simplify services. Refer to Section 5.8 Network Planning for details.
Integrated	Provides the widest range of journey opportunities to customers.	We will seek to integrate bus services with other transport modes and promote integrated approaches with land use planning through: • Planned connections between bus services at key interchange locations. • Improved connections between bus and rail, Metrolink and active travel, which is key to increasing the utility value of the network, particularly for communities without direct access to the fixed track network. • We will continue to work with developers and local authorities to maximise opportunities to provide better services to and from major trip generators and large attractions.
Cost-effective (Affordability will be dealt with in section 5.6)	Ensures the public transport system is sustainable over the medium/ long term	The continued financial sustainability of the local bus network in Greater Manchester is essential to addressing social, economic and environmental objectives. In delivering an effective bus network, we will seek to re-build bus patronage to pre-Covid levels, and then beyond. We will also develop commercial partnerships where appropriate.

The routes for which high frequency daytime (at least every 10 minutes on Monday to Saturday daytimes) and enhanced evening and Sunday bus provision are proposed is set out in Figure 5.3 below, alongside the existing Metrolink and rail network.

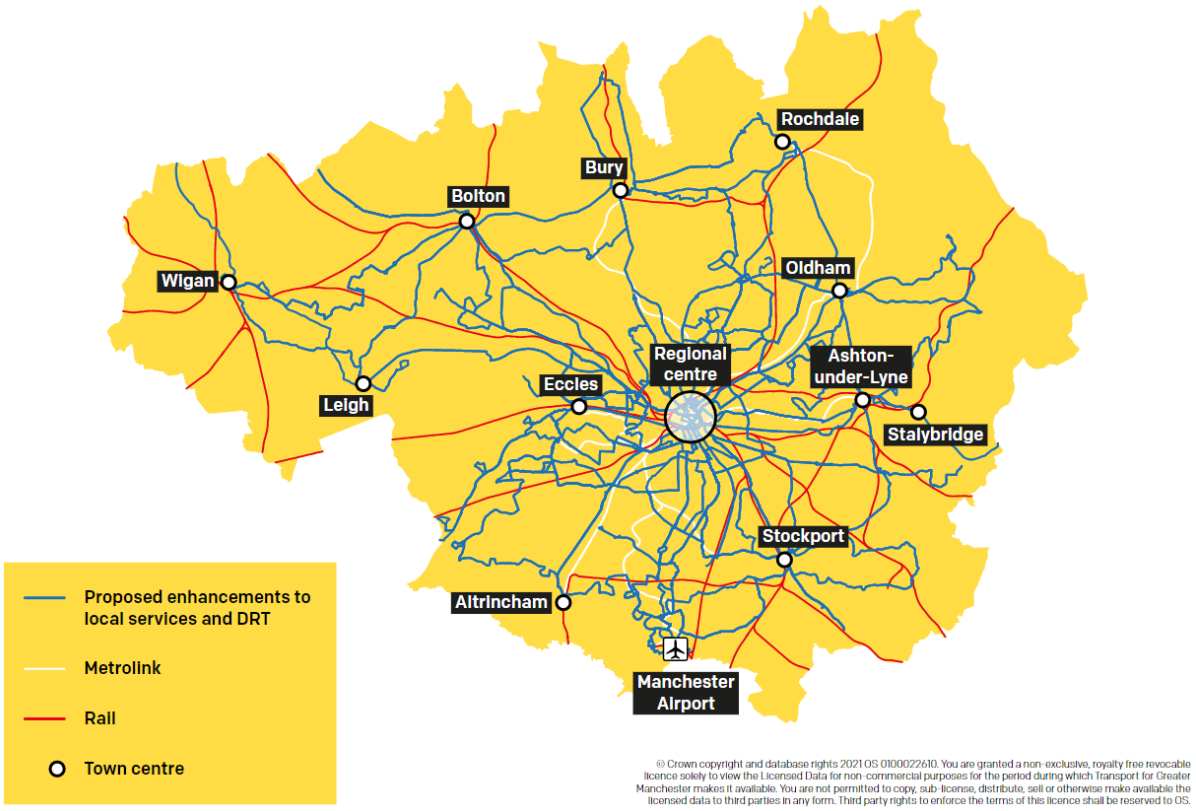


Figure 5.3 Map showing proposed high frequency ('Turn up and go') bus routes

Our core network will be flexible and responsive to meet needs of our communities through ongoing review and integration with our demand responsive transport provision, dedicated schools service as well as partner transport provision including community transport and Special Educational Need & Disabilities (SEND) services. Integrating the network in this way will enable more journeys e.g. from home to school to happen on the core network. It will need to be supported by improvements and growth of the Greater Manchester bus fleet, set out in Section 5.7.

Demand Responsive Transport Services

Greater Manchester has a diverse range of geographies, land-uses, and employment opportunities, not all of which may be suited to a frequent, regular bus service.

We understand that we need to complement the provision of a core network with additional services to cover socially necessary journeys and support out of town workplaces, hospitals and isolated communities. Greater Manchester already has Local Link services supporting some communities. We will seek to provide additional services, for example providing those living in rural areas of Rochdale and Bury with a car-free alternative for accessing work, leisure opportunities, education and health services.

We will review new learning emerging from Future Mobility Zones which are currently trialling demand responsive services. As referenced in the consultation on the "Future of

Transport: Rural Strategy", the growth in digital and data capability may increase the viability of demand responsive services. We will integrate our existing demand responsive transport services (Ring & Ride and Local Link) into the wider network, ensuring that they are fit for purpose and providing access to the network for those that most need it. This work will develop previous DfT-funded Total Transport work completed in the Saddleworth area of Oldham, applying the theory across Greater Manchester. Working with our suppliers and community transport operators we will deliver:

- Customer friendly, integrated, multi-modal booking systems and ticketing to provide 'mobility as a service' bringing our demand responsive services within the Bee Network brand;
- Centralised booking, scheduling and dispatch software to facilitate integration with the Bee Network;
- Early improvements to our Local Link and Ring & Ride provision including increased coverage; promotion to more communities to ensure equal access; and a review of Ring & Ride group booking policy application to improve availability;
- Support the supplier base for example through supplier days, improving links with Local Authority SEND, schools services and other transport procurement, supporting small operators through clean air grants;
- A Zero Emission DRT fleet, starting with the full replacement of the Ring and Ride fleet, and then working towards using this core fleet to more efficiently deliver the wider DRT service offer;
- Increased patronage from across the whole of Greater Manchester and a wider demographic than our current Ring & Ride and Local Link markets; and
- Efficiencies in service provision through a Total Transport Approach bringing together our Ring & Ride, Local Link and home to school services.

We will also explore implementing a fully integrated DRT offering to all customers who experience barriers to accessing the wider network (whether this relates to geographical barriers or disability or mobility impairment) as part of a wider MaaS ecosystem. This will enable journeys where the conventional public transport (walking, cycling, bus, tram, rail) network does not support customer journeys.

5.4 Infrastructure

London in 2021:	**Greater Manchester in 2021:**
• Bus priority measures on key routes including a wide use of red routes • Consistent standard of bus passenger facilities	• Fragmented bus priority infrastructure • Uneven standard of bus facilities

GM Ambition: "Significant Increase in Bus Priority including Quality Bus Transit on main corridors, and the removal of congestion 'hotspots' for buses, plus investment in bus passenger facilities"

Our plan for infrastructure is central to the delivery of reliable bus journeys, with shorter journey times for customers; an integrated and accessible public transport network; a high quality and safe waiting environment for customers; and improved connectivity to and from the public transport network by foot and by bicycle.

The infrastructure proposals align to our recent CRSTS submission which sets out our proposals for significant investment in our overall transport network over the next 5 years (2022-2027), including our proposals for improvements to bus related infrastructure.

Future Bus Reliability and Journey Time Improvement Programme

The GMTS 2040 Delivery 2021-2026 Plan and our City Region Sustainable Transport Settlement submission set out ambitious plans to develop and deliver transformative bus and Streets for All improvements on strategic bus corridors across the City Region that will deliver a step-change in the reliability, speed and comfort of our bus services and help us to meet our targets set out in Section 3.

To achieve this aim, four transformational programmes of work have been developed that will deliver a range of measures: from delivery of new dedicated, segregated bus infrastructure; to quick-win schemes to tackle local points of bus delay. The following provides a summary of these programmes, with information on delivery timeframes provided in Figure 5.6.

- **Bus Rapid Transit (BRT):** As demonstrated in the success of the guided busway service on the Leigh-Salford-Manchester corridor, Bus Rapid Transit services are able to provide shorter and reliable bus journeys that deliver levels of satisfaction and modal shift that is comparable with Metrolink for medium to long-distance journeys. In the next five years we are committed to exploring options for new bus rapid transit links for longer and middle-distance journeys across the City Region, for example focussing on connections to and from Manchester Airport from the east and west. These will be our SuperBus services.

  Typical measures for BRT schemes will include consistent, physically segregated bus facilities, such as busways or bus lanes, limited stop services, park and ride provision and full integration with wider active travel or other rapid transit modes, enabling journeys to be made quickly with limited impact from wider traffic. Due to the nature of the interventions and the planning and powers required for implementation these schemes will inevitably be a longer term solution.

- **Quality Bus Transit (QBT):** Complementing BRT, Quality Bus Transit corridors will enhance strategically important bus routes on our Key Road Network, where communities they connect are under-served by our rapid transit network. These will also be equivalent to the SuperBus concept.

  Focusing on delivering better orbital routes between our key towns, interventions will seek to deliver strategic bus priority, such as bus gates, bus lanes, and signal priority for

bus, alongside wider measures to improve whole journeys, such as enhancements to stops, and corridor-wide measures to deliver connected active travel networks.

Eight Quality Bus Transit corridors for development and early delivery have been identified within the GMTS 2040 Delivery Plan (shown in Figure 5.4), covering 112km of strategic bus routes, and 20% of our Key Road Network. Combined, this network will better connect communities to the rapid transit network, GMCA growth corridors, and other local services where bus is the only high-frequency public transport option.

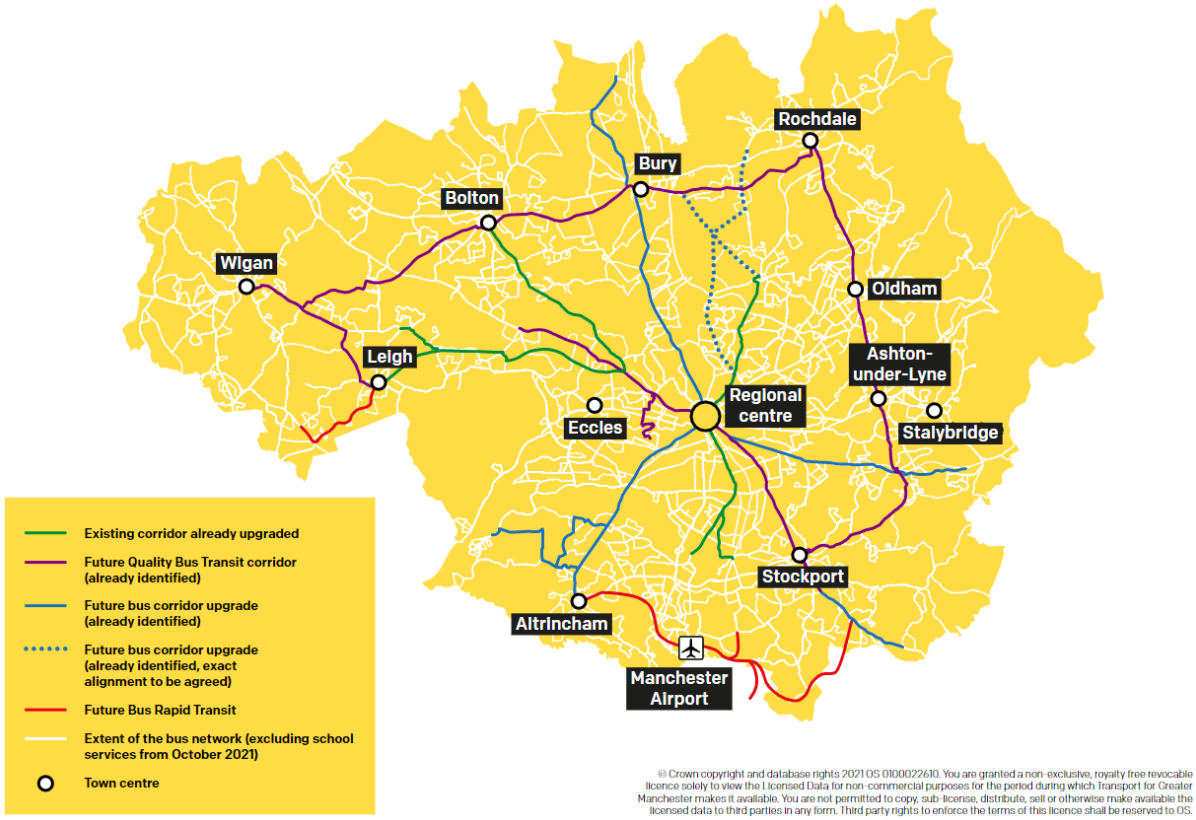


Figure 5.4: BSIP Bus Corridor Improvement Routes

- **Bus Corridor Upgrade (Frequent Service and Other Busy Corridors):** A programme of Bus Corridor Upgrades is proposed on high-frequency bus routes that connect people to opportunities in the city centre, and destinations and employment sites. This programme includes improving existing corridors to enhance speed and reliability of bus, as well as establishing new bus connections to major development sites.

  Measures proposed for delivery on these corridors will include whole bus route strategic bus priority, upgrades to bus stops, and active travel measures, alongside new bus facilities integrated within development, such as dedicated busways and bus, cycling and walking only streets. Six Bus Corridor Upgrade Corridors have been identified within the GMTS 2040 Delivery Plan, and it is our ambition to extend this network to other high-frequency routes in the City Region, shown on Figure 5.4.

- **City Centre Transport Strategy:** A programme of improvements is proposed with the aim of increasing the number of bus trips to Manchester City Centre in the morning peak by 50% by 2040. This will be done by improving bus services into and across the city centre, making these more reliable and accessible, and providing better gateways at key stops and interchanges, particularly for onward travel by Active travel modes.

  Works over the next 5 years are envisaged to include improving the areas around Piccadilly Gardens and Oldham Street, where poor quality public realm, antisocial behaviour, poor bus passenger facilities, significant bus-on-bus congestion and pedestrian movement are some of the key issues experienced. The scheme will also include enabling works needed to support more efficient and effective routing of buses within the city centre as plans are developed.

- **Bus "Pinchpoints":** Supporting our bus corridor improvements, a programme of Bus Pinch Point improvements will be delivered on key bus routes in and across the City Region, that will tackle localised issues on the highway which are causing delays to bus journeys. It includes both low-cost quick win and higher cost longer term schemes. Examples include introducing traffic regulation orders to prevent obstructive parking, making bus stops more accessible, or implementing bus priority at traffic signals and junctions.

The Quality Bus Transit and Bus Corridor Upgrade packages proposed within our CRSTS programme seek to deliver the first phase of improvements on these corridors over the next 5 years, enabling delivery of around 50km of bus network improvements between key destinations in the City Region. Interventions on this network will deliver a step-change in the experience of catching the bus, improving reliability, accessibility, and comfort of whole bus journeys, through measures such as strategic bus priority, making stops fit for purpose, and improving trips to the bus from homes and destinations by active travel.

More details on the types of bus priority measures we will seek to implement through our Bus Reliability and Journey Time Improvement Programme is provided in Appendix B 'Typical Traffic Management Measures by Greater Manchester Bus Programme Type'. These will be applied as most appropriate, in relation to the particular issue to be addressed and/or the location/setting and will be subject to local approvals and consents. Figure 5.5 below shows a conceptual example of the type of strategic bus priority measures we will seek deliver through this programme, aligned with active travel and public realm enhancements.

Figure 5.5: Example of integrated strategic bus priority proposed through Quality Bus Transit

Better and More Accessible Bus Stops

Improving the quality and accessibility of journeys to and from stops, waiting for the bus and boarding the bus, are key to removing the barriers to using the bus, and reaching an increase in patronage needed to meet our BSIP targets. Building on the success of our Growth Deal-funded Bus Stop Accessibility programme, we will continue our programme of bus stop improvements to increase the number of stops that are fully accessible, provide a comfortable, attractive, and safe waiting environment, and are well connected to homes and destinations. To achieve this aim, we will implement the following programmes:

- **City Region Bus Stop Upgrades Programme:** Delivery of a long-term rolling programme of bus stop upgrades to ensure that Greater Manchester bus stops are fit-for-purpose and fully accessible. Over the next 5 years, we will work to deliver a programme of bus stop enhancements across the City Region that will provide new shelters (where practical and required), raised kerbs to facilitate level boarding and alighting for all, access to digital real-time journey information and integration within the local area.

  As part of this programme, we will significantly reduce the number of stops that are currently not accessible by people with mobility impairments, delivering up to a further 2,000 more accessible stops by 2027 through measures such as raised kerbs and places to rest while waiting. A further programme of stop enhancements will be developed as funding becomes available.

  We will also ensure that bus stops are easy and safe for people to walk to and from through conveniently located crossings, low-traffic neighbourhood routes, and convenient cycle parking. Pedestrian safety for the first and last mile of the trip will be a key focus along with improvements to footway condition and the eradication of pavement parking, particularly around bus stops.

- **Quality Bus Transit, Bus Corridor and Bus Rapid Transit Programme:** Through our bus corridor improvement programme, we will seek to deliver whole-route improvements to stops on these corridors, with a particular focus on enhancing stops and access to stops at town centres and key destinations on these routes.
- **Integration of the Local Full Fibre Network (LFFN):** Alongside delivery of City Region and Corridor based improvements, we will seek to understand how Local Full Fibre Network may increase the feasibility of offering a greater range of services at bus stops which can improve the customer experience. Services which may be able to be enabled by integrating LFFN include real time information, storage lockers, and CCTV Cameras and passenger call points.

Integration and Interchange

Delivering better physical integration and seamless journeys across modes, including more bus-rail and bus-Metrolink interchange, integration with active modes, and implementation of cross-modal timetables, such as bus/ Metrolink/ Rail alignment is a key ambition of our 2040 GMTS Transport Strategy and BSIP.

As set out in Section 4, Greater Manchester has a track record of delivery of new and integrated interchange facilities through our Interchange Investment Programme. The success of this programme has been established by setting high standards and guiding principles of urban design quality and civic presence with a coherent approach which dovetails Clean Air, active cycling and walking travel plans and Streets for All. Key integration and interchange projects we are progressing in the BSIP and CRSTS timeframe include:

"For me it means a joined up approach of all the transport types including the tram, buses, local trains. Anything that helps you get across Greater Manchester – including the roads"

Residents (Wigan/ Bolton/ Bury), 35 - 64

- **Stockport Mixed Use:** This is the latest of our interchange schemes to be progressed combining a modern and attractive bus interchange facility, with enhanced links to Stockport rail station and the wider town centre and including residential units and a public park, all of which is planned to be delivered by 2024. This is being funded out with of CRSTS and BSIP.
- **Bury Interchange**: A flagship scheme that applies our guiding principles for interchange development, Bury Interchange is identified within our CRSTS submission for delivery by 2029. It is an ageing asset (having been constructed in 1980) and will be one of the last interchange facilities in Greater Manchester to be upgraded. This multi-modal scheme will:

- Address local and national decarbonisation targets by minimising embodied carbon in construction and incorporation of features to deliver Greater Manchester's first operationally carbon neutral interchange;
- Provide seamless interchange for customers between light rail, bus and active travel networks to encourage modal shift to sustainable travel choices in line with Greater Manchester's Right Mix targets and support access to nearby strategic sites such as Northern Gateway;
- Deliver significant improvements for customers in line with our Network Principles with modern and fit for purpose passenger facilities with sufficient capacity for future services across all modes over its lifespan. It will include features such as real time information, Metrolink platform improvements, new lift and stairs provision, new southern step-free access, larger high-quality cycle/active travel parking facilities and a Changing Places facility; and
- Be a welcoming, safe, accessible, inclusive and attractive place which acts as a catalyst for the regeneration of the town centre with a strong brand identity. It will be a place people want to use, dwell, visit and travel, and encourage easy and legible access to key destinations across Bury town centre by foot and cycle.

Travel Hubs: Alongside dedicated interchange facilities, we will seek to deliver City Region-wide improvements to enhance integration between bus, rapid transit connections, active travel and shared mobility through our Travel Hubs programme.

The focus for Travel Hubs will be on improved physical infrastructure to integrate other modes with rapid transit – for example, local bus as the first mile leg of a longer journey on Metrolink. In practical terms, this would mean considering whether bus stops could be relocated closer to a rapid transit stop/station, facilities for Demand Responsive Transport services, and better crossings and wayfinding between modes, as well as better public realm and accessibility of stops. These improvements 'level up' the facilities, providing an enhanced environment for the benefit of all users at the Travel Hub.

This programme will include delivery of a new Travel Hub at the Tyldesley stop on the Leigh Guided Busway, Bus Rapid Transit route in the next five years. This is expected to include improved integration with local buses, cycle parking facilities and Park and Ride facilities to support access from areas with low levels of public transport connectivity.

Harnessing Future Mobility Options

Capturing the benefits presented by new mobility innovations will be essential to future-proofing our bus network and delivering the best bus service to people in Greater Manchester that we can offer. Two key innovations we will seek to apply to improve and manage our bus services are Connected Autonomous Vehicles (CAVs) and Shared Mobility, outlined below.

- **Connected Autonomous Vehicles (CAV):** We are actively exploring the benefits and risks that development of a Connected Autonomous Vehicle network presents for bus

services and bus users, engaging with Centre for Connected Autonomous Vehicles (CCAV) and working with Project Synergy, an Innovate UK funded CAV project.

Key opportunities we will seek to harness include the potential for CAVs to make using the bus a more feasible option for more people through increases in hours of operation and geographic coverage, and potential for improvement in road safety for vulnerable road users. We are also aware of risks presented by CAVs for bus travel, including potentially compromising levels of bus travel and our BSIP and Right Mix targets.

Through Project Synergy we have established a set of guiding principles for CAV deployment, including that "CAVs in Greater Manchester must primarily be used to supplement access to, or journeys between mass transit systems", and these will be published in our forthcoming 'Connected/Autonomous Vehicle/Infrastructure Strategy'.

We are also exploring the opportunities for connected vehicles and connected vehicle data. Public transport is an existing use case for connected vehicle data with bus priority and real time passenger information (RTPI) systems using AVL to provide real time information on bus journeys and provide priority at traffic signals. This provides benefits of improved journey times for buses and increased use of public transport due to improved journey experience. The DfT has also outlined Public Transport as one of the seven key national connected vehicle service groups within the Connected Vehicle Data Research Strategy Report Connected Vehicle Data Strategy - Strategy Report (publishing.service.gov.uk)

- **Mobility Hubs and Shared Mobility:** Alongside Travel Hubs located at Rapid Transit Nodes, we will seek to establish a programme of Mobility Hub delivery at or around local bus stops. Mobility Hubs have the potential to provide bus users with enhanced shared mobility options (such as electric bike, cargo bike or e-Scooter hire), digital information on on-ward journeys and payment, and facilities such as delivery lockers.

  Alongside enhancing the sustainable travel offer, Mobility Hubs have the potential to significantly improve the experience of waiting for the bus by incorporation of pocket park principles, (such as Sustainable Urban Drainage Systems (SUDS), improved public space and community artwork). Combined these measures will significantly improve accessibility and integration of stops with sustainable modes, and a more engaging and comfortable stop environment.

  We are developing a Mobility Hubs strategy that will establish the framework for the delivery of a Mobility Hubs programme across Greater Manchester, including our approach to the integrating of buses with Mobility Hubs.

Delivery Programme

Figure 5.6 below outlines the proposed programme of development and delivery for the Quality Bus Transit, Bus Corridor Upgrades, Bus Rapid Transit, Bus Pinch Point and Stop Upgrades, and wider bus measures over the next 5 years. This reflects what was included

within our CRSTS submission and focusses on what can be delivered between April 2022 – March 2027.

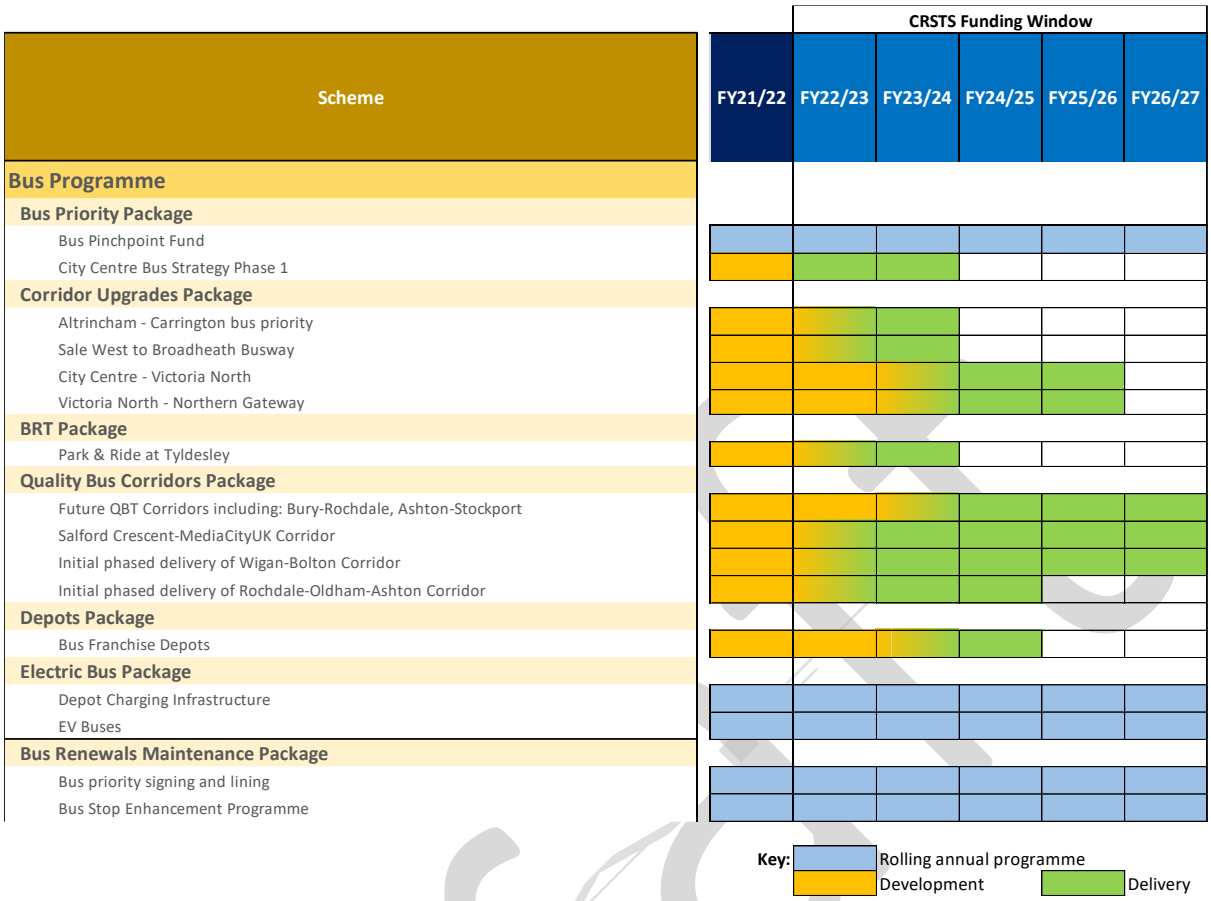


Figure 5.6: Infrastructure Delivery Programme

5.5 Information

London in 2021:	**Greater Manchester in 2021:**
• Strong wayfinding offer • Comprehensive live bus information on whole network (**2,500** bus stops with countdown signs) • Strong open data offer • Multi-modal travel information on a single mobile app	• Lacking integration between modes and services (e.g. purchasing travel) • Real time information is readily available online and at interchanges but not widely on buses or at stops • Limited open data offering • Lacking an integrated multi-modal and multi-service mobile app-based customer offer

GM Ambition: "Readily available; live and up-to-date; multi-modal information that is integrated with the purchase of travel and is provided in a variety of ways to reflect the needs of all customers ensuring its use is captured and used to inform service design."

Travel Information Overview

Providing accurate, reliable and easy to understand travel information has long been of strategic importance in Greater Manchester. Travel information alongside other contributing factors (journey time compared to other modes, modern fleet of vehicles, accessibility for all) is crucial to halting the decline and growing bus patronage. Customers expect more than a reliable bus service, they expect reliable real time travel information and to be notified of all disruptions, planned or unplanned, at the stop and/or on the bus. They want to know live journey times, hear and see what the next stop is, and more.

Two fifths of Greater Manchester residents feel that more investment is needed in "ways of keeping bus passengers informed about their journey"; this has increased over time (TfGM, Network Principles Survey 2018, 2021).

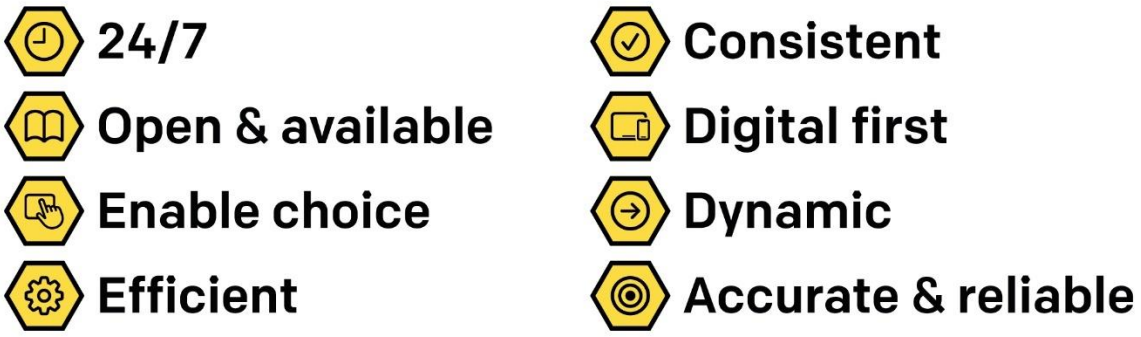
In a recent survey, 79% of respondents were satisfied with the overall travel information available in Greater Manchester. Looking at bus users specifically, their satisfaction varied at different stages of the journey, being lower for information provided at the bus stop (72%) and during the bus journey (68%, TfGM Network Principles Survey 2021). Transport for London (TfL) has a satisfaction score of 75 out of 100 for information on board the bus (Q1, 21-22). Although not specific to bus, the national benchmarking within the NHT survey shows Greater Manchester's score for satisfaction with the provision of public transport information (57) is significantly lower when compared to an area of best practice such as Nottingham (73, NHT 2020), with a similar scale of difference on measures such as clarity, accuracy of public transport information. This shows clear areas for improvement for customers.

As a result, we strive to continually make improvements to the travel information offer in Greater Manchester. We do so based on customer feedback with a focus towards the delivery of our Right Mix objectives.

It is important that, as we consider a digital first approach to the delivery of customer information, we remain focused on ensuring traditional channels, such as printed information and Travelshops, are maintained where appropriate in line with customer needs and expectations.

We will ensure that all tourists arriving on leisure trips from outside of Greater Manchester to a railway station or bus station/interchange will have tailored customer travel information and best value ticketing options available digitally and printed with varying durations to suit their visit.

Our travel Information vision is supported by the following principles:



We will deliver the above through strong collaborative working and data sharing. Examples of this include:

- Robust processes, including quality assurance checks, are in place to govern timetable changes;
- Real time departures information is shared between operators and TfGM to ensure consistency in the information provided to customers;
- Collation and publication of multi-modal disruption information through the appropriate channels; and
- Third party engagement and open data to support integration of information on third party channels.

Travel Information Plan

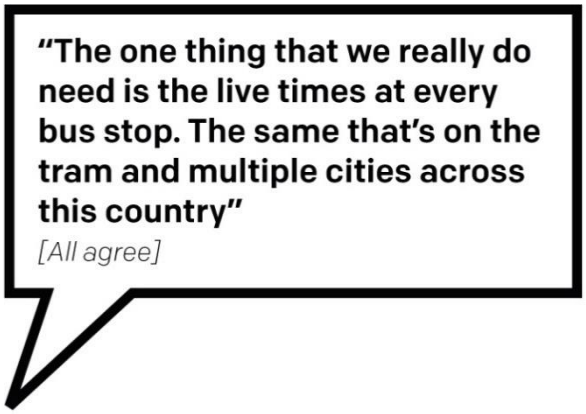
We will ensure our proposed improvements are designed using customer experience best practice techniques incorporating customer feedback and user insight in our design process.

Customer information improvements:

- Better **information on the physical accessibility of the network for end-to-end journeys**.

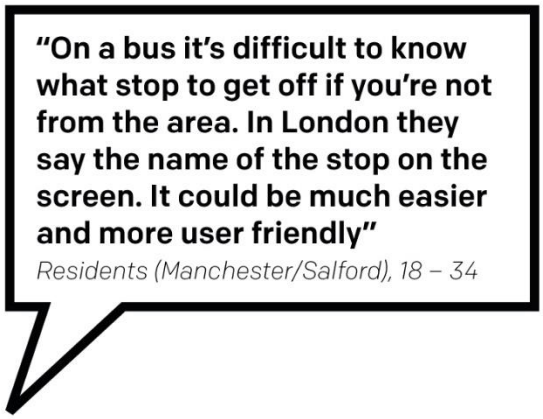
- **Real time information on the level of occupancy / crowding** of individual bus services so customers can make informed choices about the best times to travel (using technology fitted to the bus fleet).
- **Improved and integrated disruption information for customers** to help them navigate the Bee Network seamlessly.
- Supporting the delivery of the Bee Network by ensuring fares and **ticketing information is published in more places and integrated with wider multi-modal information offer.**

- **Real time bus departures and map based live bus location information** so that customers have up to date information on their bus services, giving them confidence to travel.



Channel improvements:

- Provision of real time information at bus stops – **with 1,000 key interchange stops having digital screens** and the **remaining stops having digital departure information**.
- Provision of **real time information at all bus stations and interchanges.**
- To ensure we provide an inclusive and accessible service **we will provide audio visual information on buses**.
- To ensure a range of channels are available to customers we will **continue to offer printed information at key locations.** We will introduce improved formats to include timetables, fares and wayfinding information. We will consider which stops should have printed information in line with customer needs and in line with the role out of real time information as referenced above.



Integration of information:

- Information will be integrated with our Account Based Mobility Service offer ensuring customers can access information alongside other services. This will include a **new integrated Bee Network mobile App**.

- **A new website to bring to life the Bee Network** and provide a shop window for customers to enable access to travel information that is integrated with other customer services.
- Develop our open data offer to help **ensure customers get the information they need through a variety of third party mobile apps and websites**.
- All **information types will be unified under the Bee Network brand** to support the promotion of bus and an integrated network.

We will undertake further work with customers to validate and prioritise this plan. We are developing a methodology and tools that will allow us to assess the impact these, and other improvements, might have on bus patronage. We will use these tools to validate, prioritise and evolve our BSIP. These tools will also allow us to understand the relative importance of travel information improvements compared with other areas to facilitate strategic prioritisation.

Promotion of Bus

As an integral part of the integrated transport system across Greater Manchester, Bus will require a constant flow of marketing and communications activity to help drive revenue and patronage and to communicate required safety messaging in line with seasonal or government campaigns, as well as product and ticket promotion, ongoing design requirements for both on stop, on bus and digital wayfinding and customer engagement. This activity will include but will not necessarily be limited to resource delivered by a wide range of teams within TfGM and is key to delivering our Right Mix targets and positioning bus as 'mode of choice' for people to encourage behaviour change, as well as supporting Greater Manchester residents to access bus as part of an integrated, inclusive transport network.

Transport Insight and Analytical Planning and Performance

It is essential for us to understand and continually improve the transport and bus network. We will look to capture information, incorporate it into, and build on, our data and analytics capabilities to better understand, adapt and change to the environment. This will enable us to:

- Improve our understanding of the transport network;
- Increase customer patronage and satisfaction, using information, insight and machine learning to move to a more dynamic customer driven bus network by meeting customer demands with bus frequency, location and supply;
- Improve the quality and experience for customers at our interchanges using data and insight to understand passenger flows and needs so that we can adapt and improve as required;

- Reduce congestion, optimise bus flows and reduce carbon emissions using data and insight to understand and improve traffic flows and patterns so they are more efficient and effective;
- Provide a fares and ticketing proposition that balance customer need, usage and revenue through knowledge of what fares and tickets are used when and where; and
- Reduce fraud and revenue loss using data and insight to understand when and where it occurs so that we can target our revenue protection.

5.6 Fares and Ticketing

London in 2021:	**Greater Manchester in 2021:**
Unlimited bus journeys within an hour for **£1.55** Unlimited daily travel on bus and tram - **£4.65**	Some individual journeys cost as much as **£4.50** – like the **4.5 mile** trip from Failsworth to Manchester Multi-bus operator day ticket - **£6.00**

GM Ambition: "More affordable journeys, with attractively priced and simply structured fares for 'hoppers', travelcards, daily and weekly capping for all bus travel, and for trips interchanging between bus, Metrolink and other modes including elements of Active Travel"

In this section we set out how we will achieve the requirement for lower and simpler fares.

2040 Fares and Ticketing Objectives

Our BSIP Ambitions for Fares and Ticketing are guided by the Fares and Ticketing objectives set out in the Greater Manchester 2040 Transport Strategy:

Simplicity: Customers should easily understand and choose options to pay for their journey, including for multi-modal travel.

Analysis presented in support of franchising (**Bus Market in Greater Manchester**) identified 22 different daily tickets, 29 weekly tickets and 14 different 28-day tickets and, whilst customers making habitual trips with one operator are able to identify the best ticket, only 62% of bus customers making unfamiliar, infrequent / multi-operator trips were only able to do so. Our BSIP proposals include both simpler fares (in particular a flat fare irrespective of distance) and more convenient ticketing.

Convenience: Transactions should be easy for the customer; one payment allows multi-modal travel and delivers efficiencies to the operator. In the Fares Research, ease of getting tickets showed the same pattern as simplicity above with high rating for frequent bus users (>90%), falling for infrequent and multi-operator use Our BSIP proposals include joined-up ticketing with contactless Pay as you Go (PAYG) and capping on Bus and for multi-modal travel. Our development of Account Based Mobility Services will provide bring the benefits

of PAYG to all customer groups as well as integrated digital solutions for ticketing and customer information.

Inclusivity: Related to the affordability of travelling by public transport and informed by concessions policy. In the Fares Research, whether fares were considered 'fair' varied depending on several contexts we asked people to consider, but only 59% of bus users agreed that "fares are fair regardless of journey length"; 60% "regardless of where you live" and 65% "regardless of their access to, and ability to use the internet and apps". Only 58% of bus users thought "fares are set in the interests of the people of Greater Manchester." Affordability, as represented by "you can afford to travel by public transport as much as you like" was particularly low amongst people using multiple bus operators – 61%. Our proposed fares offer aims to tackle this weakness, with additional concessions particularly targeted at people with low incomes.

Value for Money: Passengers should see fares as fair for the service they get. In the same survey, even amongst frequent bus users, only 66% rated this as good, and fewer still (49%) of infrequent multi-operator users. Our proposed BSIP fares offer is aimed at tackling this, especially for people who make infrequent multi-operator trips.

Transparency and Trustworthiness: Customers should have a clear understanding of pricing and products. Customers tended to trust staff to sell them the right ticket more than machines or apps. Overall, 89% of bus customers trust the driver to give them the appropriate ticket but again, this was lower amongst the infrequent and multi-operator users.

Balanced Funding: Fares should raise the revenue needed to balance costs with available subsidy. The structure of the BSIP fares offer aims to raise the required revenue in the most efficient manner, with lower fares focused particularly on price-sensitive market segments.

Manage capacity: Fares can be used as a tool to match demand with capacity.

Our Ambition for Fares - lower and simpler

Ambition for Fares

The structure of bus fares in Greater Manchester has been reviewed against the 2040 Fares and Ticketing objectives and an Ambition for Fares has been created, at prices that represent an average reduction of approximately 25% from present fare levels, excluding allowance for the fares reduction resulting from the proposed integrated fares between bus and Metrolink. We expect our Ambition for Fares to transform the attractiveness of bus travel in Greater Manchester thereby facilitating more people into work and a therefore creating a more productive economy.

At the core of our Ambition for Fares are the following:

- A London-style flat hopper fare for single trips (as in London) to permit a change of bus within one hour of the start of the trip;
- One-day and one-week bus travelcards offering the freedom of the network and which encourage discretionary trips that make good use of seats that would otherwise be empty. Travelcards are the most popular fare product in Greater Manchester and we aim to build on that success. This will be facilitated by Pay As You Go contactless that will see day and weekly capping introduced at the same price as the equivalent Travelcard, aiding more flexibility and ease of travel; and
- Integrated fares between bus and Metrolink, reducing most fares for trips that include both modes to a lower level than that of the current multi modal offering.

The flat Hopper fare is the biggest change to the present fare structure. Travelcards in Greater Manchester are already 'flat fare' in that most travelcards do not impose any geographical restrictions on travel within Greater Manchester – although restrictions exist between operators. Since urban bus travel becomes less attractive for longer trips (bus mode share falls off sharply in Greater Manchester for trips over 6km) we consider that the practice of charging different fares by distance travelled to have outlived its usefulness and introduces unnecessary complication to bus travel.

Our Ambition for Fares aims to maximise patronage by segmenting the market so that trips that are more sensitive to price will benefit particularly from lower fares. That includes one-way trips that require a change of bus (as in 'Hoppers' described above). It also means much lower fares for trips interchanging between bus and Metrolink, who presently 'pay twice': the present multi-modal offer, offers only small discounts – if any – over the separate Metrolink and bus fares for each leg of the multi-mode trip.

The new structure will also give consideration for carnet style tickets and an improved offer for Group tickets across modes.

Figure 5.7: Our Ambition for Fares

Fares product	What it provides	Target market	Target Price
Hopper	Bus travel, including change of buses, within one hour	Single trips, not just on a single bus	£1.55 Adult 0.80p Child
Day travelcard/ Daily Cap	Unlimited bus travel on a single day	Extra discretionary trips across the day	£4 Adult £2 Child
Week travelcard/ Weekly Cap	Unlimited bus travel within one week	Travel to/from work, and extra discretionary trips across the week	£16 TBC
Longer-period travelcards	Unlimited bus travel for periods up to one year	Travel to/from work, and extra discretionary trips	Multiples of Week travelcard, depending on duration
Carnet x 5 or 10	Unlimited bus travel on five or ten specific days	Travel to/from work by part-time and hybrid workers	Priced to offer a small discount on the Daily product.

In addition to an attractive and affordable flat fare across the network, there will be a weekly capped product that will enable customers to travel throughout the day for a lower price than that of the currently weekly offerings. This principle will also be reflected in the equivalent weekly multimodal offer.

To ensure our ticketing proposition reflects changing market demands for flexibility, we will also introduce carnet offerings for those that do not wish to use Pay As You Go or Travelcards.

Our Ambition for Fares represents a reduction of approximately 25% from present bus fares in Greater Manchester, with particularly large reductions for:

- Single fares for turn up and go trips;
- One-way trips requiring a change of bus; and
- Multi-mode trips interchanging between bus and Metrolink.

The Fares Ambition is estimated to result in bus patronage growth of 14% between 2022 and 2030, from its 2022 level, before allowing for the additional patronage growth that would result from integrated fares between bus and Metrolink. This, together with the other elements of our BSIP, is estimated to achieve our overall BSIP patronage target of a 30% increase in bus travel by 2030 from its post-Covid level.

Concessionary fares

The introduction of 'Our Pass' pilot has given almost 100,000 16-18 year olds access to free bus travel in the region. 'Our Pass' has improved satisfaction with, and affordability of, bus travel and has increased bus use for all journey types made by 16-18 year olds, their access to opportunities, and maybe most importantly the likelihood of them continuing to use bus in the future (even when they have to pay). Our evidence points to the most deprived areas having greater uptake and usage of the pass.

Travel costs are a recognised barrier hindering individuals from accessing interviews and opportunities; taking up and maintaining their apprenticeships; and enabling people to get back into employment. We propose to offer to Apprentices and people returning to employment a travel offer comprising free bus or Metrolink travel for 28 days, plus support to encourage active travel (including bike loan) and travel planning and advice. The travel offer would benefit each year up to c.7,500 apprentices; c.5,000 in the Working Well programmes; 5,000 individuals in the Skills Support programmes for Young People, c.12,000 in Kickstart programmes.

Our Ambition for Ticketing - joined-up easier ticketing

Ambition for Ticketing

The Greater Manchester Transport Strategy 2040 sets out the benefits to customers of having a simple, integrated ticketing system that complements and enhances the integration of the Bee Network with London-style affordable fares:

We want people to be able to travel easily around the City Region, to move from one bus to another, or on to a tram, without having to buy another ticket, just tapping on and tapping off with a daily cap on what it will cost.

We are excited about the opportunities outlined by the National Bus Strategy to transform how customers access and pay for travel by bus. An attractive fares offer needs to be easily accessible to everyone without requiring customers to plan their travel in advance. We set out here our Ambition for Ticketing that will support our Ambition for Fares. Our plans for ticketing are closely aligned with the Government's vision for bus.

In the future we expect that contactless pay as you go ticketing will be the default for most bus users. Contactless 'ticketing' minimises the difficulty of paying for bus travel. PAYG means that customers don't need to commit in advance to buying a particular fare product, therefore removing barriers to travelling sustainably. A deduction is made from the customer's account to cover the cost of their travel.

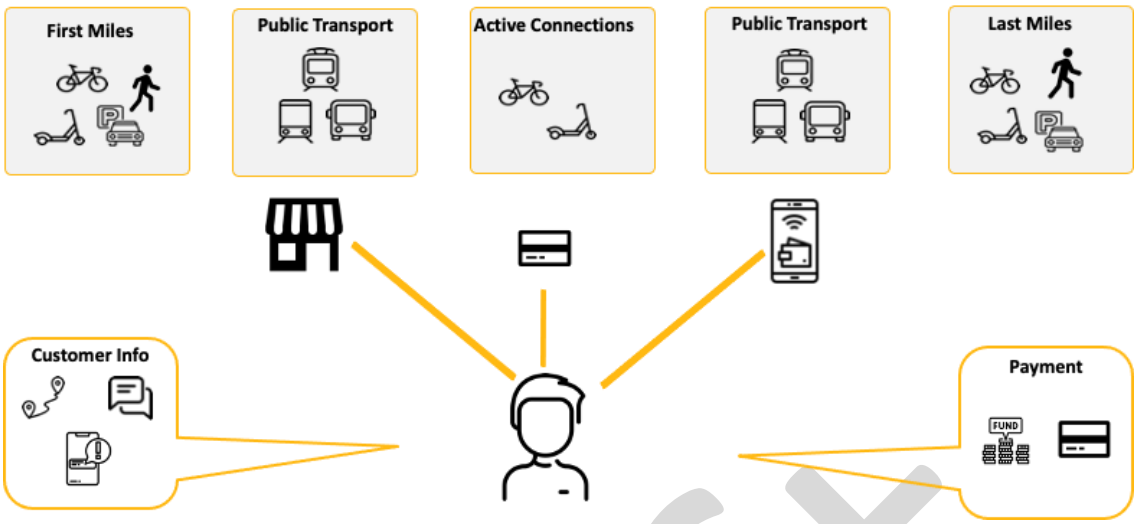
Account Based Ticketing

Account Based Ticketing will allow for the flexible benefits of Pay As You Go and capping to be extended to all customer groups including those who don't pay full fare or with a need to use cash, as described below.

We recognise that using contactless is not appropriate for all, including customers who do not pay full fare and those who need or prefer to manage their money differently. Our ambition is to extend the flexibility of Pay As You Go and capping to these groups. We believe that the convenience and value of capping should not be the preserve of customers who are able and willing to use a contactless payment method.

We plan an inclusive Account Based Ticketing approach that allows for those eligible for lower fares to register, for example, concessionary cards and manage account balances for travel. This capability will also allow for users with a preference for cash to access the benefits of flexible fares and capped charges across modes. These users may, for example, top-up their travel balance at convenience stores in a similar manner to Oyster users in London.

Account Based Ticketing will integrate with other services to bring the benefits of a 'Mobility as a Service' (MaaS) - see Section 5.2 'Customer Experience'. We will deliver a Mobility as a Service proposition that brings together multi-modal digital services that allow for customers to pay for access to travel alongside journey planning, real-time travel information and customer services. This will include the ability to purchase tickets and products and top-up Pay As You Go credit. It will provide a digital one-stop shop for many modes of transport including active travel and shared mobility modes.



Account Based Mobility will enable joined up access to transport services as well as personalised customer service and information. With a single account, integrated products and services can incentivise sustainable travel for all customers. These services will evolve with Bus Franchising and with ongoing integration opportunities.

Implementing the Ambition for Fares and Ticketing

Fares

We plan to roll-out bus franchising in Greater Manchester in three tranches during 2023 and 2024, with the process currently scheduled to be completed in 2025. We are targeting introduction of the Ambition for Fares for Tranche 1 from the start of the first franchises. In addition, we will work with commercial operators who continue to run services through the subsequent tranches to develop and build on the Recovery Fares proposition in place pre-franchising. Before the start of bus franchising, we aim to implement elements of the Fares Ambition that are feasible utilising existing delivery arrangements, specifically concessions for Apprentices and people returning to employment. It is also our intention to accelerate our half fare for children policy.

We will seek to engage Government as well as operators about how we can deliver the National Bus Strategy expectations and our BSIP ambitions in a manner that helps to provide a consistent offer for customers and patronage growth throughout the transitional period, within the constraints of competition law.

Ticketing

As set out above, we aim to introduce the Ambition for Fares at the time of implementation of the first tranche of franchising. However, with a phased approach to franchising, the Ambition for Ticketing customer proposition for Pay As You Go is best delivered when the majority of the network is under the same fares and ticketing model.

All buses in franchised areas will support contactless payment. From the commencement of franchised services, it will be possible to purchase travel on-board franchised services, providing convenient payment and reducing boarding times.

TfGM successfully introduced contactless Pay As You Go ticketing with capping on Metrolink in 2019. Around a third of customers who can benefit from day capping are now choosing this convenient method of accessing public transport.

With an established capping model in place for contactless users on Metrolink, recently extended to capping over a 7-day period, TfGM is well placed to leverage and build on existing technology and experience to deliver capping across modes.

As more of the bus network becomes franchised, from 2024, we will start to extend the existing Metrolink contactless Pay As You Go capping to bus such that customers will be able to benefit from day and week capping across Metrolink and bus. This consistent and convenient customer proposition will provide a London-like experience and incentivise sustainable travel and mode shift.

We aim to progressively extend capping to facilitate bus travel in combination with other modes, including cycle hire.

To facilitate the Ticketing Ambition and Account Based Mobility Services the specific deliverables include:

- Contactless services enabling retail and PAYG payment for travel;
- Account Based Ticketing back-office systems;
- Mobile App integrating Ticketing, Retail and Customer Information Services;
- Online digital services that provide a personalised retail and information service;
- Ticketing and information solutions at key locations and interchanges; and
- In-person and convenience store payment and retail capabilities.

Cross-boundary travel

There are substantial flows of bus trips between Greater Manchester and surrounding local authority areas, especially travel by residents of adjoining areas to destinations in Greater Manchester. We will work with neighbouring LTAs and operators of cross-boundary services that may sit outside the franchised network with the aim of extending the benefits of our Ambition for Fares and Ticketing to bus travel between Greater Manchester and the surrounding local authority areas. We will aim for a consistency of experience and value in order to promote the use of these services for commuting and leisure trips between Greater Manchester and surrounding areas. In addition, we will look for solutions to providing this consistency for Greater Manchester residents who make use of these services within Greater Manchester only to create a seamless experience within Greater Manchester itself.

The ability to meet these ambitions will require the support of operators and LTAs as well as significant funding to ensure that a consistent cross-boundary experience remains affordable. That includes funding support to provide attractive fares as well as technology to

support, for example, purchase of travel through contactless PAYG. We have developed options, but not developed specific plans, for cross-boundary fares and ticketing, and look forward to working with neighbouring local authorities and operators to extend the coverage of the Greater Manchester fares and ticketing offer.

Integrating Fares and Ticketing with National Rail

We are currently working with the rail industry in providing through-ticketing between Metrolink and National Rail services. We will look to leverage this experience in improving the through ticketing proposition. As a City Region with a number of major rail stations, we are very well placed to encourage use of Plus Bus through better use of technology.

As a result of ambitions set out in the Williams Shapps Plan for Rail, we see opportunities to use rail-fare simplification as an opportunity to develop a more joined-up fares and ticketing offer for customers and we would like to work with the rail industry to run a pilot of integrated fares and ticketing between bus, Metrolink, and National Rail, as a stepping-stone towards a more fully integrated fares and ticketing offer for travel to, from, and within Greater Manchester.

Revenue Protection

As part of the development of the Ambition for Fares and Ticketing and as we move towards a franchised bus service, GMCA will build up our revenue protection activity in order to protect the honest fare-paying customer and the public purse.

We will employ a team to manage all aspects of revenue leakage across the bus network including a visible presence of revenue inspectors. Similarly, we will invest in systems and data analytics capabilities to support insights that protect revenues and maintain a deterrent to fare avoidance and fraud. We will look to use innovative approaches to understanding ticketing data and fraud with an intelligence led operations.

GMCA would welcome government support with respect to contactless fraud scenarios. All operators are faced with challenges with the current contactless payment model for pre-pay products and transactions over the issuer liability limit of £10. A co-ordinated approach with the card scheme and issuing banks that better protects revenue where there are deliberate attempts at fraud would be productive in encouraging greater adoption of contactless payment technology. Similarly, collaboration between operators, finance bodies and solution providers could contribute to limiting operator exposure through quicker authorisation of transactions.

5.7 Bus Fleet

London in 2021:	**Greater Manchester in 2021:**
• Average age of a bus is **5.9 years** • **100%** of buses have full on-board audio-visual announcements. • **43.2%** of the fleet are hybrid vehicles, and **5.4%** are fully electric.	• Average age of a bus is **8.6 years** • About **5%** of buses have full on-board audio-visual announcements**.** • **13.4%** of the fleet are hybrid vehicles, and only **1.8%** are fully electric.

GM Ambition: "Introducing a full fleet of zero emission high quality buses within GM alongside associated support infrastructure by 2032, with 50% of the fleet to be zero emission by 2027."

The modern bus provides a high level of comfort and amenity for passengers. All vehicles in the Greater Manchester fleet are now fully accessible to wheelchair users and others who require step free access, and on board amenity of new vehicles is generally good. Operators are also investing to ensure passengers are provided with a clean, bright and comfortable environment in which to travel, and have introduced contactless payment systems in recent years to further increase the convenience of travel by bus. We will work with operators to maintain standards, share best practices and bring greater consistency across the system in Greater Manchester to ensure a consistently high level of on board amenity is provided.

We understand that customers are placing greater importance on vehicle cleanliness during the Covid 19 pandemic and will work with the operator community to better understand this heightened customer expectation and how best to respond to it.

Ongoing fleet renewal investments by operators coupled with Clean Air Plan related investments in the fleet will ensure that by the time the Clean Air Plan is implemented in Greater Manchester, very few buses will fall below the highest possible emission standards for diesel technology.

However, the world is moving at pace. Customer expectations are increasing whilst some important sections of the community remain at an unnecessary disadvantage when using bus. Our BSIP is consistent with the national pledge to improve accessibility of the bus system by accelerating the roll out of on board audio-visual information across the fleet by 2025. In addition, there is also a pressing need to decarbonise the economy rapidly. Buses with zero tailpipe emissions are now in successful daily operation in Greater Manchester and elsewhere, and our BSIP contains ambitious plans to accelerate the deployment of zero emission technology.

Our Plan to Decarbonise the Fleet – Technology

The DfT has committed to delivering a "Green Bus Revolution". They have put in place the first stage of a programme of reform to the Bus Service Operators Grant to increase the financial incentive for investing in Zero Emission Buses (ZEBs), and they have pledged to provide direct support to deliver the first 4,000 ZEBs in the UK fleet.

Greater Manchester has already benefited from some of these programmes. Over 30 Zero Emission Battery Electric Buses have been successfully deployed by Stagecoach on Routes 43 and 111 since February 2020.

These buses were delivered through investment by Stagecoach alongside funding support from the DfT through the Ultra Low Emission Bus fund. Further monies from this fund will support the conversion of buses used on the Vantage BRT group of services. The GMCA has also made a compelling submission to the "Zero Emission Bus Regional Areas" fund and are hopeful that funding will be made available for an exciting project to create a fully Zero Emission "Bus Depot of the Future" in Stockport, ensuring that by 2025, Stockport would become one of the first Zero Emission Bus towns in the country.

However, we know that we need to do more. Based on the number of Zero Emission Buses (ZEBs) deployed in Greater Manchester in the calendar years 2020 and 2021, and at the current rate of roll out it would take 100 years to transition the Greater Manchester bus fleet to zero emission technology. The Greater Manchester 5 Year Environment Plan which was published in 2019 however has set out a priority action to deliver a Zero Emission bus fleet by 2035 in the context of Greater Manchester becoming "Carbon Neutral" by 2038.

More recently, we have analysed the scale of the Greater Manchester Transport sector carbon challenge. It is clear that the actions set out in the 5 Year Environment Plan, whilst challenging to deliver in themselves, do not go far enough to achieve a "Carbon Neutral" transport system by 2038. There is therefore a clear need to explore ways to accelerate efforts to decarbonise the transport sector in Greater Manchester. The same can be said for every other part of the UK.

Bus can play a significant role in accelerating the reduction in Green House Gas emissions. Full electrification of the bus fleets by 2032 would reduce carbon emissions from the bus fleets in Greater Manchester by approximately 1.1MtCO2e. The heavy utilisation of the typical bus in terms of miles travelled per year and the high average occupancy relative to car means that investment to decarbonise the bus fleet is therefore extremely cost effective.

We have discussed the technology options with bus operators and the majority support electrification of the fleet over the use of hydrogen for reasons of cost and vehicle reliability. Furthermore, depot charging rather than off depot "opportunity" charging is preferred for reasons of cost and scheduling efficiency. As battery electric bus technology matures, range anxiety problems are virtually eliminated and our analysis suggests that it will be possible to convert diesel to electric on a "one for one" basis.

Whilst we remain open to considering the potential for hydrogen to fuel our Greater Manchester Zero Emission Bus fleet of the future, our current plans are based upon the deployment of battery electric buses because they are currently more cost effective with proven "in service" reliability.

Finally, we have explored the potential to repower existing vehicles to reduce the capital costs of transition to Zero Emission Buses (ZEBs) and to reduce the embodied carbon penalty associated with retiring diesel vehicles early. At the current time there are no suitable cost effective and credible solutions available to us but we will continue to explore the potential to replace diesel engines with electric motors as a cost effective way to convert late model diesel vehicles that in all other respects meet modern passengers needs very well.

Our Plan to Decarbonise the Fleet - Phasing

The immediate pipeline for the deployment of Zero Emission Buses includes plans for 25 ZEBs that will run on the Vantage group of services and ZEBs that will convert all services run from Stockport bus depot in the period 2023 to 2025. To date funding has been secured for the Vantage buses and we await to hear the outcome of our bid submission for the Stockport proposals from Government.

Our route by route deployment plans beyond these immediate proposals will be based upon the following prioritisation criteria:

- Quality Bus Corridors;
- Routes with the highest passenger utilisation per vehicle per year; and
- Local environmental and operational impacts.

We are working with both Electricity North West Ltd (ENWL) and the operator community to ensure our proposals contained in this BSIP are shaped by those key partners and have their support.

Overall, the rate of deployment will depend on the scale of funding available. Our BSIP ambition suggests Zero Emission Buses will enter the fleet at the rate of approximately 150 buses per annum. This level of ambition will require funding support as outlined below and also cooperation from the industry supply chain.

Our Plan to Decarbonise the Fleet - Scale

Our BSIP ambition is to electrify approximately 50% of the current Greater Manchester fleet by 2027 as part of a progression to full electrification by 2032. Furthermore, the plans to develop our network of services and deliver our fares ambition, which will generate additional customer demand, are forecast to require an additional peak vehicle requirement of 330 buses. In addition, we plan to transition the currently aging Greater Manchester Ring and Ride fleet to zero emission technology by 2027. This network provides an essential lifeline for many of the most vulnerable in our community.

The funding requirement, set out in Section 6, represents the incremental cost of electrifying 50% of the existing fleet by 2027; the full cost of an electric fleet to meet additional peak vehicle requirement of 330 buses; and the costs for incremental depot space to accommodate both the electrification of the existing bus fleet and the additional fleet. Our CRSTS proposals include complementary funding (£25 million) for Electric Vehicle charging infrastructure.

Our Plan to Improve the Customer Experience Through Fleet Investment

The electrification of the bus fleet will deliver significant passenger benefits in terms of a smoother and quieter ride. In addition, we will progress the implementation of enhanced audio visual equipment to improve onboard passenger information. This retrofit programme could be achieved within 18 months.

To support passenger confidence and demand management and ensure customers can be fully informed regarding their expected journey experience we also plan to invest in passenger counting technology on buses in order to collect and publish this information to customers in a consistent way through several channels.

5.8 Network Management

London in 2021:	**Greater Manchester in 2021:**
Moving traffic offences devolved to L/A's and enforced through on bus cameras. Lane Rental operates on 69% of TfL network encouraging reduced highway occupancy by work promotors.	Moving traffic offences enforced by the police Greater Manchester Road Activity Permit Scheme (GMRAPS) operates across the 10 highway authorities. Limited deterrent for works promotors to reduce duration of activity.

GM Ambition: "Network Management … prioritising bus passenger journey times and reliability consistently across Greater Manchester"

Managing the highway network throughout Greater Manchester is challenging given the need to balance local and strategic priorities within each of the ten Local Highway Authorities. Overall, however collaboration across the Region in relation to: Highway maintenance; Development Management; Road Safety; and Network Management has worked well over a number of years. We now however need to focus on how we realise the benefits of investment in active travel and public transport with the aim of providing a consistent set of outcomes such as journey times and reliability for passengers, which requires consistency in delivery and network management interventions across the Region. Examples of network management tools include those highlighted in Appendix B.

Response to Department for Transport's (DfT) Key Route Network (KRN) Consultation

The DfT has consulted on the Government's intentions to provide similar powers for Mayoral Combined Authorities over KRNs, similar to those in London over the TfL Road Network. The Greater Manchester response to the consultation sets out the current approach to the management of the KRN in Greater Manchester and indicates how Government could support GMCA and the ten local highway authorities to maximise the impact of the KRN on our priorities for decarbonisation and levelling up through the Greater Manchester's integrated transport vision.

It is recognised that Greater Manchester has undertaken significant development of the City Region's transport policy framework since the establishment of the KRN. This includes the development of the Streets for All Strategy and the forthcoming roll-out of bus franchising. There is a commitment to reinforce the strong foundations already established and review KRN management arrangements with an aim of securing:

- Consistent standards across the KRN in terms of public transport/active travel priorities, traffic speed, asset management and other highways measures, informed by local priorities and the place-based framework provided by the Streets for All Strategy;
- Whole corridor solutions and management/parking policies that ensure a consistent offer for those travelling across local authority boundaries, particularly bus passengers, cyclists and pedestrians;
- Continuous improvement in the management of road activity permitting, GMRAPS, ensuring consistent deployment of the permitting of works to support better, more responsive network management, minimising disruption to bus and stricter controls on permitting on high frequency bus corridors;
- Efficient and effective delivery of the Greater Manchester highways capital programme, to safeguard Greater Manchester's high reputation for programme delivery and to realise the outcomes of Greater Manchester investment priorities at the earliest opportunity in the interests of residents, the economy and the environment; and
- A shared plan for the introduction of powers to enforce moving traffic offences, such as banned turns and stopping illegally in box junctions.

Roadworks

Roadworks are one of the biggest daily challenges and unknowns bus operators face to running punctual and reliable bus services. Roadworks can result in major operational problems for service providers which erode customer confidence in buses turning up or arriving on-time. The effect of works can often be 'felt' way beyond the immediate proximity of a works site. Greater Manchester already operates a number of initiatives to assist bus operators and, ultimately, customers and as part of our BSIP we propose to enhance the existing tools used to managed works activities through the following additional measures:

Greater Manchester Road Activity Permit Scheme (GMRAPS)

GMRAPS is a system where promoters of roadworks, usually utility companies and local highway authorities, apply for a permit to 'reserve' road space to undertake their activities. TfGM administer the scheme and monitor performance however the 10 Greater Manchester highway authorities co-ordinate the works and solely have the responsibility to approve and challenge permits. Authorities can also attach conditions to individual permits e.g. controls of when the work is carried out and what type of traffic control should be used.

The KRN carries approximately 64% of peak A and B road traffic, and congestion caused by roadworks accounts for approximately 62% of overall delay on these roads. To minimise congestion local authorities prioritise their resources to manage and co-ordinate roadwork activities on these busiest routes during the busiest times focussing on the type of traffic management that will cause the least overall impact and for the least amount of time.

Bus operators in the region currently have access to daily information in relation to the activities that will directly impact on a particular bus service and route. This gives some indication that there will be an impact on a service and appropriate mitigation can be taken by the operator. However, a bus service may travel into a number of different Greater Manchester local authority areas and, whilst there may a level of cross boundary co-ordination of works, services may be severely disrupted by numerous activities along a particular corridor. We are therefore working to develop a notification on the streetworks co-ordination software, through a 'clash analysis tool' to highlight when multiple works (including cross boundary works) could potentially affect the same bus service. This will mean highway authority 'works approvers' are better informed assisting them in their Network Management Duties and ultimately enabling us to provide a better bus service for customers. Development is in the early trial stages and it is hoped the trial corridor can be implemented by the end of 2021. The project will improve co-ordination of roadworks that have a severe detrimental impact on bus services.

Lane Rental

There is an ambition within the region to introduce a Lane Rental scheme, focusing on the most traffic sensitive areas of the network, that will introduce a financial incentive for promoters of works, subject to agreement from all ten Greater Manchester authorities, to:

- Reduce the length of time that sites are unoccupied;
- Improve the planning and co-ordination of works;
- Carry out more works outside of peak times and reopening at busy times;
- Increase the number of workforce on site at any one time; and
- Complete works to the right standard first time.

Roadworks Charter

To reduce the impact of roadworks on bus services and other road users, Greater Manchester is currently developing a Roadworks Charter. This will include a series of

principles and targets which (through collaborative working) will ensure roadworks are carried out as efficiently and safely as possible, keeping disruption to a minimum and supporting sustainable travel modes. The Charter will include:

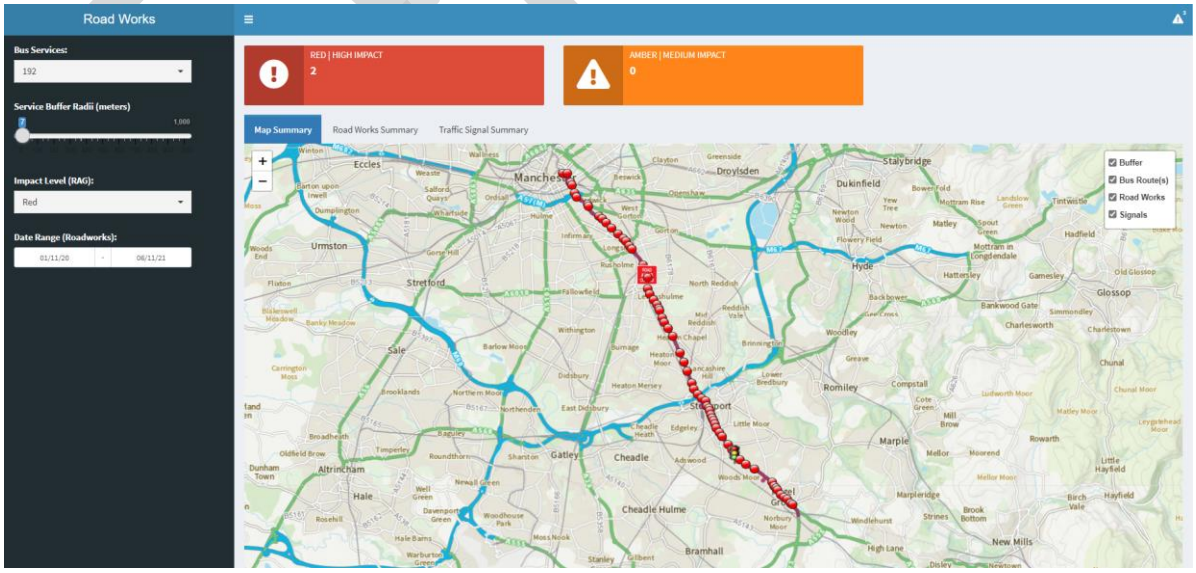
- Planning of works - Commit to sharing forward plans to improve collaboration and information to road users;
- During works - Reduce overall duration and disruption to road users during peak periods and commitments regarding provisions for pedestrians, cyclists, people with disabilities, users of mobility scooters and bus operators / passengers during works; and
- Post-works – Improved failed inspections and safety related response times.

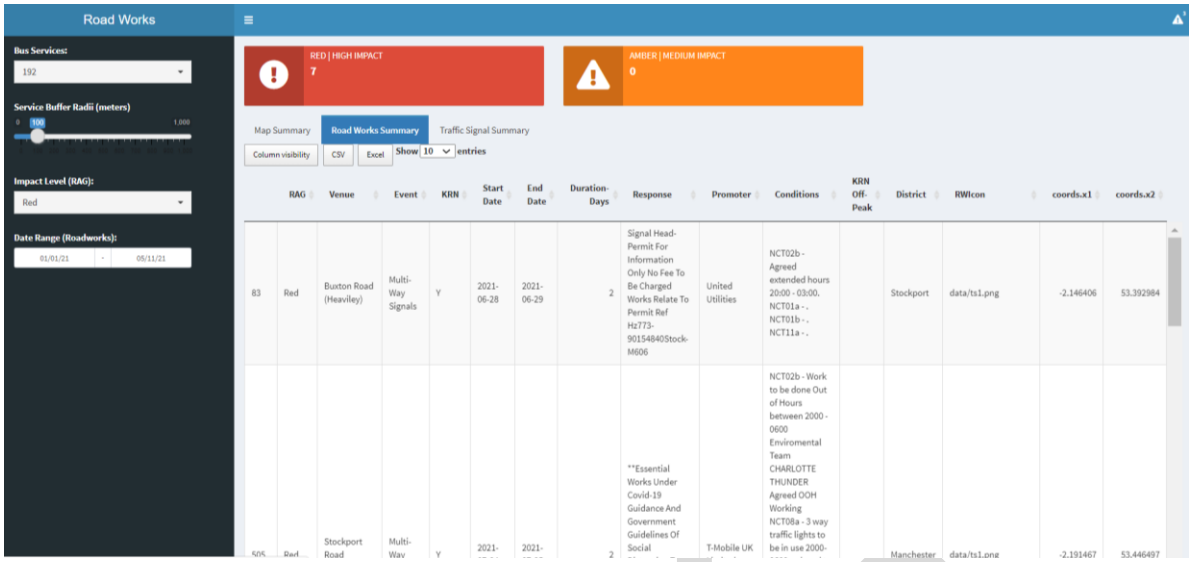
Greater Manchester's bus operators are a key partner in the Charter. It is envisaged that 'signatories' will be the 10 Greater Manchester highway authorities and key utility companies.

Bus Operator Roadwork Viewer

This tool complements roadworks information provided on the GMRAPS public website (https://www.gmroadworks.org/). To assist bus operators in managing the impact of roadworks, we have developed an automated bus operator roadworks notification tool. This tool provides individual bus operators with registered works affecting their individual bus services that is automatically generated daily.

To assist operators, allow for better planning of bus services post franchising and a commitment as part of our BSIP we are currently developing an interactive web based system to allow a more user friendly and visual experience exclusively usable for bus operators to allow an enhanced forward view of up and coming works by bus service. Examples from the beta version are outlined shown below:





Enforcement of Traffic Offences

Parking and loading on the highway in contravention of waiting and loading restrictions can be unsafe but also disruptive to the passage of traffic due to the restriction in carriageway width. This reduction in available carriageway space can be more disruptive for larger vehicles such as freight and buses. The unplanned delays caused by such parking often have a detrimental impact on bus services journey time and reliability. We will work together to ensure that the key routes and bus corridors are monitored by CCTV and Civil Enforcement Officer patrols to support local bus services and deter disruptive parking. We will fund additional Civil Enforcement officers in each of the ten Greater Manchester areas who will ensure waiting and loading restrictions on busy bus corridors remain free from obstructive vehicles through regular patrols and, if necessary, issuing of Penalty Charge Notices for vehicles parked in contravention.

All ten local highway authorities in Greater Manchester have decriminalised parking enforcement powers and several authorities currently have decriminalised bus lane enforcement powers. However, only Greater Manchester Police currently have powers to enforce moving traffic offences (e.g. yellow box junctions, making banned right turns), which they do in addition to enforcing road safety offences such as speed, drink and drug driving, seat belt wearing, mobile phone use and red light running. This means that they are not always able to give a high priority to moving traffic offences, which can affect network efficiency and safety.

Evaluation work undertaken considered a range of intervention types and improvements schemes to improve overall traffic flow. This found that enforcement related schemes, including enforcement of existing Traffic Regulation Orders relating to parking and loading, were highly effective in terms of reducing congestion – these types of measures offered the highest level of value for money of all the intervention types considered. Additionally, monitoring of 10 yellow box junctions within Manchester City Centre identified over 15,000

contraventions that led to a loss of highway capacity and further delay on the network in a single day impacting overall reliability and increasing journey times.

Greater Manchester would like to take on moving traffic offence powers from 2022 which will provide a key tool to help tackle congestion and improve bus passenger journey time reliability across the network. Greater Manchester has submitted an expression of interest to take on these powers once available.

Innovation and Technology

The improved operation of the bus fleet requires improved methods of managing the road network. This will enable the road network to be managed more effectively for all road users – pedestrians, cyclists, private vehicles, goods vehicles, trams, taxis, buses etc. All these users of the transport network are often competing for time and space and effective management means maximising the benefits for some targeted users whilst minimising the disbenefits for the other users of the network.

With improved and enhanced methods for managing the road network it is possible to provide a policy led approach whereby priority can be enabled based on the particular need on each transport corridor by time of day. This could mean that bus priority is targeted during the morning peak period with large numbers of buses where bus delays are minimised at the expense of general traffic – and as the day progresses pedestrian movement could be prioritised.

We currently use a wide range of new technology to manage the highway network to benefit buses (minimising delays) including:

- Operator AVL and mobile phone data – To identify delays and locations where highway interventions are required.
- Rapid deployable cameras – To allow for network intelligence and allow live traffic signal timing changes.
- Intelligent temporary traffic signals – Used to allow temporary traffic signals to be linked to TfGM's Control Room / traffic signal systems. Ensuring the most efficient use of reduced highway capacity.
- Late running signal priority for buses - Used at a number of locations to extend the green time on services that are running late. On bus GPS locators detect the position of the bus and determines if the service is running late. If late, the device will communicate with the traffic signals along the route to extend green time so that the service can catch up lost time.
- It is the intention to deploy bus priority across Greater Manchester at a scale similar to the current TfL bus priority operation
- Having a bus priority system that can host all AVL data and be integrated to TfGM's current traffic management systems will benefit bus journey time reliability, customer experience and customer information

We are trialling **future traffic control methods** using Artificial Intelligence Based traffic control systems in Salford and Manchester – these are two research projects funded by Innovate UK and the Department for Media, Culture and Sport. The aim of these projects is to introduce more sophisticated and faster traffic control methods that can be targeted to provide priority for different modes of transport – including buses, walking and cycling as well as general traffic – across a whole transport corridor and road network, not just at a specific junction.

The key to managing the road network efficiently is to have a live view of as much of the network as possible – this includes the traditional CCTV but is increasingly data-led and automated – the aim is to use technology to automatically identify problems on the road network, provide operational metrics of the road network and use artificial intelligence to automatically resolve problems. These are provided by an increasingly wide range of sources from traffic counters, Bluetooth journey time sensors, CCTV image recognition, mobile phone data and in-vehicle monitoring using GPS. TfGM is continually investigating and looking at new means of obtaining more information from a wider range of sources.

Case Study: Smart Junctions

The Smart Junctions project is an innovative collaboration to deploy smart sensors across a number of road traffic junctions in Greater Manchester. These smart sensors can provide real time data on a number of metrics providing detailed information on journey times and delays. There is the ability to detect a wider range of vehicle types over traditional detection methods. This allows traffic signals to safely adapt traffic signal phasing in response to traffic conditions or to implement longer term signal optimisation objectives.

The trial has been extended to use 5G small cell networks for communication between signals. This reduces detection installation costs and the need for disruptive engineering works. The expansion of this pilot will build on the investment made in the Local Full fibre Network which is providing high speed connectivity to over 700 traffic signals in Greater Manchester. In addition, the Smart Junction 5G project will provide a "connected corridor" for test and trial of future mobility systems and can benefit connectivity for bus priority and customer information. If the Smart Junctions 5G trial is proven to deliver benefits in terms of carbon reduction and improvements in air quality, journey time and reliability then we will seek to develop a business case for the roll out of this technology on a wider scale.

5.9 Impacts of Our Ambition for Bus Patronage

We have estimated that, our BSIP interventions and ambition will achieve our target of 30% increase in bus travel by 2030 from its post-Covid level. This is wholly dependent on securing the necessary funding and agreeing appropriate delivery mechanisms with both Government and Operators, particularly in order to deliver our short term patronage ambitions.

Figure 5.8 illustrates the estimated effects of our BSIP interventions on bus patronage between 2022 and 2030.

Figure 5.8: Estimated patronage changes from our BSIP Interventions compared with 'Business as usual'

Estimated change	Year ending March (Millions of Trips)									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	TOTAL
Increase in bus patronage (millions of trips)	0.0	1.5	8.0	17.7	29.1	38.6	43.2	46.5	49.0	**233.6**

6 Delivery

6.1 Our Bus Ask - Commitments

Figure 6.1 below sets out: what we plan to deliver in the first 12 months from April 2022; what we plan to deliver within three years (to March 2025) and a summary of our longer term commitments beyond 3 years, as part of our BSIP. The commitments will be reviewed annually with further measures and proposals developed and implemented in response to any new opportunities or funding that arise and in order to respond to the changing environment as recovery from the Covid-19 Pandemic progresses. The associated indicative funding requirements to deliver the commitments below are set out in Figure 6.3. The deliverables below are based on the current timeline for franchising which assumes, subject to the outcome of the Judicial Review that franchising will be delivered in area 1 – Wigan and Bolton within the first 12 months of the BSIP and that by March 2025 all areas of Greater Manchester will be franchised.

Figure 6.1: Greater Manchester BSIP Commitments

BSIP Theme	Within 12 Months from April 2022 we will deliver:	Within 3 years (by March 2025) we will deliver:	Beyond 3 years we will deliver:
Customer Experience	• Improved safety (and customer perceptions of safety) across our bus network, including provision of 40 extra Travelsafe officers. • Trained staff to support to adoption of 'Safe Places'. • Services designed by turning customer needs and insight into action. • A Customer Charter that sets out what customers can expect from	• A customer focused approach to grow patronage, loyalty and trust. • Up to 95 extra TravelSafe officers to cover the bus network and ensure a proactive and targeted response to incidents. • A real time public reporting system for incidents and feelings of safety. • A contact centre as the single point of contact for customers.	• Enhance the customer experience across all 7 BSIP themes, with a focus on integration with the wider transport network. • A safer bus network to encourage growth in patronage. • TravelSafe Officers providing a trusted and reassuring presence across the network.

BSIP Theme	Within 12 Months from April 2022 we will deliver:	Within 3 years (by March 2025) we will deliver:	Beyond 3 years we will deliver:
	bus travel across Greater Manchester.	• A consistent look and feel, of the Bee Network for customers travelling around Greater Manchester.	
Services	• Maintain and stabilise the current network of services such that there are no commercial service de-registrations from April 2022 as a result of operators determining current services are no longer profitable. • Initial improvements to evening and Sunday daytime frequencies, starting with existing key radial services into the Regional Centre and key orbital routes.	• Further enhanced evening and Sunday daytime frequencies on key routes. • Enhanced daytime frequencies to 'turn up and go' services on up-to 70 key routes with a particular focus on linking our key towns and district centres. • 24-hour services across 15 to 20 routes to support the night time economy; • Enhanced local connectivity in all Greater Manchester Local Authority Areas, including DRT and 'socially necessary' transport; • Improved scheduling & booking systems for DRT.	• 65% of population inside M60, or near a key town centre, within 400m of 10-min* weekday daytime bus/Metrolink service (7am-7pm). • 60% of GM population within 400m of 10-min* weekday daytime bus/Metrolink service (7am-7pm) and 20-min* weekday evening (7pm-11pm). • 65% of GM population within 400m of 20-min* of a Sunday daytime bus/Metrolink service (11am-6pm). • 90% of GM population within 400m of 30-min* weekday daytime bus/Metrolink service (7am-7pm). • New express services to areas unserved by rail or Metrolink on 3-4 corridors. *average frequency (or better)

BSIP Theme	Within 12 Months from April 2022 we will deliver:	Within 3 years (by March 2025) we will deliver:	Beyond 3 years we will deliver:
Infrastructure	• A programme of bus "Pinch Point" improvements to be delivered on key bus routes in and across the City Region, that will tackle localised issues on the highway which are causing delays to bus journeys. (Funded by CRSTS)	• A new integrated interchange facility within Stockport town centre. (funded out with of BSIP and CRSTS) • A new Travel Hub, including Park & Ride, at Tyldesley to support the existing Guided Busway services. (Funded by CRSTS) • Options for new bus rapid transit links for longer and middle-distance journeys across the City Region, for example focussing on connections to and from Manchester Airport from the east and west, will be explored. (Funded by CRSTS)	• A new interchange facility within Bury Town Centre. (Funded by CRSTS) • Phase 1 of Quality Bus Transit and Bus Corridor Upgrade schemes by 2027, comprising around 50km of bus network improvements between key destinations in the City Region. (Funded by CRSTS) • Up to 2,000 more accessible stops by 2027 through measures such as raised kerbs and places to rest while waiting. (Funded by CRSTS)
Information	• Improved and integrated disruption information for customers to help them navigate the Bee Network seamlessly. • Real time bus departures and map based live bus location information so that customers have up to date information on their bus services, giving them confidence to travel. • We will introduce improved printed timetable formats.	• Accessibility information for customers for end to end journeys. • Real time information on the level of occupancy / crowding of individual bus services so customers can make informed choices about the best times to travel – on the basis of technology fitted to the bus fleet. • New ways for customers to find travel information including: an integrated mobile App (see section 5.6), an	• Reprioritised and redesigned information provision at all c 11,500 bus stops in Greater Manchester considering how we provide information in real time. .

BSIP Theme	Within 12 Months from April 2022 we will deliver:	Within 3 years (by March 2025) we will deliver:	Beyond 3 years we will deliver:
		improved website and digital displays at key bus stops.	
Fares & Ticketing	• A London-style Hopper flat fare for single trips (franchising area Tranche 1 – Wigan and Bolton), (as in London) to permit a change of bus within one hour of the start of the trip; • Acceleration of the Child flat fare ahead of the first franchise. • Introduction of an offer to support Apprenticeships and Job seekers. • Make improvements across our ticketing channels, including mobile app and online retail.	• Extension of the London style offering to introduce the flat fare across all areas of Greater Manchester. • Bus and multimodal (Bus and Tram) integrated ticketing, (including capping) across the network. • Evolution of Account Based Ticketing to integrate Bus, Tram and other modes that will also see the integration of a number of our customer services. • Enhanced integrated retail channels, including contactless, app, online and in person retail. Providing a joined up and inclusive proposition for all • Development of new revenue protection methods and an enhanced Fraud Management approach.	• Extension of the Account based Mobility Services offer to enable customers to plan, book and pay for journeys across modes, providing a joined up proposition with information that will deliver an enhanced customer journey in line with the customer charter.
Fleet	• Commence the retrofit of existing buses with audio visual announcements and passenger counting systems	• All fleet fitted with audio visual announcements and passenger counting systems. • Up to 450 new electric buses into service, to replace mainstream fleet.	• Deliver total of c.800 electric buses into service representing 50% of Greater Manchester's mainstream fleet and 100% of the Ring and Ride fleet by March 2027.

BSIP Theme	Within 12 Months from April 2022 we will deliver:	Within 3 years (by March 2025) we will deliver:	Beyond 3 years we will deliver:
		• Expansion of the zero emission fleet by approximately 175 vehicles to facilitate network enhancements and fares reduction and associated growth in patronage.	• Expand the fleet by approximately 330 vehicles in total to facilitate network enhancements and fares reductions and associated growth in patronage.
Network Management	• A trial roadworks clash monitoring tool on a pilot corridor. • Greater scrutiny of road works activities along the Key Route Network and high frequency bus corridors. • Enforcement of moving traffic offences within Greater Manchester on receipt of additional powers from Government. • A Bus Operator Roadworks Viewer. • A Greater Manchester Roadworks Charter. • Additional Civil Enforcement Officers to control parking and loading contraventions on busy bus corridors.	• Lane Rental on the Key Route Network to ensure a behavioural change by road works promotors therefore reducing the time it takes to deliver road works. • Bus priority measures at traffic signal junctions through the wider development of the 5G Smart Junctions programme. • Corridor wide network management interventions to benefit bus priority e.g. bus lanes, red routes and increased parking enforcement.	• Further corridor-wide network management interventions to benefit bus priority e.g. bus lanes, red routes and increased parking enforcement. • Late running bus traffic signal priority at all Split Cycle Offset Optimisation Technique (SCOOT) controlled junctions within Greater Manchester. • New technology to benefit network management and associated bus priority.

6.2 Our Bus Ask – A Shared Endeavour

One of the core aims of the introduction of a franchised bus network is that this will give a greater level of control and influence to GMCA and TfGM in determining the bus network and its services, timetables, fares and ticketing and the overall quality of the passenger offer, which in turn will provide a strong foundation for us to improve the overall customer experience. This new set of arrangements will however only take us a part of the way to achieving our overall ambition to create a London-style transport network within Greater Manchester. Many different partners will have a role to play in helping us transform the bus network within Greater Manchester and key to achieving this aim will be for all partners to work together. The bodies responsible for delivering improvements to the bus network and bus passenger experience are:

Greater Manchester's 10 local authorities are the highway and traffic authorities with duties in law for the safety and maintenance of all local and major roads and for the flow of traffic (including buses) on those roads. They also have the powers to make improvements to the road network, including through the introduction of bus priority measures.

TfGM is responsible for oversight and performance but not the maintenance of major roads (the Key Route Network), all traffic signals, co-ordination of road safety and the provision of some bus services in areas and on routes where routes are not operated by commercial bus operators. TfGM also owns the Metrolink network, bus stops, bus stations and interchanges, and is responsible for the long term planning of improvements across Greater Manchester's transport network. Following the introduction of bus franchising the responsibility for the provision of the whole bus network would rest with TfGM on behalf of GMCA.

Greater Manchester Police is currently responsible for road policing and enforcement of moving traffic offences such as blocking yellow box junctions which has an impact on the reliability of bus services as well as policing law and order in the context of crime and anti-social behaviour across the transport network; and

Private sector companies, such as Arriva, First, Go North West, Stagecoach, Rotala and TransDev run the buses. They currently set routes, timetables and fares. Following the introduction of bus franchising private sector operators would still operate bus services but the key difference being that this would be in accordance with routes, timetables and fares set by GMCA and TfGM. National Highways manage the motorway and Strategic Road Network. The Metrolink network is run by KeolisAmey Metrolink on behalf of TfGM. Local rail services are run by Northern on behalf of the Government.

We also work closely with our neighbouring highway authorities and this relationship will remain vital in managing and delivering improvements to the bus network in Greater Manchester.

We have published our 2040 Transport Strategy and Delivery Plan which sets out a long term approach to developing a much more integrated transport system. You can find out

much more about the 2040 Strategy and Delivery plan online at the TfGM website: (Add weblink)

The tools to deliver

To achieve the ambitions set out in Greater Manchester's Bus Service Improvement Plan we have identified a set of improvements across a range of key themes. However, we cannot deliver the full range of measures without access to: the required funding (capital and revenue); the right set of legislative powers; cooperation and partnership working from across the transport sector; and support and collaboration from politicians, residents and organisations. This section sets out the important actions needed to ensure Greater Manchester can deliver the integrated London-style transport network its residents, businesses and visitors deserve.

Funding

Greater Manchester is already investing significant local funding into our plan for bringing the bus network back under local control. A summary of funding already committed by Greater Manchester to improve our bus network and bus offer for customers is provided below in Figure 6.2:

Figure 6.2 – Existing and Committed Local Funding

Funding Item	Committed Funding	Comments
Ongoing Our Pass Pilot	£16 million per annum to maintain the current Our Pass scheme	Currently a 'pilot' until end of August 2022
Concessionary Fares and Subsidised Bus Services	Up to £86.7 million per annum funded by a statutory charge on the ten Greater Manchester Local Authorities.	
Bus Franchising – Depots	£80 million local contribution from incremental Mayoral precept and future bus revenues	Committed local contribution to CRSTS
Bus Franchising	Incremental funding of £134.5 million to be invested up to 2025/26 in establishing a franchised network	

In order to deliver the key improvements and commitments included within our BSIP we have set out below in Figure 6.3 the indicative level of capital and revenue funding that would be required over the next 3 years, with a further indication as to what our ongoing financial requirements might be beyond 2024/25, with particular focus on ongoing revenue costs. It is recognised that this ask of Government is significant however we believe that no one else can guarantee the same level of public returns on this level of investment, given our unique position in relation to franchising.

Figure 6.3: Greater Manchester's Indicative Funding Requirement

Key Improvement Area	Indicative BSIP Funding Requirement (£m): revenue costs are the net of ongoing costs and estimated generated fares revenue (2021 prices)							
	22/23		23/24		24/25		25/26 to 29/30	
	Capital Costs	Revenue Costs	Capital Costs	Revenue Costs	Capital Costs	Revenue Costs	Capital Costs	Revenue Costs (per yr)
Network recovery and stabilisation	-	30	-	30	-	30	-	30
Fares and Ticketing (Net of generated revenue)	11	11	10	33	2	46		60
Services (Net of generated revenue)	-	11	-	30	-	51	-	71
Fleet*	20	-	135	-	115	-	270	-
Information	16	6	12	6	10	6	-	6
Customer Experience Capability	-	3	-	5	-	7	-	7
Network Management	2	1	2	1	2	1	-	1
TOTAL	49	62	159	105	129	141	270	175

**Note: Capital required to deliver 50% of EV Fleet by 2027 plus additional EV to accommodate demand from new services and fares reductions.*

The current Bus Recovery Grant funding is in place until April 2022, however, there will be a requirement over the next 3 years and beyond to support and stabilise the core network of services during the period of recovery from the Covid 19 Pandemic. To inform the financial requirements for maintaining network stability beyond April 2022, TfGM has undertaken qualitative and quantitative analysis to identify services in the network which are currently operated on a commercial basis but are deemed to be at risk if there is insufficient recovery in patronage and revenue. This analysis has taken account of the supply and demand characteristics of individual services and identified those for which rationalisation or withdrawal is most likely. Where potential withdrawal has been identified, estimates for ongoing revenue support of approximately £30 million per annum, in the form of bus recovery funding or an equivalent funding stream, have been calculated and are presented in Figure 6.3 above.

This estimate is necessarily based on a planning assumption of bus demand recovering to approximately 83% of pre covid levels, with the support of recovery funding, in 2022/23. The quantum of recovery funding to maintain the network is sensitive to the assumed recovery in patronage, for example a five-percentage point reduction in demand would

increase the net revenue support requirement to approximately £41 million per annum (an annual increase of approximately £11 million).The effects of Covid-19 are anticipated to persist, and as a result there is still forecast to be a continuing, underlying, impact on bus passenger demand in the period after 2024/25 resulting in an estimated ongoing funding requirement of approximately £30 million per annum.

The estimates for stabilisation of the bus network are also predicated on the continuing financial sustainability of Metrolink services as patronage recovers from the impact of Covid-19; a similar exercise and planning assumption for Metrolink indicates a revenue support requirement of c£38 million in 2022/23 which is not reflected in the estimates in the figure above.

In parallel to analysis of the commercial network, for its April 2022 tender round for supported bus services, TfGM is seeking a range of options for network efficiencies through the tendering process. This will seek to mitigate potential cost increases whilst maintaining network coverage, although it is unlikely that further efficiencies will reduce the ongoing stabilisation funding requirement.

Other key points to note about the indicative values in Figure 6.3 include:

- Total indicative capital spend between April 2022 and March 2025 is £337m.
- All values are in 2021 prices. GMCA note that bus related costs are experiencing inflationary pressures, particularly in relation to fuel and driver wages, which will affect a significant proportion of the costs in Figure 6.3 and hence will need to be reflected in the ongoing BSIP process.
- The costs of the BSIP package will be offset by generated fares revenue from the resulting additional bus travel. The indicative funding requirement for Fares and Ticketing and Services allow for that generated revenue, estimated through appropriate modelling, which reflects evidence on how patronage changes over time in response to improvements to the bus offer.
- Improved services will both improve the offer to customers and provide additional capacity to accommodate additional peak-period travel attracted by the other elements of the BSIP package. We have estimated that the BSIP package will nonetheless require an addition of approximately 60 vehicles to the peak vehicle requirement beyond that allowed for within the improvements to Services. The additional capital cost is included in Figure 6.3 within the capital cost under 'Fleet' and is expected to be needed in the late 2020s. The ongoing costs are included as a 'revenue' item within the net funding requirement for Fares and Ticketing, since it is the fares offer that is the main contributor to the additional peak vehicle requirement.
- The BSIP package will attract some trips to bus from the Metrolink light rail system, and the estimated loss of Metrolink fares revenue is allowed for within the net 'revenue costs' within 'Fares and Ticketing', 'Services', and 'Other fares revenue generated'. That cost is estimated at £3.5m for the year 2024-25, increasing to £13m by 2029-30.

Infrastructure:

In addition to the above we have requested £322 million of capital funding through our CRSTS submission to support the delivery of infrastructure improvements for additional bus priority, the resolution of highway pinchpoints which impact on bus journey times and reliability, a new interchange facility in Bury town centre and bus stop enhancements across Greater Manchester. Within all of these improvements, consideration will be given to how they will align to and interface with our extensive plan of proposals for Active Travel improvements.

The final element of bus funding requested from CRSTS will deliver depot electrification in support of the proposed new zero emission fleet that is included within our BSIP.

The pipeline above forms a first phase of bus interventions which are expected to be delivered over the period April 2022 to March 2027. In addition, longer term measures for further Quality Bus Transit Corridors, bus corridor upgrades and Bus Rapid Transit proposals will be developed over this timeframe in order that a longer term pipeline is in place in readiness for the next tranche of funding as and when this becomes available. These proposals form part of the wider Greater Manchester 2040 transport pipeline, as set out in the 2040 Delivery Plan (https://tfgm.com/our-five-year-transport-delivery-plan).

The proposals within the CRSTS submission have been developed through several years of strategic planning through a partnership between Transport for Greater Manchester and the ten Greater Manchester Local Authorities (as local Highway Authorities and promoters of local schemes). They represent the most deliverable and most impactful level of investment within the given funding envelope.

Local powers to support local delivery

With an elected and accountable Mayor of Greater Manchester now firmly in place and the powers received to start making a transformational change to Greater Manchester's bus network, we are in a stronger position to make the case for further devolution of powers from Central Government to take greater control of our transport network. These include devolving powers for moving traffic offences such as the blocking of yellow box junctions, which cause congestion and delays to bus services within our towns and cities and Lane Rental, to local authorities.

Cooperation of Partners

Improving the bus passenger experience and bus network in Greater Manchester will need commitment from all our partners and a fully coordinated approach, particularly between our local highway authorities, TfGM, transport operators and the emergency services. In addition, and as set out above, in order to deliver our ambition for a London-style transport network we will need Government commitment and support to ensure that we have the funding and powers in place to facilitate the delivery of Greater Manchester's Bus Service Improvement Plan.

6.3 How will we know we have delivered?

Reporting

Our success criteria, as described in Sections 3.4, 3.5, come from our Right Mix and Carbon Reduction targets and measuring progress against our customer facing GMTS 2040 Network Principles. As a subset of our existing strategic indicators, additional BSIP success measures will also be identified. We have existing programmes of performance data and customer satisfaction data that support these, and they will be enhanced over the course of this Plan to demonstrate the effectiveness of the BSIP interventions.

GMCA has already committed to comprehensive monitoring and evaluation of bus franchising, as part of the Devolution Deal. Given that franchising and this Plan's proposals are inextricably linked and measurements would come from the same sources, we propose to integrate the monitoring and evaluation of both whilst attempting to preserve, as far as possible, distinctly attributable findings.

Journey time, reliability, passenger numbers data will be readily available through business as usual (BAU) reporting. Mode split, and its separation into the Right Mix's Spatial Themes requires the continuance of GMTRADS. These will be corroborated by Greater Manchester's and DfT's network of traffic counters, cordon counts and mobile phone data. Customer experience data will be gathered through surveys such as Network Principles and 'Sales Funnel' (our customer categorisation), NHT as described in Sections 2 and 3. Once the full scope of interventions arising from franchising and this Plan is known, a complete monitoring and evaluation plan will be produced. As per government guidance, we will publicly report on targets every 6 months where possible.

Customers

The existing TfGM Insight Programme currently covers all-Greater Manchester population research at the following levels of detail and frequency and collects appropriate equality protected characteristic demographics:

Every 2 years:

- satisfaction overall and in detail at different stages of the journey measuring GMTS 2040 customer KPIs - frequent and infrequent user splits (telephone or face to face method: Network Principles)
- consumer segmentation, attitudes towards bus use, areas for improvement (Greater Manchester residents, telephone survey: Sales Funnel)

Annually: high level bus satisfaction ratings only – large samples at local authority level (postal method: NHT).

This can be built upon, along with 6-monthly reporting or if new approaches emerge (e.g. via Transport Focus), and supporting engagement activity, of key measurements of customer experience, to ensure regular monitoring of BSIP via more specific research of,

and engagement around, priorities such as information, fares. All of this information will provide valuable feedback towards the ongoing evolution of a Customer Charter.

Additionally, we will embed a principle of consultation with customers – and representative groups – through wider engagement activity and building on extensive prior consultation and engagement on the proposed bus franchising scheme (Section 2.4). This approach will proactively and systematically ensure we are listening to what different people face in terms of their access, experience and outcomes in relation to bus services, and support further work with partners to create solutions which address them.

DESTINATION:
BEE NETWORK

Bus Service Improvement Plan
Appendix A

Appendix A – Bus Network Fact Sheet

Table 1: Estimated monthly bus mileage and number of bus journeys

	Number of Bus Departures	Mileage (within Greater Manchester)	Mileage (Outside Greater Manchester)
Overall	**523,993**	**4,503,978**	**436,481**
Stagecoach Manchester	217,748	1,858,308	18,314
Diamond Bus	72,300	719,081	180
Go North West	53,094	537,578	5,867
First Manchester	47,140	438,285	5,642
Arriva	33,548	261,405	92,667
Transdev (inc Rosso)	34,820	207,717	129,782
Vision Bus	16,020	133,139	739
Others	49,323	348,465	183,291

Table 2: Bus miles per GM local authority (June 21)

Local Authority	Mileage (within GM)	%
Bolton	426,981	9.5%
Bury	290,353	6.4%
Manchester	1,190,261	26.4%
Oldham	295,906	6.6%
Rochdale	301,519	6.7%
Salford	550,716	12.2%
Stockport	381,614	8.5%
Tameside	306,711	6.8%
Trafford	335,014	7.4%
Wigan	424,902	9.4%
Overall	**4,503,978**	**100.0%**

Table 3: Service profile by operator (June 21)

	No. Services	%
Stagecoach Manchester	217	25.7%
Transdev (inc Rosso)	93	11.0%
Vision Bus	82	9.7%
Belle Vue Coaches	72	8.5%
R.S. Tyrer & Sons	59	7.0%
Diamond Bus	50	5.9%
First Manchester	39	4.6%
Others	233	27.6%

Table 4: Service Classification (June 21)

Service Type	Inside GM (miles)	Outside GM (miles)	Overall	%
Frequent Service[1]	1,116,230	0	1,116,230	22.6%
Schedule Service	3,375,639	436,448	3,812,087	77.2%
Night Service	12,109	33	12,142	0.2%
Overall	**4,503,978**	**436,481**	**4,940,459**	**100.0%**
1 - based on Individual service provision levels during 7am - 7pm period				

Table 5: Bus Network - Road Network Utilisation

Road Network	Length (KM)	Bus Service Utilisation
Key Route Network	918	84%
Primary Road Network	969	63%

Table 6: Interchange Departures (September 21)

Interchange/Station	Departures Per Month (Sept 21)			%
	Commercial	Subsidised	Overall	
Piccadilly Bus Station	130,002	12,420	142,422	17.5%
Bolton Interchange	73,538	10,344	83,882	10.3%
Stockport Bus Station[1]	50,778	8,958	59,736	7.3%
Ashton Interchange	41,026	10,248	51,274	6.3%
Bury Interchange	42,594	6,694	49,288	6.1%
Wigan Bus Station	40,880	7,636	48,516	6.0%
Shudehill Interchange	37,592	4,884	42,476	5.2%
Rochdale Interchange	29,902	7,316	37,218	4.6%
Oldham Central Bus Station	26,608	6,880	33,488	4.1%
Middleton Bus Station	27,736	5,346	33,082	4.1%
Trafford Centre Bus Station	26,488	5,138	31,626	3.9%
Leigh Bus Station	24,576	3,088	27,664	3.4%
Eccles Interchange	19,322	5,762	25,084	3.1%
Altrincham Interchange	12,834	8,304	21,138	2.6%
Oldham Mumps	18,455	2,128	20,583	2.5%
Wythenshawe Interchange	14,848	5,674	20,522	2.5%
Pendleton Town Centre	16,094	1,824	17,918	2.2%
Hyde Bus Station	14,718	3,010	17,728	2.2%
Manchester Airport Station	10,094	3,858	13,952	1.7%
Oldham West Street Bus Station	11,152	662	11,814	1.5%
Radcliffe Bus Station	6,438	1,592	8,030	1.0%
Farnworth Bus Station	2,958	3,636	6,594	0.8%
Southern Cemetery Bus Station	4,848	520	5,368	0.7%
Stalybridge Bus Station	3,100	1,484	4,584	0.6%
Chorlton Bus Station	18		18	0.0%
Overall	686,599	127,406	814,005	100.0%
[1] June-21				

Table 7: Public Transport Accessibility (June 21)

GM Accessibility Levels (GMAL)	Population (2019)	%
1 - Very Low Public Transport Accessibility	6,137	0.20%
2	138,640	4.80%
3	575,491	20.10%
4	726,379	25.30%
5	937,753	32.70%
6	297,465	10.40%
7	87,010	3.00%
8 - Very High Public Transport Accessibility	99,330	3.50%

Table 8: Bus Service Provision/ Population Accessibility (June 21)

Population Acorn Categories	Weekday (11:00 - 11:59) | <640m Bus Stop			Weekday (11:00 - 11:59) | <640m Bus Stop		
	2+ bph	4+ bph	6+ bph	2+ bph	4+ bph	6+ bph
Affluent Achievers	438,712	273,276	123,316	344,532	74,732	55,825
Rising Prosperity	122,909	104,582	73,959	109,629	63,643	46,852
Comfortable Communities	576,743	438,632	226,396	443,567	122,072	69,242
Financially Stretched	705,139	587,260	337,309	576,583	203,117	126,617
Urban Adversity	727,624	612,327	367,842	613,611	231,374	99,285
Non-Private Households	38,588	31,673	19,703	32,174	12,863	9,086
Overall	2,609,715	2,047,750	1,148,525	2,120,096	707,801	406,907
% GM Population (2020	92%	72%	41%	75%	25%	14%

Table 9: Dedicated Bus Priority Length By Local Authority

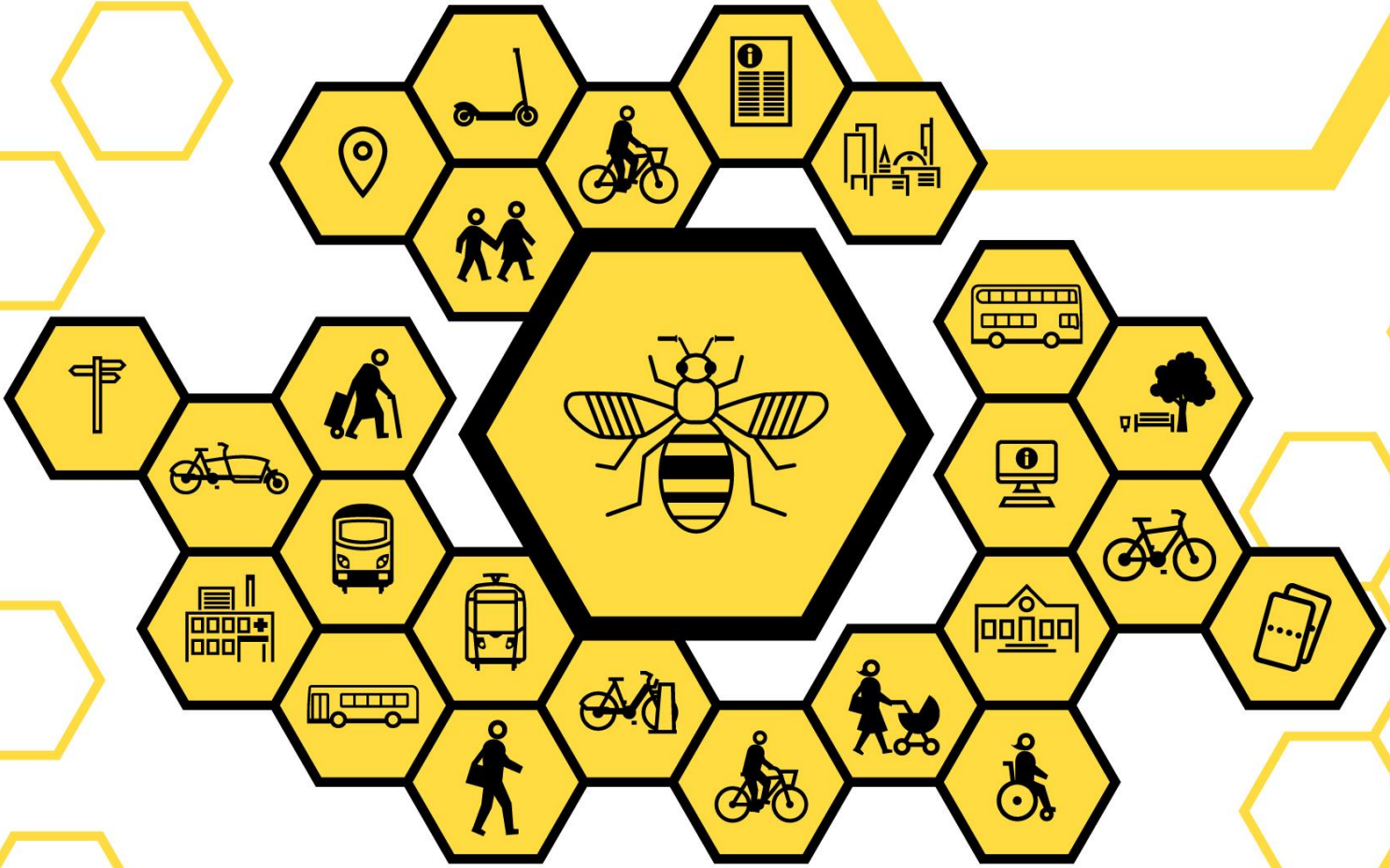
Local Authority	Total Length of Bus Lanes (Metres)	Length of Proposed Bus Lanes (Metres) - Committed Scheme Exclusive of BSIP Proposals
Bolton	5256	
Bury	1949	-
Manchester	16345	-
Oldham	3351	-
Rochdale	2119	-
Salford	13811	1200
Stockport	4992	-
Tameside	2063	-
Trafford	2244	-
Wigan	2859	-
Total	**55345**	**1200**

Table 10: Current Supported Bus Services Budget

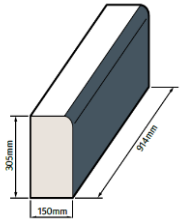
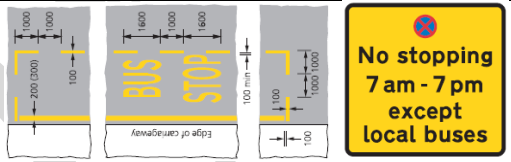
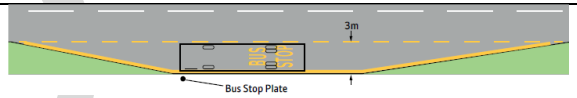
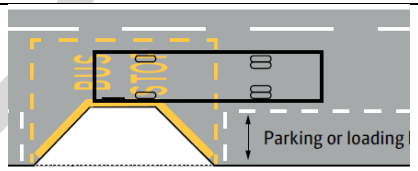
	Budget 2021/22 (£000s)
General Network	
General Bus Services	26,468
Local Link	2,367
Sub-Total General Network	28,835
Schools Services	14,447
Gross Spend – Subsidised Services	**43,282**
Subsidised Services income	**12,234**
Net Cost - Subsidised Services	**31,048**
Accessible Transport – Ring and Ride Grant	**3,700**

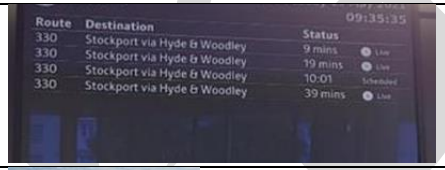
DESTINATION:
BEE NETWORK

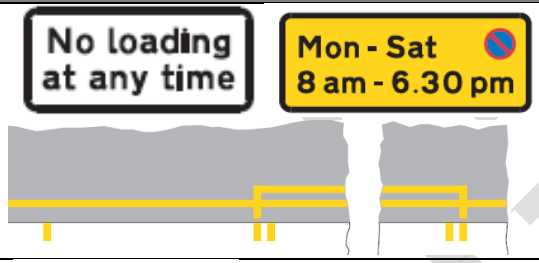
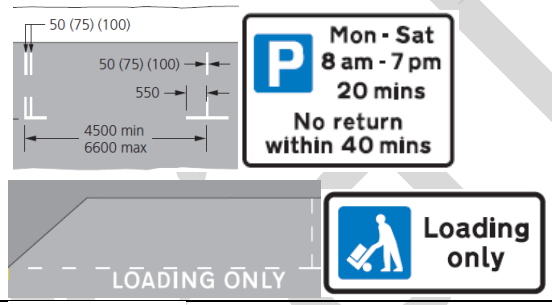
Bus Service Improvement Plan
Appendix B



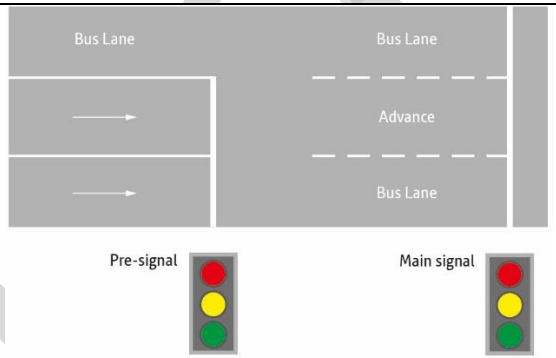
Appendix B – Typical Traffic Management Measures by Greater Manchester Bus Programme Type

Intervention			Example / Image	Greater Manchester Programme Type				
Type	Measure	Description		Bus Rapid Transit	Quality Bus Transit	Busy Bus Corridor	Pinch-Point	GM-Wide (Area Type Initiatives)
Bus stops	New or relocated bus stop	New or relocated stop to improve accessibility to the bus network		✓	✓	✓	✓	✓
	Raised kerb	Raised kerb installed to the Greater Manchester standard (160mm), to improve access / egress to buses and speed up boarding / alighting times		✓	✓	✓	✓	✓
	Clearway marking / sign	To ensure bus stops are clear of vehicles other than buses, allowing buses to dock against the kerbside ensuring access to the bus network for all and speeding up boarding times		✓	✓	✓	✓	✓
	Removal of bus stops layby	Lay-by removal to speed up buses re-entering the main flow of traffic when leaving a bus stop		✓	✓	✓	✓	✓
	Footway buildout (Boarder)	Buildout of footway at bus stop to allow access / egress to buses and maintain parking / loading, by minimising the space required for the stop		✓	✓	✓	✓	✓

Intervention			Example / Image	Greater Manchester Programme Type				
Type	Measure	Description		Bus Rapid Transit	Quality Bus Transit	Busy Bus Corridor	Pinch-Point	GM-Wide (Area Type Initiatives)
	Shelters	To provide protection for poor weather conditions (must meet Greater Manchester's minimum of 40 passengers criteria over a 12 hour period)		✓	✓	✓	✓	✓
	Access to bus stops	Improvements to footways, crossing points and cycle facilities to access bus stops		✓	✓	✓	✓	✓
	Real time passenger information	Information display at busy stop to inform passengers of live timetable data		✓	✓	✓		
	Cycle parking	Cycle parking facilities to allow integration with other sustainable travel modes and improve accessibility to the bus network at key stop locations		✓	✓	✓		
On-Street Priority	Enforcement	Enforcement (via Civil Enforcement Officers or CCTV as appropriate) of Traffic Regulation Orders or bus stop clearways, to ensure no unintended delays to buses are occurring e.g. bus lanes, waiting and loading restrictions	 	✓	✓	✓	✓	

Intervention			Example / Image	Greater Manchester Programme Type				
Type	Measure	Description		Bus Rapid Transit	Quality Bus Transit	Busy Bus Corridor	Pinch-Point	GM-Wide (Area Type Initiatives)
	Waiting / loading restrictions	To prevent obstructive parking / loading to ensure the free flow of buses and other traffic		✓	✓	✓	✓	
	Parking / loading bays (management of stationary vehicles)	Dedicated space used to rationalise vehicles which would otherwise potentially obstructing the free flow of buses		✓	✓	✓	✓	
	Banned turn (with exemption for buses)	Prohibited movement with exemption for buses to allow priority or faster access along a bus route		✓	✓	✓	✓	
	Red route	Major roads where vehicles are prevented from stopping (including to set down or pick-up passengers), except in designated spaces. With the aim of ensuring the free flow of buses and other traffic		✓	✓	✓		

Intervention			Example / Image	Greater Manchester Programme Type				
Type	Measure	Description		Bus Rapid Transit	Quality Bus Transit	Busy Bus Corridor	Pinch-Point	GM-Wide (Area Type Initiatives)
	Carriageway widening	Widening of the vehicle lane(s) to allow easier and faster passage by buses and other traffic		✓	✓	✓	✓	
	Bus lane - with flow or contra-flow (new or amendment to existing)	Lane on the carriageway only useable by buses, cyclists and hackney carriages during the times of operation. Providing buses with the ability to bypass congestion		✓	✓	✓	✓	
	Bus gate	A section of road with restricted access to all traffic except buses, cycles and hackney carriages (as appropriate)		✓	✓	✓	✓	
	Junction capacity improvement	Improvement at junctions to reduce delays and speed up / reduce journey time variability. This could be achieved through changing the junction type, additional lanes or new more efficient traffic signal control such as SCOOT or Microprocessor Optimised Vehicle Actuation (MOVA)		✓	✓	✓	✓	

Intervention			Example / Image	Greater Manchester Programme Type				
Type	Measure	Description		Bus Rapid Transit	Quality Bus Transit	Busy Bus Corridor	Pinch-Point	GM-Wide (Area Type Initiatives)
	Queue relocation (SCOOT gating)	The amount of traffic entering an area of restricted carriageway width (not wide enough for a bus lane), is controlled by holding traffic back on the approach at a location where a bus lane can be provided to bypass queuing traffic		✓	✓	✓		
	Pre-signal	Traffic signals implemented in advance of main signals at a junction, providing priority for buses exiting a bus lane and choosing their approach lane to the main junction. Whilst general traffic is held on red in advance of the junction		✓	✓	✓		
	Late running bus traffic signal priority (SCOOT based)	The automated vehicle location system on a late running bus is able to 'request' a priority at traffic signal junction operated via SCOOT (centralised control system)		✓	✓	✓	✓	✓

Intervention			Example / Image	Greater Manchester Programme Type				
Type	Measure	Description		Bus Rapid Transit	Quality Bus Transit	Busy Bus Corridor	Pinch-Point	GM-Wide (Area Type Initiatives)
	Corridor-wide cycle and walk route upgrades	Complementary walking and cycle facilities along key bus priority corridors and junction pinch-points to assist sustainable modes		✓	✓	✓	✓	
	Segregated bus only road	Road accessible to buses only that is separated away from the carriageway aimed at providing a faster route than an on-highway option		✓	✓	✓		
Complementary Streets for All Measures	Town Centre integration and public realm improvements	Greater Manchester's progressive approach to making our streets easier for all to get around by putting people first		✓	✓	✓		
	Rapid Transit Integration - Travel Hubs to assist with modal interchange	A major bus interchange point with high quality facilities to assist interchange by all modes, particularly sustainable	 Image: CoMoUk	✓	✓			

Intervention			Example / Image	Greater Manchester Programme Type				
Type	**Measure**	**Description**		**Bus Rapid Transit**	**Quality Bus Transit**	**Busy Bus Corridor**	**Pinch-Point**	**GM-Wide (Area Type Initiatives)**
Off-Street Priority	Segregated bus only guided busway	A dedicated, buses-only route with buses running on a purpose-built track being steered by external means		✓				

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