



Draft Greater Manchester Rapid Transit Strategy

Trams, trains, busways
and beyond for the
Bee Network



BEE NETWORK



Transport for
Greater Manchester

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Foreword

Greater Manchester is the country's fastest growing city region and has huge potential for further growth. However, like other UK cities, our economy is underperforming compared to our European peers. We need to better connect people, businesses and places to the opportunities that exist throughout Greater Manchester, supporting the future prosperity of the North and the UK.

We are committed to delivering a world-class, integrated transport system for Greater Manchester: the Bee Network. Rapid transit – public transport options like trams, trains and busways that are fast and frequent – form a critical part of this.

Greater Manchester is already a proven leader when it comes to developing and providing rapid transit. Metrolink, our light rail system, is the largest in the country with 99 stops across over 100km of track. Its yellow trams have now become an icon for our city region. The demand for new lines and extensions is testament to this success and reflects how the network has transformed since the very first line opened in 1992, with May 2024 being Metrolink's busiest month on record.

The Leigh–Salford–Manchester Busway is another clear example of our successful approach to rapid transit in action, carrying over two and a half million journeys per year and removing the need for around half a million car journeys.

Our rail network will play an important role in bringing the benefits of rapid transit to more of Greater Manchester and we are committed to bringing local rail services on eight corridors into the Bee Network by 2028. By bringing rail into the Bee Network, we will have a greater ability to improve the customer experience. Through investing in growing patronage we could, in time, reduce the subsidy required to support local rail services – helping to deliver a better service at a lower cost.

This draft strategy sets out our vision for rapid transit and how we'll aim to deliver it – both through sustaining and growing the existing system and transforming our services and infrastructure.

Developing and delivering new rapid transit requires time and significant funding. That will mean considering better use of existing funding, and new forms of funding. This draft strategy will support Transport for Greater Manchester to plan its work, extending rapid transit to more of Greater Manchester and helping create a fairer, greener and more prosperous city region.



Andy Burnham, Mayor of Greater Manchester

Executive summary

Greater Manchester (GM) is building the [Bee Network](#), an integrated transport system that will support sustainable travel across the city-region. With the first buses brought under local control from September 2023, we have now franchised 50% of the bus network. This has yielded ridership growth of 5% in the last 6 months through strongly improved reliability, customer service and fleet. All buses will be franchised, and the first phase of the Bee Network complete, in 2025.

Local train services are then to be brought into the Bee Network in a second phase, with 8 rail corridors integrated by 2028. Looking beyond this to 2040, the [Greater Manchester Transport Strategy 2040](#) sets out how transport is an enabler of sustainable economic and housing growth in support of the [Greater Manchester Strategy](#).

Purpose and structure

The Draft GM Rapid Transit Strategy sets out how better rapid transit (fast and frequent mass transit) is to play its role for the city-region alongside other public, active and shared modes as part of the Bee Network. As a sub-strategy flowing from the GM Transport Strategy 2040, the draft strategy complements and reinforces other published Bee Network family documents such as the [GM Streets for All Strategy](#) and the [GM Bus Strategy](#).

The draft strategy will help people to understand how the rapid transit system can be sustained and support GM growth to a horizon of 2030, and how the network could continue to be transformed to 2040 and beyond. The draft strategy will support Transport for Greater Manchester (TfGM) by informing decisions on prioritisation, underpinning our work with government and external organisations – including those that make up the rail industry – and setting out the background to our planning and policy case when promoting schemes.

As we refresh the GM 2040 Transport Strategy, the draft strategy will play a key role in shaping the next Five Year Delivery Plan (2027-32). For that reason – and also to ensure that rapid transit is part of a fully integrated Bee Network approach to refreshing the 2040 Strategy itself – this document is being published in draft so that it can form part of the wider engagement on this activity.

Work as part of our City Region Sustainable Transport Settlement 1 (CRSTS1) Delivery Plan in relation to this draft strategy will continue. Much of this work concerns schemes 'in flight' – such as Metrolink Renewals, Metrolink Next Generation Vehicles / Tram-Train Pathfinder, Bury Interchange Redevelopment, Golborne Station, Access for All, and integration of 8 rail lines into the Bee Network by 2028. These schemes, and others, are all reflected in the draft strategy.

One key piece of scheme development work in relation to our CRSTS1 Delivery Plan – namely the planning for new, extended and/or converted rapid transit lines – is shaped by the draft strategy rather than simply being reflected in it. Our principles and emerging priorities for rapid transit network expansion are described.

This draft strategy therefore sets out the following, which are summarised below and overleaf:

- our vision for rapid transit and why there's a case for change
- what we need (in broad terms) and how we'll seek to deliver it (in more detail)
- integrating rail into the Bee Network by 2030, with 8 priority corridors by 2028
- c.15 emerging priorities for expansion of the rapid transit system
- next steps

Our vision for rapid transit

In GM, rapid transit is defined as a public transport service that is fast, frequent and capable of moving large numbers of people (mass transit). Throughout this draft strategy, 'rail-based rapid transit' includes suburban rail and metro services (today in GM, that means trains and trams) and 'bus-based rapid transit' includes busway services (today in GM, that means the 'V' bus services on the Leigh–Salford–Manchester busway). We also look ahead to a future where tram-train technology and underground technology play a role, by joining up the light and heavy rail networks and providing major new Regional Centre rapid transit capacity, respectively.

Rapid transit offers faster journeys with fewer stops than local buses, and more frequent services than inter-city and regional trains and coaches. However, it shouldn't be thought of as being separate with individual services, information, and fares and ticketing. It needs to be a seamless part of the Bee Network – integrated with other public transport and underpinned by active travel.

This draft strategy sets out the overall policy position for rapid transit as part of the Bee Network including the 'Right Mix' vision – **aiming to more than double rapid transit trips by 2040** – and our ambitions for a greener, fairer and more prosperous city-region in the context of:

- an approximately 10% population increase in that period
- our commitment to be carbon-neutral by 2038, and improved air quality and biodiversity
- transforming opportunities for all, and responding to GM's growth locations

Why there's a case for change

This draft strategy sets out the case for rapid transit playing its part in **tackling inequalities**. The case is made with reference to the Levelling Up White Paper, Centre for Cities research, and the National Infrastructure Assessment – which all show that a lack of infrastructure to get large numbers of people quickly to and from the centres of economic activity is a key factor limiting the productivity of city-regions including GM.

The argument for rapid transit's role in **delivering the opportunities for good growth** across GM is also made in relation to our growth locations – by having enough rapid transit capacity to accommodate growth in Regional Centre and town centre trips, and achieving a step change in connectivity with rapid transit taking a greater share of wider city-region trips.

Meeting our environmental commitments makes up the third part of the case for change, with rapid transit offering an attractive alternative to driving (and therefore tackling congestion and moving us towards the Right Mix vision and our carbon-neutrality target). The challenges and opportunities regarding embodied carbon and operational emissions are considered.

The success story of Metrolink from its opening in 1992 onward, the serious challenges faced by suburban rail in recent years, and the continual evolution of busway services including their integration into the Bee Network in 2023 all form part of the **story so far** for rapid transit.

Rapid transit can play an important role in orbital connectivity, with the **complementary role** of Quality and Express Bus services for some middle distance trips rounding out the case for change.

What we need, and how we'll seek to deliver it

In broad terms, we need three things for rapid transit:

- We need it to be part of a **seamless Bee Network**.
- We need **room to grow** because capacity is the single biggest challenge to our vision.
- We need it to work at its best, which is when it has local **accountability**.

In this draft strategy, we set out how we'll seek to deliver that by:

- **Sustaining, integrating and improving.**
 - Sustaining a well-maintained, resilient and reliable rapid transit system.
 - Integrating our rapid transit system within the Bee Network and the regional and national context, including the rail pay-as-you-go contactless ticketing pilot by 2025.
 - Continually improving our offer to customers in terms of the environment and health, safety and security, and accessibility and inclusion.
- **Growing.**
 - Addressing mounting capacity challenges on Metrolink with a fleet of longer 'next generation vehicles' that have tram-train capability, working with the rail industry on train and platform lengthening, and remaining responsive to demand on the busway.
 - Developing and delivering new rapid transit stops and stations, whilst improving our existing ones with access for all and better first and last mile connections.
 - Working to improve key links that knit together the existing rapid transit system.
- **Transforming.**
 - Integrating rail into the Bee Network by 2030, with 8 priority corridors by 2028.
 - Developing proposals for new, extended and converted rapid transit lines including tram-train technology, the Airport as a hub, and major Regional Centre capacity.

Integrating rail by 2028

Between now and 2028 rail integration delivery will focus on 8 priority corridors across GM. This will bring customer-facing improvements that align rail services with the Bee Network, including consistent branding, information, fares, accessibility, and station enhancements. This will deliver early realisation of customer benefits, create an environment for passenger growth and provide the first step in establishing a single cohesive recognisable 'Bee Network' product that incorporates rail.

Emerging priorities for rapid transit system expansion

The draft strategy presents a principles-based prioritisation of options for new, extended and converted rapid transit lines, with c.15 emerging priorities identified for rapid transit system expansion. These will be taken forward for further detailed prioritisation during 2024, alongside ongoing business case development and supporting activities.

Developing new, extended or converted rapid transit lines requires significant time and funding, so it is vital to prioritise the proposals to achieve our aim of a steady, rolling pipeline that builds up skills and moves them from scheme to scheme – driving efficiency and applying lessons learned.

Prioritising in this way allows us to focus our finite scheme development resources on those that would most effectively move us towards our vision. It also allow us to maintain a proper focus on the other key actions to sustain, grow and transform the rapid transit system that do not involve new, extended or converted rapid transit lines.

The emerging priorities are described in both text and map form, and are shown in the context of the 8 rail lines to be integrated into the Bee Network by 2028 and complementary Quality Bus routes.

Next steps

The draft strategy is not in itself a costed or funded delivery plan, and its fullest ambitions would require significant funding (including considering better use of existing funding, and new forms of funding) and statutory powers to be delivered. It is anticipated that a number of delivery plans (for example, concerning the full integration of rail into the Bee Network) will come forward over time to support implementation of the draft strategy. The main next steps are:

- **Wider engagement** on this draft strategy as part of our Local Transport Plan refresh, which itself starts with refreshing the GM Transport Strategy 2040 and is followed by the creation of the next Five Year Delivery Plan (covering 2027-2032).
- Further work on **future funding** arrangements, including as part of the Single Settlement and for the anticipated City Region Sustainable Transport Settlement 2 (CRSTS2) period 2027/28 to 2031/32 – with an indicative overall CRSTS2 allocation of £2.5 billion for GM, subject to further engagement and agreement with central government.

- Continued development and delivery of our **existing commitments** including those in the City Region Sustainable Transport Settlement 1 (CRSTS1) Delivery Plan 2022/23 to 2026/27 that will **sustain** and **grow** our rapid transit system.
- Continuing work on **transforming** our rapid transit system:
 - Working with the rail industry to fully integrate rail into the Bee Network, including the key next step of agreeing our long-term partnership with the rail industry to embed local accountability for our rail network.
 - Development of the Metrolink Next Generation Vehicles and Tram-Train Pathfinder, which will be crucial to addressing capacity challenges and developing viable business cases for tram-train schemes on a larger scale respectively – unlocking future expansion of GM’s rapid transit system.
 - Further detailed prioritisation during 2024 of the c.15 emerging priorities for new, extended and/or converted rapid transit lines, to sequence a potential future expansion programme – this is alongside ongoing business case development, working with local authorities to space-save for potential future routes in Local Plans, and planning for Regional Centre capacity and network optimisation.



A trip on our future rapid transit network

1

More Greater Manchester residents live a short walk from their nearest rapid transit stop or station. Housing developments are often completely integrated with rapid transit, and some developers have invested in the facilities.



2

Rapid transit stops and stations are easy to access for everyone. In particular, rail stations feel like part of the Bee Network, and step-free access to them has been transformed.



3

For those that live close enough, walking, wheeling and cycling are the main way to get to and from the rapid transit stops and stations – and there are excellent facilities to support this active travel. For those that live further away, local bus services and other first and last mile options are fully physically integrated with the stops and stations.



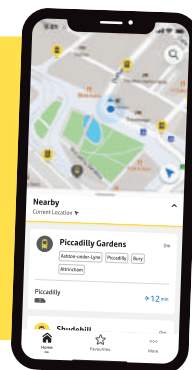
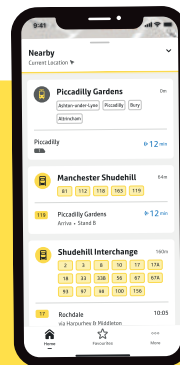
4

Tram and busway services have remained reliable and frequent, and reform has allowed suburban rail services to rise up to meet reliability and frequency standards across the day and week.



5

People can plan the best journey for them in one place – the Bee Network app and other journey planners – without having to think about the different modes of transport involved. They can purchase best value and flexible tickets before boarding.



6

The rapid transit service departs on time and is easy to board for everyone – with level boarding as is already standard on all tram services, and ramps and other devices provided as needed to bridge any gaps on busway and suburban rail services.



Cont. on next page.

A trip on our future rapid transit network

7

The rapid transit service makes swift progress on its route – faster than a local bus service – because it is mainly separated from general traffic, and is given priority at junctions. There is enough capacity for everyone to travel safely and comfortably, without excessive crowding.



8

A trip on a Bee Network rapid transit service feels safe at any time of day or night. Stops and stations are bright and well-lit. Frontline staff, including partnerships with the police, are on hand to help. CCTV and audio-visual announcements mean everyone can use rapid transit with confidence.

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In the background, the Operational Control Centre is monitoring the network to keep passengers informed, taking decisions to keep tram and busway services on time, and working with partners to achieve the same for suburban rail services.



9

Changing from one rapid transit service to another during the journey is seamless, with the right infrastructure supported by information and signage to help passengers find their way. There are no worries about getting the best-value fare, because tickets are simple and multi-modal.

12

The rapid transit service arrives on time and passengers are able to change seamlessly to other local services - like buses and cycle hire - or walk or wheel to their destination. Using the Bee Network app, customers can rate their journey and provide immediate feedback on their experience.



11

All tram and busway services are zero-emission, and suburban rail is increasingly electrified – using overhead wires and batteries to move away from diesel.



Our vision for rapid transit

GM is building the Bee Network, an integrated transport system that will support sustainable travel across the city-region. Our overall vision is to have “World class connections that support long-term, sustainable economic growth and access to opportunity for all.”

In seeking to achieve our vision, the GM Transport Strategy 2040 sets out our ambition “To extend the benefits of rapid transit to more of GM and provide the capacity and reliability needed to support growth in the economy.” We will strive to deliver an enhanced rapid transit system that enables everyone to travel easily and affordably, that is safe, accessible, reliable and sustainable – and is an integrated and accountable part of the Bee Network.

Improved public transport is essential for increased productivity and economic growth, and better living standards. Here in GM, we need to invest in and expand the capacity and coverage of our rapid transit system to deliver greater access to jobs, education, healthcare, culture and leisure opportunities, to support healthy and active lifestyles, and to reduce carbon emissions.

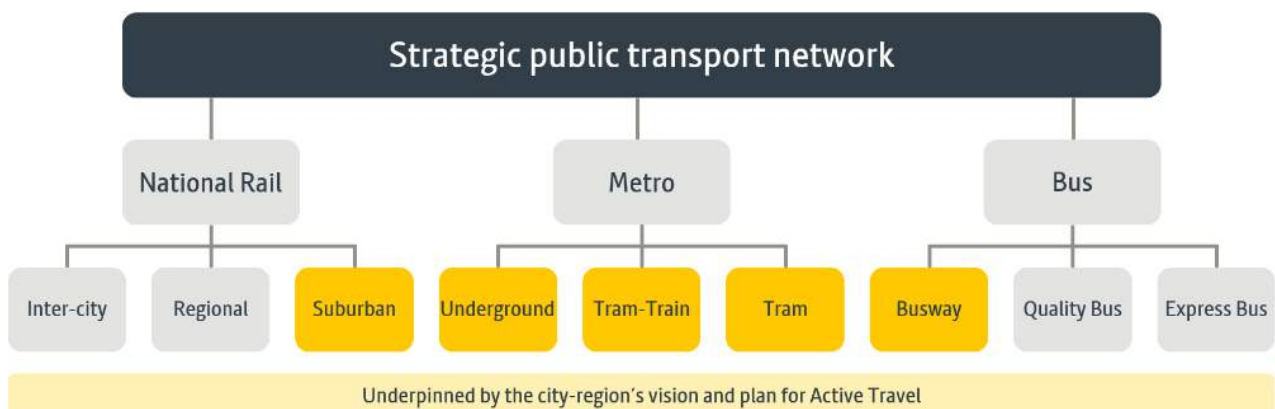
What is rapid transit?

In GM, rapid transit is a public transport service mainly focussed on middle distance trips that is:

- Faster than local bus services. Local bus services with closely spaced stops are good for serving shorter distance trips. For middle distance trips, faster journeys with fewer stops are critical.
- More frequent than city-to-city services. Inter-city and regional trains and coaches are good for serving longer distance trips. For middle distance trips, services need to run more frequently.
- Able to move large numbers of people. Rapid transit uses dedicated routeways, with a high degree of segregation, to serve major passenger flows concentrated on key corridors.

Throughout this draft strategy, we describe ‘rail-based rapid transit’ as including suburban rail and metro services, and ‘bus-based rapid transit’ as including busway services.

In the figure below, current and potential future rapid transit modes are shown highlighted in yellow, in the context of the wider strategic public transport and active travel network.



Our ambitions

Sustainable growth with the 'Right Mix'

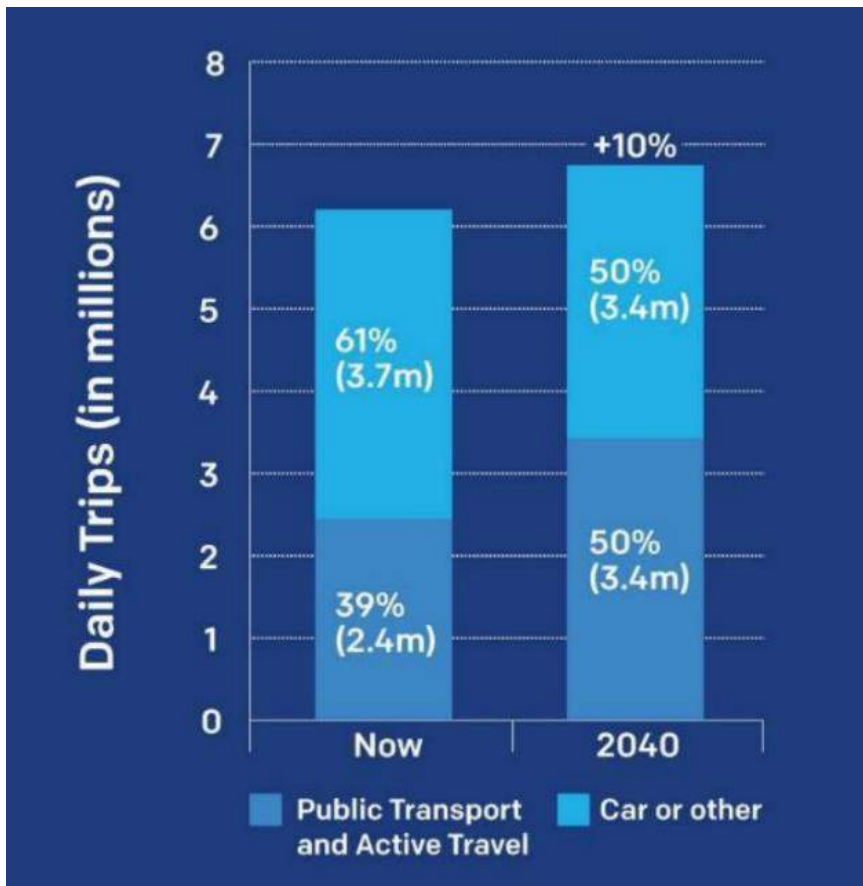
Since 2000, GM's population has grown by 300,000 to 2.8 million – and is expected to exceed 3 million by 2037. We need to accommodate that growth in a sustainable way.

By 2040 we want at least 50% of all journeys in GM to be made by active travel and public transport. That will mean one million more sustainable journeys every day enabling us to deliver a healthier, greener, and more productive city-region. This is our 'Right Mix' transport vision.

The Right Mix vision anticipates a much greater role for rapid transit, supporting a stronger Regional Centre and a step change increase in the use of rapid transit for wider city-region trips, including to and from thriving town centres. That will require the number of trips made by rapid transit to more than double by 2040 – with consequential increases in connecting active travel trips by walking, wheeling and cycling, and connecting public transport trips by bus.

Achieving the Right Mix would enable us to make progress towards reducing carbon emissions, with local authorities across the city-region having declared a Climate Emergency, and the aim being for the city-region to be completely carbon neutral by 2038.

Our Right Mix vision is currently being reviewed in the light of the longer term effects of the COVID-19 pandemic. Initial indications are that changes to working patterns may reduce growth in the travel-to-work peak but could also lead to more use of rapid transit for non-work trips.



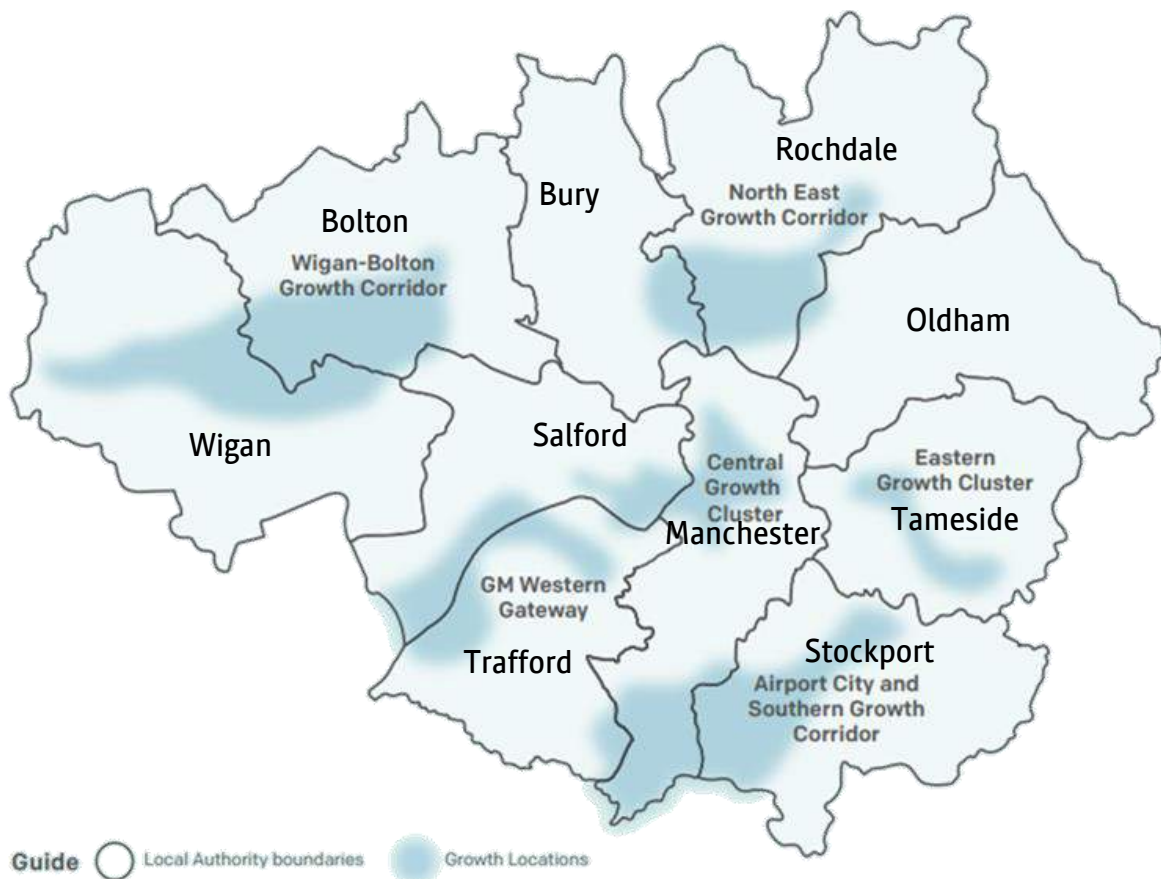
Transforming opportunities

As well as accommodating the sustainable growth of GM's population, our ambition is for rapid transit to play a key role in transforming opportunities for everyone across our city-region. Over the last 30 years, improvements to our metro, suburban rail and busway services have connected people with jobs, education, healthcare, culture and leisure opportunities.

But there is much more to be done, in line with the Places for Everyone spatial plan and emerging Local Plans. The vast majority of growth will be within the existing urban area. In addition to this, Growth Locations represent opportunities for the whole city-region to bring forward housing and employment development at a scale which can drive the transformational change we want to see. By linking opportunity and need – and connecting investment and development – the growth locations offer a chance to realise improvements for communities and places which may not have benefited previously from economic development and growth, or where there is major scope to drive growth.

GM is a potential catalyst of substantial growth, supporting the future prosperity of the North and the UK. The city-region is home to large clusters of high-value jobs in advanced materials and manufacturing, health innovation, and digital, creative and media. To thrive and grow, these high productivity sectors need to be connected to a large pool of highly skilled labour.

Rapid transit needs to respond to and shape these opportunities, by ensuring that all our residents and communities are able to benefit from the opportunities that growth and increased economic prosperity brings – and ensuring that new development is supported by sustainable transport.



Why there's a case for change

Tackling inequalities

Addressing regional inequalities across the UK is a key priority. The 2022 White Paper, '[Levelling Up the United Kingdom](#)', highlights the role of cities as drivers of productivity. Currently, productivity in the UK's major cities outside of London lags international comparators, and a combination of lower population density and poorer public transport infrastructure are the root causes.

The White Paper set out that "The UK's second cities have generally lower population densities and relatively poor local transport infrastructures. Centre for Cities, for example, found that in Europe, on average, 67% of people can get to their local city centre in 30 minutes using public transport, compared with 40% in Britain. This suggests public transport in UK cities may limit productivity by reducing effective density and, as a result, agglomeration".

In recognition of this weakness, the White Paper sets out a mission that, by 2030, local public transport connectivity across the country and all transport networks in all major urban centres will be significantly closer to the standards of London – with improved services, simpler fares, and integrated ticketing.

'[Greater Manchester's productivity resurgence](#)' published by the Northern Powerhouse Partnership makes the case that "Greater Manchester is experiencing the beginning of a productivity resurgence, with analysis showing the city region's productivity growth outstripping that of comparable Northern cities and closing the gap with London. Evidence shows that income and productivity growth is being felt across Greater Manchester more widely thanks to investment in intracity transport connectivity."

MetroLink Phase 3's [Monitoring and Evaluation Second Report, March 2021](#) showed the power of that investment, achieving a 10%+ improvement in public transport door-to-door access to healthcare, employment (ages 16-75) and further education (ages 16-19) for around 20% of GM's total population. Because the Phase 3 MetroLink lines targeted a number of areas with high deprivation, the 10%+ connectivity improvement was achieved for a greater proportion of people living in the most deprived areas in GM – with 30% of these people seeing the 10%+ improvement in public transport door-to-door access.

National Infrastructure Assessment

The National Infrastructure Commission carries out an overall assessment of the UK's infrastructure requirements – including transport – every five years. The Commission published its second Assessment in October 2023 and published its latest Progress Review in May 2024. The Assessment was guided by objectives to support sustainable economic growth across all regions of the UK, improve competitiveness, improve quality of life, and support climate resilience and transition to net zero carbon emissions.

The Assessment emphasises that better transport networks can support economic growth across regions, with cities being the main engines of economic growth. It also notes that there has been underinvestment in transport systems in regional English cities. The proposed solution is better public transport and active travel – noting that these are much more space efficient than cars.

The Assessment recommends that “Government should invest £22 billion [between 2028 and 2045] to improve public transport in the largest regional English cities to unlock economic growth. Birmingham, Bristol, Leeds, and Manchester are important economic hubs within their wider regions but face the biggest transport capacity constraints. They should be the... initial priorities for investment in mass transit systems.” This recommendation is restated in the Progress Review. The National Infrastructure Commission sets out some conditions, such as local funding contributions.

The Assessment also stresses the clear need for action to invest in the maintenance and renewal of existing transport infrastructure on both a national and local level.

The GM view

The National Infrastructure Commission’s recommended level of investment, whilst significant, should be seen as a minimum if we are to seek to unlock the scale of economic growth that the largest regional cities have the potential to deliver. But this will also mean considering better use of existing funding, and new forms of funding.

Individual schemes to be promoted for investment would be subject to detailed, bottom-up assessments and appraisals – as is standard practice.



Delivering opportunities for good growth

Core Growth – the Regional Centre and the Central Growth Cluster

Our future rapid transit system must support the development of a well-connected Regional Centre at the heart of the North. At present, more than half of rapid transit trips in the city-region start or finish in the Regional Centre. It is GM's principal hub for rapid transit services due to its high concentration of employment, education, health, culture and leisure trip attractors – and its role as the city-region's central hub for inter-city connections. Its economy depends on people being able to travel in and out of it, and without rapid transit there would be significantly increased congestion.

As a result, radial links connecting the city-region into and across the Regional Centre represent the principal markets for rapid transit. These will continue to be a main driver of the case for further investment – noting that combining radial links facilitates cross-city journeys, and some radial links can also make a strong contribution to orbital and semi-orbital journeys between town centres.

We want to support the continuing growth of the Regional Centre and the Central Growth Cluster. We aim to do this without increasing car travel, meaning that the volume of Regional Centre trips made by rapid transit will need to double by 2040. That requires attractive rapid transit services with sufficient connectivity, capacity, and reliability – and increased development densities around rapid transit stops and stations.

Town centres

As well as the doubling of Regional Centre trips, our Right Mix vision includes a step change increase in the use of rapid transit for wider city-region trips. Many of those wider city-region trips will be to, from, or passing through our key town centres. Rapid transit therefore has an important role to play in supporting the growth of our key town centres. Whilst at the time of writing the Right Mix does not have explicit targets for these town centre trips, it is anticipated that these will be developed. With its emphasis on fast and frequent services, rapid transit can create opportunities for travel between town centres (whether on orbital or semi-orbital links, or via the Regional Centre).

Boosting northern competitiveness – from west to east

Beyond the Regional Centre, rapid transit needs to play a much greater role in serving other centres of employment, education, health, culture and leisure. By serving a wider range of origins and destinations, rapid transit can spread prosperity more widely in GM.

In the north of the city-region, this includes responding to the emerging growth locations spanning from west Salford and the Western Gateway, to the Wigan-Bolton Growth Corridor, the North East Growth Corridor (including the Atom Valley cluster across Bury, Rochdale and Oldham) and the Eastern Growth Cluster in Tameside. Ensuring that residents across the north of the city-region can access the established major employment centres in the Regional Centre, at Trafford Park and at Manchester Airport is also important. Traffic congestion on the highway network and some slow public transport links mean that many of these trips are difficult at present, especially at peak times.

Sustaining southern competitiveness – Airport and southern gateway

Our overall spatial strategy seeks to spread prosperity to all parts of the city-region. This is balanced with the need to ensure that the existing competitiveness of the southern areas is sustained, and the potential is realised of key assets such as Manchester Airport and the town centres of Altrincham, Wythenshawe and Stockport. Further development of rapid transit can play a vital role in supporting the objectives of the development of the Airport and Southern Growth Corridor.

Manchester Airport is our 'Global Gateway'. The Greater Manchester Strategy notes that "the international connectivity afforded through the airport, Airport City, and development of the wider integrated transport system connecting the airport to all parts of Greater Manchester and the wider North will be important in... rebalancing both the local and national economy".

In the longer term, the jobs growth in this area means that the Airport has the potential to become a second hub for rapid transit in GM. In the nearer term, the cancellation of the northern sections of High Speed 2 means that Stockport's role as GM's southern gateway is more important than ever.



Meeting our environmental commitments

In 2019 Greater Manchester Combined Authority (GMCA) and the GM Local Authorities declared a Climate Emergency and stressed that urgent action is needed to put GM on a path to carbon neutrality by 2038, 12 years ahead of the Government's net zero target of 2050. In March 2022, GMCA also declared a Biodiversity Emergency, and GM leaders signed the Edinburgh Declaration – a statement of intent calling for local, national, and international action to reverse devastating biodiversity loss.

Transport currently accounts for around a third of carbon emissions in GM. The Bee Network is critical to enable people to travel in a different way – increasing the use of active travel and public transport will help us to tackle our most pressing economic, environmental, and quality of life challenges, and address environmental concerns around carbon, climate change, noise pollution and biodiversity.

To achieve this, GM needs more people to choose to travel by these more sustainable forms of transport. Rapid transit, supporting a stronger Regional Centre and a step change increase in the use of rapid transit for wider city-region trips, will help give everyone travelling in GM an attractive alternative to driving. This will move us toward achieving the Right Mix and enable us to make progress towards reducing carbon emissions.

Where we invest in rapid transit we will not consider that investment in isolation. Instead, we will examine how it can also better support walking, cycling, wheeling and bus trips as part of overall sustainable journeys – and how investment in these modes can grow the rapid transit market.

TfGM will incorporate the nationally recognised standard for managing carbon in infrastructure into our development and delivery process to ensure that carbon is considered throughout the scheme lifecycle. Known as PAS 2080, the standard aims to reduce carbon and cost through intelligent design, construction and usage decisions.

We also need to make the best use of our existing infrastructure (including the potential of tram-train technology to join up existing light rail and heavy rail infrastructure with new rapid transit services) as a way of mitigating carbon emissions – and seek reductions in the carbon intensity of the rapid transit trips themselves, for example with further electrification of rapid transit services.



Rapid transit – the story so far

Rapid transit shouldn't be thought of as being separate – with individual services, information, and fares and ticketing. It needs to be a seamless part of GM's Bee Network. But to describe the story so far, a quick description of metro, suburban rail and busway in the GM context follows below.

Metro

These are tram, tram-train, and underground train services that call at stops in the heart of the city centre. Customers can 'turn up and go' without checking a timetable first, because they run frequently. A large proportion of their routes operate on their own dedicated tracks, which are owned and maintained locally. In GM, Metrolink is our metro system.

Metrolink has grown from two lines to Bury and Altrincham in 1992 to eight lines today. The number of trips people took more than doubled between 2010 and 2020, and before the COVID-19 pandemic there were over 45 million tram trips each year. The increase in trips has not just a result of opening new lines, though. As with National Rail, Metrolink has seen strong growth on existing lines. Metrolink passenger numbers have now exceeded pre-pandemic levels during most weekday peaks, and significantly exceeded them on weekends. It saw its busiest month in its 32 year history in May 2024, with 4.1 million tram trips. Capacity is once again a challenge.

One of Metrolink's particular strengths from day one has been the growth in off-peak travel for shopping and leisure purposes, encouraged by a service that is easy to use for all.

Suburban Rail

These are train services that call at stations on the edge of the city centre. They might run often enough that people can 'turn up and go' without checking a timetable first, but this is not always the case. Services run on tracks that form part of the National Rail network, owned and maintained by Network Rail – so they often need to be timetabled around inter-city, regional and freight services, which make their own important contribution to GM, the North and the UK. The rail line through east Manchester and across the boundary to Hadfield and Glossop is an example of suburban rail.

On the National Rail network, trips to (and through) the Regional Centre during the morning peak increased by 72% between 2002 and 2017. Some of those additional trips were carried by the suburban rail services that form part of GM's rapid transit system. Despite this significant growth, investment in capacity of the network has not kept pace. Rail passenger numbers have also shown a strong recovery, with a similar pattern to Metrolink of greater weekend use.

In attempting to squeeze more out of available capacity, the over-ambitious May 2018 rail timetable was an example of an insufficiently robust approach to development and delivery. As a result of over-stretching Victorian infrastructure and a failure to deliver required enhancements in time for the timetable change, customers suffered major disruption. Since then, recovering reliability has been at the expense of the loss of services in the December 2022 timetable. Greater investment and joined up development and delivery will be essential to provide benefits to passenger and freight customers, and avoid constraining the growth potential of GM, the North and the UK.

Busway

By this, we mean buses that are highly segregated from general traffic (with a good degree of continuity of that segregation) and more widely spaced stops than is usual. This allows higher frequencies, increased speeds and reduced journey times. Segregation can be achieved either with bus lanes, bus-only streets or a guideway, as shown in GM by the Leigh–Salford–Manchester busway. Busways offer more flexibility than suburban rail or metro because they can use the existing highway when they need to, without the need for tracks or signalling.

Since 2016, the Leigh-Salford-Manchester busway has formed an important part of our rapid transit system. The 7km of guideway from Leigh, and the bus lanes and priority measures between Ellenbrook and the Regional Centre, make it a particularly effective service.

Patronage on the busway services grew from 2.1 million annual trips in its first year of operation to over 3 million trips prior to the pandemic. Like most public transport services, patronage is still recovering, but in 2023/24 over 2.6 million trips were made on the busway – an increase of over 300,000 from the previous year. Growth in passenger demand for busway services brought capacity challenges, and it is expected that demand will continue to recover and grow. Busway services became part of our Bee Network in September 2023 as part of the first phase of taking local control of GM's bus services (due to be complete by January 2025). Frequencies have increased, and more buses deployed.

Complementing rapid transit

Where passenger flows are not great enough to justify the significant investment in rapid transit, there are two particular types of bus service that also form a critical part of our city-region's strategic public transport network and complement rapid transit. Whilst Quality Bus and Express Bus are part of the [GM Bus Strategy](#), the features that they share with rapid transit – and the need to plan GM's Bee Network as a seamless whole – mean that they are outlined here. They play a particularly important role on orbital and semi-orbital routes, where these routes are not served by rapid transit.

Quality Bus

We want all Bee Network journeys to be high quality, regardless of transport mode. Quality Bus refers specifically to whole route upgrades on key corridors – with bus priority to achieve reliable services, attractive waiting environments integrated with the public realm, and sometimes an even higher quality of vehicles than would be the norm. Quality Bus proposals can have features in common with rapid transit including higher frequencies, faster speeds and reduced journey times.

Express Bus

Limited stop services that enable people to make middle distance trips due to the faster journey times they achieve. GM examples include cross-boundary services to Rawtenstall, Burnley, and Accrington. In seeking to maximise the service offer to passengers, Express Bus services can be aligned with complementary Quality Bus whole route upgrades on key corridors.

What we need

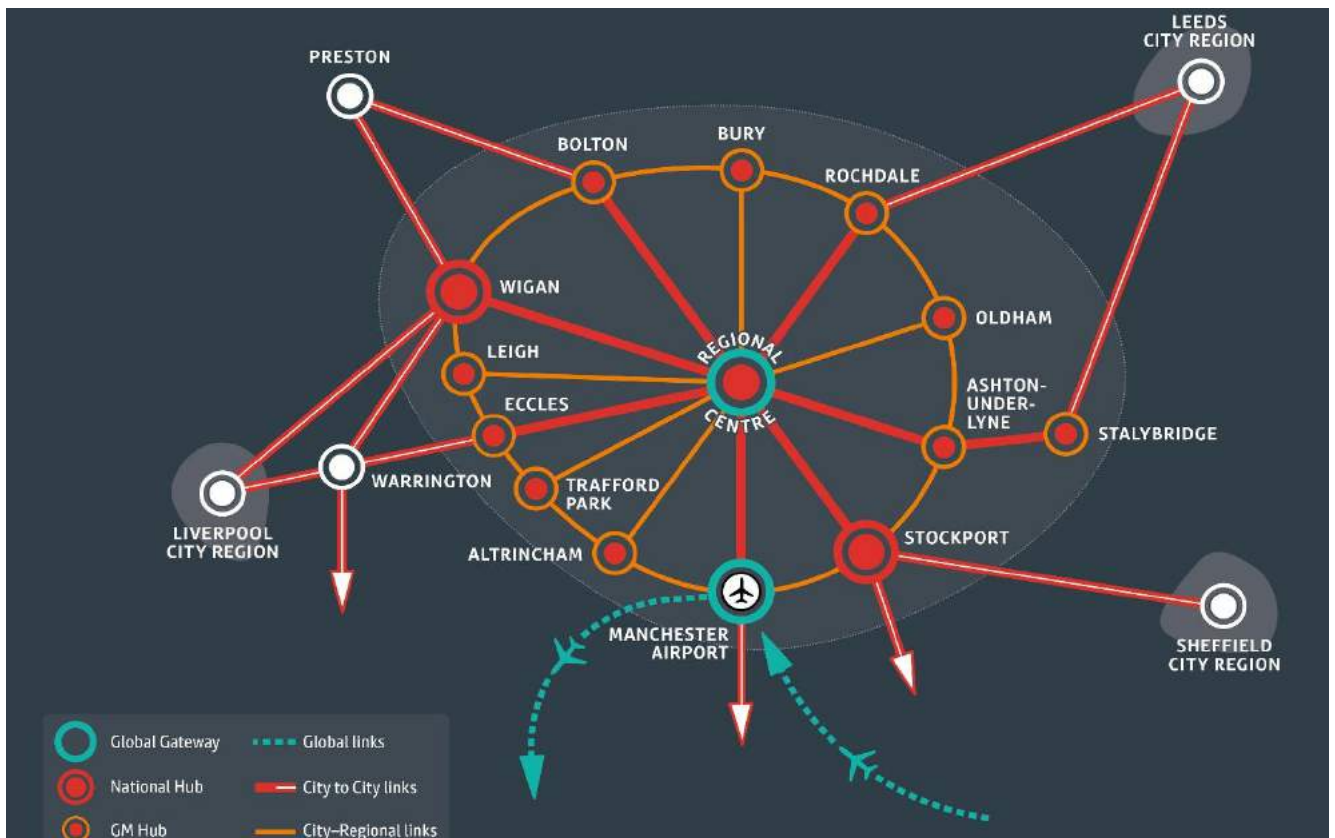
A seamless network

Our GM 2040 Transport Strategy was developed around spatial themes so that we can implement the most appropriate interventions for different parts of the city-region and for different journeys.

Our strategic public transport network connects GM hubs (the key town centres of Bolton, Bury, Rochdale, Oldham, Ashton-under-Lyne, Stalybridge, Altrincham, Eccles, and Leigh, plus Trafford Park), National Hubs (the Regional Centre, Stockport, and Wigan), and our Global Gateway at Manchester Airport.

The aim is not for direct rapid transit links between all of these hubs, but for seamless overall journeys as part of the Bee Network. A network approach will enable us to meet a wider range of travel needs, facilitating easier interchange at key nodes on our transport network. This includes enabling people to make cross-city and orbital journeys around the city-region much more easily.

Our vision for a seamless Bee Network includes the integration of all forms of rapid transit across the city-region, underpinned by integration with a wide range of other public transport, active travel and shared mobility modes to provide for the first and last mile of journeys. Effortless connections are to be facilitated at network hubs across the city-region. A seamless customer experience will see high quality services at high quality stops, stations and interchanges that are accessible to all (especially by walking, wheeling and cycling) and have joined up, simplified, and affordable fares and ticketing.



Room to grow

Capacity on our rapid transit system poses the most significant challenge to our vision for supporting sustainable growth across GM. Over the past three decades, our city-region has seen extraordinary growth in the number of customers using rapid transit services.

Despite the impacts of the COVID-19 pandemic on travel in recent years, demand has quickly returned close to (or exceeded) the levels seen before – and growth is expected to continue. Whilst travel patterns and the nature of trips on our networks may have changed, the critical issue of capacity remains.

In the past, crowding on the Metrolink network was addressed by deploying additional trams in 'double' formations. However, the contract for procuring more of our current fleet of M5000 trams has now come to an end – limiting our ability to address crowding in this way. Progressing the development and procurement of the next generation of Metrolink vehicles will therefore be vital.

In the longer term, however, network capacity constraints are expected to become critical, with the focus on Manchester city centre on which all Metrolink lines converge. Network capacity is limited by street running in Manchester city centre, and achieving a step change in Regional Centre rapid transit capacity is considered later in this draft strategy.

Whilst returning crowding issues on the National Rail network can be addressed to an extent through investment to provide longer trains on existing services, capacity on the network to accommodate the additional services that are needed is significantly constrained. There are longstanding capacity issues on the Castlefield Corridor in central Manchester and emerging capacity issues in and around Stockport.

On the busway, we can remain responsive to demand by deploying buses as needed.

Accountability

Transport works best when it is seamless and locally accountable. GM's busway and other franchised bus services, Metrolink and Starling Bank bike hire services offer compelling evidence for that – where decisions have been and continue to be made on behalf of GM by elected members through the GMCA and the Bee Network Committee, supported and delivered by TfGM.

We are radically improving the accountability and integration of GM's bus services by finishing the job of bringing them under local control as part of the Bee Network by 2025. But suburban rail is also a critical part of the vision: it needs to be more accountable and more integrated, with 8 priority corridors to be part of the Bee Network by 2028 and full integration of rail by 2030.

To this end, in March 2023 the GMCA agreed a '[Trailblazer' deeper devolution deal](#) with central government. This commits the government to support the development of a new partnership with Great British Railways: "to support the delivery of the Bee Network by 2030, which will see full multi-modal fares and ticketing integration, co-branding and common customer information, 'pay as

you go' ticketing pilots, better integration of local stations, identification of opportunities for regeneration and development, greater access to local rail data and giving GMCA the opportunity to sponsor infrastructure and service enhancement schemes."

The Greater Manchester Rail Board has been established under the Trailblazer deal. Guided by the GM 2040 Transport Strategy, and on behalf of the Mayor and Leaders of the 10 districts of GM, it:

- Contributes local insight supporting the joined up planning and delivery of all existing major rail infrastructure and rail service projects and programmes affecting the economy, people and businesses of GM.
- Leads and monitors delivery of the Trailblazer deal commitments.
- Brings local expertise together to inform the prioritisation and business case development of future rail infrastructure and service delivery projects affecting GM.
- Champions regular joined up public communication of a coherent delivery plan for improving rail services in GM.

The Board is designed to streamline the need for multiple forums and it provides a single place to plan and monitor the delivery of rail elements for the Trailblazer deal – as well as helping to ensure that the needs of the people and economy of GM are properly considered in railway industry decision making at a time of major change.



How we'll seek to deliver better rapid transit

This section of the draft GM Rapid Transit Strategy sets out how, subject in some cases to funding and statutory powers, we will seek to deliver improvements across all aspects of rapid transit in GM. It is structured around the seven network principles of the GM Transport Strategy 2040 and our six Bee Network customer commitments.



Our six commitments to you



The Bee Network is our bold vision to deliver a joined-up transport system that works for you. We commit to delivering a Bee Network that is:

| | | |
|--|---|--|
|  |  |  |
| Safe <small>We will create a safe and secure network</small> | Accessible <small>Everyone can use us</small> | Reliable <small>We will deliver a reliable network</small> |
|  |  |  |
| Affordable <small>We will keep the cost of travel as low as possible</small> | Accountable <small>We will use your feedback to shape the Bee Network</small> | Sustainable <small>We will take the lead in creating a greener, healthier Greater Manchester</small> |

If we are to achieve our vision of more than doubling rapid transit trips by 2040, we need to make the best use of the rapid transit infrastructure we already have and build on its strengths, as well as expanding it with new, extended and converted lines (which take a long time to plan and build).

This section is split into **sustaining**, **integrating**, **improving** and **growing** – with a focus on our system to a horizon of 2030 – and **transforming**, with a focus on our system to 2040 and beyond.

Whilst this section of the draft strategy sets out the ways in which we intend to act to achieve our vision for rapid transit and gives examples, it does not set out exactly what specific interventions we intend to deliver. The draft strategy is not in itself a costed or funded delivery plan, and its fullest ambitions would require significant funding (including considering better use of existing funding, and new forms of funding) and statutory powers to be delivered.

Wider engagement on this draft strategy will take place as part of our Local Transport Plan refresh, which starts with refreshing the GM Transport Strategy 2040 and is followed by the creation of the next Five Year Delivery Plan covering the years 2027-2032.

We also anticipate a number of specific plans coming forward to support implementation of this draft strategy (for example, concerning the full integration of rail into the Bee Network).

Sustaining our rapid transit system: well-maintained, resilient and reliable

Rapid transit services that turn up on time – and get to their destination at the expected speed – allow our customers to plan more effectively and have confidence that their journey will take the same amount of time every day. That will make them more likely to use rapid transit again.

We will:

- **01: Maintain and renew Metrolink, and continue to have robust operating procedures for planned and unplanned disruption.** This includes paying particular attention to the assets that are critical to the operation of the entire network such as the supervisory and control system. In some cases, it may be necessary to 'over-specify' to deliberately build in some spare capacity or extra resilience. Minimising inconvenience to customers will be at the forefront of our thinking, and high quality and reliable alternative transport will be provided where necessary.
- **02: Work with the rail industry to support development and delivery of infrastructure and service planning in pursuit of a well-maintained, resilient and reliable railway.** Some parts of GM's rail network are heavily congested, and the May 2018 timetable illustrated the disastrous effect on reliability of attempting to squeeze more services in. Whilst longer term strategic infrastructure investment is required to expand capacity and connectivity, some tactical steps can be taken in the nearer term. These include the new turnback facilities either side of Manchester Victoria and a third platform at Salford Crescent that are being delivered by the rail industry as part of the Manchester Task Force workstream, with an expected completion in 2026.
- **03: Work with the rail industry to influence rolling stock improvements** including replacing older trains with newer ones that have better performance characteristics such as faster acceleration and deceleration and better layouts to speed up passenger boarding and alighting. Northern are currently starting procurement for a standard vehicle for their services (up to 450 new trains) and this could bring opportunities to improve services across GM.
- **04: Explore additional capacity that may be required at critical parts of the Metrolink network.** This will become increasingly important as passenger growth continues and pressures on the network increase. A particular focus will be placed on the critical trunk section of the network between Cornbrook and St Peter's Square.
- **05: Protect and seek to enhance rapid transit's on-highway priority over general traffic,** so that Metrolink and the busway can provide a fast and reliable service. This will involve regular review of journey time performance, with a particular focus on monitoring the performance at junctions. An equitable balance with other modes does however need to be struck. For the busway in particular, its potential now that it is part of the Bee Network should be fully exploited – including consideration of services (routes, frequencies and stopping patterns) as part of the structured, transparent, area-based 'Network Reviews' that are set out in the [GM Bus Strategy](#).



Integrating our rapid transit system: seamless and locally accountable

This section of the draft GM Rapid Transit Strategy describes how we will build on our existing arrangements with those newly created through the Trailblazer deeper devolution deal and the partnership with Great British Railways to ensure that metro, suburban rail and busway services are seamless and locally accountable as part of the Bee Network.

An exemplar of the integration we want to see is the proposed Bury Interchange redevelopment. Building on the Stockport Interchange redevelopment and the second tranche of bus franchising (delivered in March 2024), and subject to government approval and funding, the £81m project would see the current site (which is over 40 years old) transformed into GM's first operationally carbon neutral interchange. The project would provide better links between trams and buses, improved facilities for customers who are walking, wheeling or cycling, and a new link to the southern end of a refurbished Metrolink stop. The redevelopment would also deliver a safe, secure, sustainable and accessible gateway into Bury town centre, supporting its wider regeneration.

Rail is the last piece of the jigsaw which needs to be fully integrated with the Bee Network, to deliver seamless integration and local accountability.

Further information on the 8 rail corridors to be prioritised for delivery is given later in this draft strategy in 'Integrating rail by 2028'.

Operating hours and service pattern integration

Our customers need operating hours and service patterns that are integrated, so that they can trust in connections between different modes of transport and depend on rapid transit to be running when they need it across the day, week and year.

We will:

- **06: Continue to align bus timetables with tram and train timetables** through the roll-out of bus franchising to 2025 and network reviews, particularly with first and last tram and train times.
- **07: Consider night-time services on the busway** and wider bus network. This is in line with the GM Bus Strategy's commitment that TfGM will explore "providing services to major town and employment centres during the night, albeit on a less frequent basis than during the day" and the GM Night-Time Economy Strategy's commitment to developing a business case in 2024 for a pilot of later night transport services.
- **08: Explore opportunities to align tram services with demand later at night and earlier in the day.** Later services have been reintroduced from September 2023. Initially, services are running every 24 minutes between midnight and 1am on Fridays and Saturdays. Understanding the impact of these services is critical to assessing any further changes to first and last tram times.
- **09: Work with the rail industry to seek enhanced hours of operation on the suburban rail network with a '7-day railway'** that fills in the gaps in train services – particularly evening and weekends – to support shift work, the night-time economy and the weekend economy.



Digital and physical integration

Our customers need to experience the Bee Network as a seamless whole – both in terms of how they find out information and plan journeys, and how they make their ‘first and last mile’ of a trip involving rapid transit.

We will:

- **10: Seek to improve the integration of rail stations as part of completing the Bee Network, with 8 rail lines to be integrated by 2028.** Our stations need to look and feel like they are part of an integrated Bee Network. Many stations are tired and have seen little investment in decades. As set out in the ‘Trailblazer’ deal, a crucial step is the introduction of Bee Network co-branding by 2027, including wayfinding to and from the stations, signage and information provision. Improving the accessibility of our stations is covered later in this draft strategy in a separate item due to its importance.
- **11: Integrate the existing rapid transit network with the growing Bee Active Network and Starling Bank bike hire scheme.** The planned Bee Active Network would put 95% of the GM population within 400m of an active travel route built to Bee Network standards – and a focus for potential future expansion of the Starling Bank bike hire is suggested to be integration with public transport. Meaningful integration with this strategic walking, wheeling and cycling plan will provide our customers with high quality options for active travel to and from rapid transit.
- **12: Apply TfGM’s ‘Travel Hubs’ approach to our customers’ journeys to and from rapid transit stops and stations.** Walking, wheeling and cycling are seen as the main way to get to and from rapid transit. However, recognising that some people live beyond an active travel catchment, the ‘Travel Hubs’ approach seeks to provide an attractive alternative to driving all the way that is broader than our traditional park and ride solution for that issue. It involves integrating rapid transit with local bus services, demand-responsive and shared transport, and pick-up and drop-off provision. Facilities that benefit customers and could also generate net revenue for TfGM such as electric charging infrastructure, delivery lockers and convenience shops will also be investigated. The rapid transit ‘Travel Hubs’ approach is in line with the [GM Streets for All Strategy](#) and the [GM Bus Strategy](#), which (as an example) committed to explore the relocation of bus stops to better serve rapid transit stops and stations.
- **13: Continue to explore how stops and stations can become community assets that support local sustainable economic growth and wellbeing,** both as a welcoming gateway to rapid transit and as places in their own right. A particular focus will be working with the rail industry to identify and bring back into use disused buildings at stations, for both community and commercial uses.



Fares and ticketing integration

Our customers need simpler fares and integrated ticketing to make their journeys seamless. The Metrolink zonal fares and 'touch-in, touch-out' ticketing system provides a model for this. A further step towards simplification and integration has been made with the Bee AnyBus + Tram tickets introduced in 2023, which have made combined bus and tram journeys 20% cheaper. Further simplification and integration would make a significant difference for our customers.

We will:

- **14: Introduce a contactless pay-as-you-go system that will automatically cap all travel made across bus and tram in 2025 as part the Bee Network.** This could attract more customers who are beyond walking distance of tram stops.
- **15: Work with the Great British Railways Transition Team and the Department for Transport on the first pay-as-you-go contactless ticketing pilot on rail services in GM.** Due to be launched by 2025, the pilot is to cover services between Stalybridge and Victoria, and between Glossop and Piccadilly (subject to DfT business case approval). The vision is to deliver an effortless 'tap in, tap out' system that provides simpler fares and the best value on the day for rail travel, encouraging more people to use the rail network and improving customer satisfaction.
- **16: Work towards full pay-as-you-go contactless ticketing roll-out across the GM rail network and multi-modal fares and ticketing integration across bus, tram and train by 2030 – with 8 corridors prioritised for 2028.** This will require further work with Great British Railways and the Department for Transport as well as transport operators. We will also focus on finding the best approach to integrating cycle hire into the fares and ticketing regime.

Land use and planning integration

Rapid transit will be most effective in achieving our ambitions if it is integrated with land use planning and the planning system, so that more customers' homes and destinations are close to rapid transit stops and stations. The [Places for Everyone](#) plan sets out ambitions for development across the city-region towards 2040. It contains policies on high densities in the city centre and the Quays, as well as minimum densities within 400m and 800m of rapid transit stops and stations.

We will:

- **17: Continue to work with the GMCA and GM's 10 Local Authorities in support of minimum net residential densities around rapid transit stops and stations.** This includes developing proposals for improvements to services, improvements to stops and stations, and new stops and stations to serve major developments – with third party investment sought as appropriate.
- **18: Work with industry partners to develop a formal vehicle for delivering regeneration and commercial and housing development in and around rail stations.** At present, opportunities on land owned by the rail industry are not being fully realised. In 2023, TfGM and Network Rail announced a new partnership to deliver a joint vision for stations within the Regional Centre. The collaboration agreement, the first of its kind between the two organisations, is a major step forward. Working with key stakeholders, the partnership will establish future regeneration and development opportunities at stations and attract partners for delivery of future projects. Work is now underway to look at opportunities at Stockport, Piccadilly, Victoria, Oxford Road, Deansgate, Salford Central and Salford Crescent.
- **19: Promote a sustainable approach to transport for developments that encourages the fullest use of active travel and public transport, including rapid transit, over traditional road capacity enhancements.** This includes refreshing TfGM's "[Transport for sustainable communities: a guide for developers](#)", published in March 2013. In the case of very major developments that are linked to new, extended or converted rapid transit lines, high quality active travel and other public transport should often come first to prepare the way and build the market. This is because the rapid transit solutions take longer to deliver. Embedding sustainable choices early on relies on walking, wheeling, cycling and bus – with our customers able to transfer to rapid transit services at a later date.



Integration with freight networks

Rail freight is an essential part of a greener, fairer and more prosperous city-region. Many of the goods people purchase will have been moved by container on train for part of their journey, while aggregates trains bring essential construction materials from quarries. Each freight train can remove between 50 and 130 HGVs from our roads, and they help to reduce congestion, carbon, and air quality impacts. Many companies look to use rail freight to improve efficiency – in particular, avoiding congestion on the highway. A shift to rail freight can help to overcome other issues such as driver shortages, and can also help with companies' environmental objectives. Government have set a rail freight target of 75% growth by 2050. Rapid transit often shares corridors with rail freight, and it is important for them to work in harmony if we are to continue to see economic growth in a sustainable way.

We will:

- **20: Encourage the rail industry to electrify the Strategic Freight Network.** A large proportion of freight trains in GM use diesel. At present, the only practical alternative is full electrification – although batteries may support limited operation within freight terminals. Electric freight trains can free up capacity for suburban rail and metro services because they are faster and have better acceleration. In some locations the need for electrification to support rail freight may also improve the case for electrified passenger services.
- **21: Consider the needs of rail freight in capacity planning for rapid transit.** When promoting changes to suburban rail services or the introduction of new metro services, we will consider the capacity needs of freight operations and their future growth requirements. This includes the existing Trafford Park terminals and the planned Port Salford tri-mode freight interchange with access to the rail network, the M60 motorway, and the Manchester Ship Canal.



Integration with new inter-city lines

As described earlier in 'Room to Grow', focussing existing rail lines on rapid transit services can be challenging to achieve in GM. The legacy of two-track railways with heavily congested sections, flat junctions and mixed uses (with rapid transit services often sharing tracks with regional, inter-city and freight services) means that compromises are often needed. New inter-city rail lines could absorb some longer distance trains and release capacity for rapid transit services.

We will:

- **22: Following the cancellation of High Speed 2 infrastructure to Manchester, continue to work together with partners for the best outcome.** There are new challenges arising from the current proposals for High Speed 2 services to run on the existing rail network in the North. Whilst a solution is sought for the missing link between Birmingham and the route of Northern Powerhouse Rail in Cheshire, our ability to plan rapid transit services is impacted – particularly in the Stockport area with its role as GM's southern gateway.
- **23: Continue to work with partners to plan rapid transit services and new inter-city lines holistically, and seek the best Northern Powerhouse Rail outcome.** We will ensure that our input reflects the importance of rapid transit services in their own right – as well as rapid transit services providing sustainable access to new inter-city lines, reducing environmental impacts at key hubs in the Regional Centre and at Manchester Airport. Depending on the Northern Powerhouse Rail solution that is chosen, some railway lines such as Manchester–Warrington–Liverpool (CLC line) – which today has a low frequency that limits its contributions to existing communities and planned development – could see capacity released for better rapid transit services.
- **24: Seek the best solutions where proposed new inter-city lines do not release capacity for rapid transit.** It is anticipated that some existing highly-constrained lines – notably the lines via Bolton, Chat Moss, Calder Valley, Stockport and Manchester Airport – are less likely to experience released capacity from new inter-city lines. They will continue to present challenges in finding a balance between serving inter-city, regional, rapid transit and freight markets. We will continue to work with the rail industry to seek better rapid transit on these lines, including taking advantage of capacity provided by upgrades. For some of these lines, though, the only solution may involve major new capacity through the Regional Centre – which is covered later in this draft strategy.



Collaborate with, and hold central government and the rail industry to account

One of the challenges faced by our city-region is that the national planning for railway schemes does not always fully integrate them into local networks – or even with other national schemes that are progressing in parallel. This is a particular challenge when a long-term programme is phased – intermediate stages can create localised problems in the short term and medium term. There are also critical network capacity issues in central and southern Manchester that present a considerable constraint to growth, as demonstrated by the May 2018 timetable. With key schemes such as the Hope Valley Railway Upgrade, Transpennine Route Upgrade, and Manchester and North West Transformation Programme, we need mechanisms for greater and more meaningful collaboration and for holding central government and the rail industry to account – to ensure the benefits of schemes are realised.

We will:

- **25: Support the GM Rail Board to bring together national, local and rail industry insight, evidence and expertise so that GM is properly represented in railway industry decision-making.** The GM Rail Board streamlines the need for multiple forums and provides a single place to plan and monitor the delivery of the rail elements of the Trailblazer deal, support the joined up planning and delivery of existing schemes, and inform the prioritisation and business case development of future schemes.
- **26: Participate in the North West Regional Business Unit (NWRBU),** which is to be established to support the management of the current Northern and TransPennine Passenger Service Contracts by overseeing these in the north west area and providing one voice for the north west when engaging with Train Operating Companies (TOCs).
- **27: Monitor that scheme commitments are being met and hold central government and the rail industry to account when they are not.** An example going forward is ensuring that the Transpennine Route Upgrade delivers the promised freight capability and that the corresponding capacity constraints in Manchester are resolved.
- **28: Press for urgent investment to tackle the longstanding issue of capacity in the Castlefield Corridor in central Manchester and the emerging issue of capacity in and around Stockport.** Following the 2023 cancellation of Northern Hub 'Package C' (including two new through Platforms 15 & 16 at Piccadilly and a reconstructed four platform station at Oxford Road) and its accompanying Transport and Works Act Order, continuing to mitigate the unacceptable reliability of the May 2018 timetable without investing in new infrastructure would mean fewer trains and worse connections. Infrastructure investment announced in 2023 is a step along the way, and a more comprehensive package that addresses issues that 'Package C' did not address is being developed. Ultimately, the only solution that facilitates growth may involve major new capacity to and through the Regional Centre – covered later in this draft strategy.



Improving our rapid transit system: environmentally responsible and healthy

Metrolink vehicles continue to be zero-emission at the point of use, powered by electricity generated from modern, cleaner, and greener sources. At present, busway services are not yet zero-emission, while suburban rail remains heavily reliant on diesel-powered trains that add to air quality problems and carbon emissions in environmentally sensitive town and city centres.

To achieve a clean and healthy urban environment in support of the Clean Air Plan and carbon targets, high environmental standards will be applied to our rapid transit system where it is in our direct control and promoted where it is not. Active travel will be promoted as a healthy way to access rapid transit.

We will:

- **29: Replace the current low-emission fleet on the busway with a new fleet of zero-emission electric buses** in line with the [GM Bus Strategy](#).
- **30: Advocate for further rail electrification and power supply upgrades.** Around half of the GM rail network is currently electrified at present. Work is underway to electrify the route between Bolton and Wigan – a £78 million upgrade of 13 miles of infrastructure aiming to complete by 2026. The Transpennine Route Upgrade will see electrification of the entire route

via Huddersfield. There are many other strong candidates, though, that we need to see acceleration of. We will work with the rail industry to make the case for further electrification, and for power upgrades on the existing electrified network to support more electric trains.

- **31: Support the introduction of alternative technologies to replace diesel trains.** Many older trains are reaching life expiry and replacement is planned, as described earlier in 'well-maintained, resilient and reliable'. A key priority is to replace the diesel trains which are between 30 and 40 years old and have worse emission outputs than more modern trains. But without widespread electrification at present, alternatives are needed. In the short term, the rail industry may use diesel bi-mode trains, which could help to reduce instances of diesel trains operating on electrified lines and diesel engines idling in our city centre stations. The modular design of these trains supports easy conversion from diesel engines to battery or electric as electrification is extended. As battery technology develops, and with the use of fast-charging or similar technology, there may be scope for some suburban rail lines to use this technology where full electrification cannot be justified.
- **32: Promote active travel as a healthy way and sustainable way to access the rapid transit system, and consider active travel provision in rapid transit schemes.** Whilst the need for integration of rapid transit and active travel has already been described above, active travel has unique and significant benefits for health and the environment. Walking and wheeling is already an essential element of many rapid transit trips – for example, 96% of tram trips in 2022 included some walking or wheeling as part of the trip. New and improved cycle parking has recently been delivered on Metrolink. Moving forward, rapid transit schemes (such as any new stops and stations and any new, extended or converted rapid transit lines) will consider how active travel infrastructure can be delivered as an integral part of the scheme.

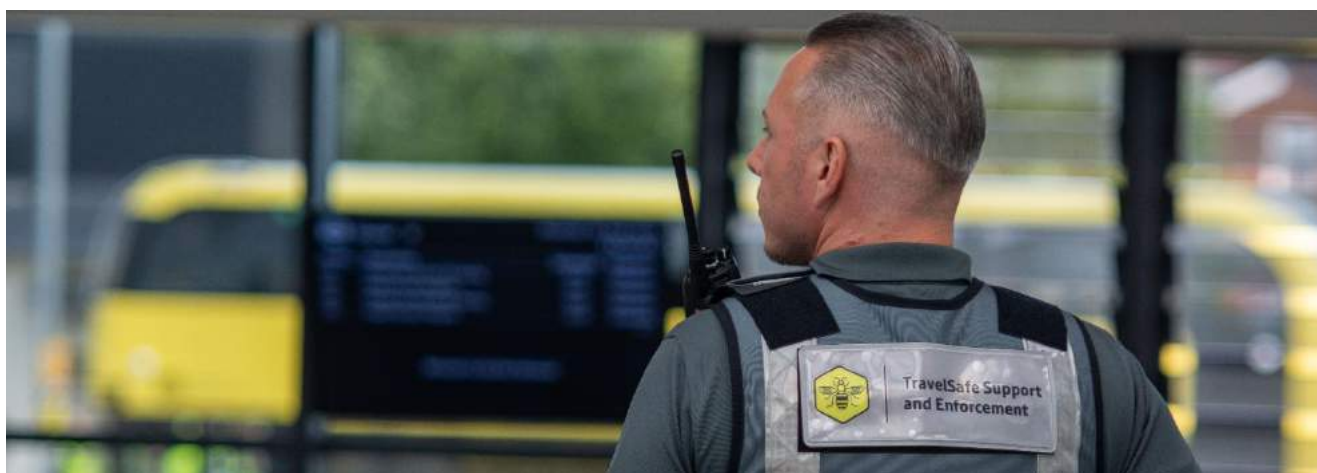


Improving our rapid transit system: safe, secure, accessible and inclusive

Rapid transit, as a major part of GM's Bee Network, needs to work for everyone. However, we know that at present there are barriers that need lowering. Negative perceptions of personal safety and security can be a significant barrier – particularly for women and girls, and people from minority groups. People need to be, and feel, safe and secure at all stages of their journeys. And for our ageing population, the fifth of people who identify as having some form of disability across GM, and those who have other access needs such as a buggy or luggage, accessibility can also present a barrier to using rapid transit. We are determined to tackle safety, security and accessibility to ensure that rapid transit is inclusive.

We will:

- **33: Work continually to improve health and safety and reduce the number of accidents, incidents, and near misses** through performance monitoring, engagement with operator forums, and safety campaigns for customers and staff alike.
- **34: Uphold recommended counter-terrorism and security best practice and other regulatory standards to support the safety and security of customers.**
- **35: Address and deter crime, antisocial behaviour and fare evasion – and encourage ethical travel behaviours – to improve safety and security (and its perception) on rapid transit through the GM TravelSafe Partnership (TSP).** The TSP is jointly led by TfGM and Greater Manchester Police (GMP) and uses a data and intelligence based approach to deploy a wide range of tactics across the network. Tactics include regular patrols (high visibility and/or plain clothes as appropriate) by operator staff, the GMP Transport Unit and other partners such as local authority youth workers. Other prevention methods include infrastructure assessment/remediation (vegetation cut-back, CCTV and lighting), intervention (such as community engagement and education) and deterrence (including penalty fares, prosecutions, restorative justice, removal of passes, exclusion orders and civil injunctions), all accompanied by clear information, campaigns and brand promotion. See: tfgm.com/travelsafe.





- **36: Maintain, renew and improve customer-facing assets (such as CCTV, information, lighting, shelters, stairs, ramps, lifts, escalators, and walking, wheeling and cycling facilities) at tram and busway stops** to support safety, security, accessibility and inclusivity. There will be a particular focus on the oldest Metrolink Bury line stops that originally formed part of the British Rail network, where standards of these customer-facing assets may be lower than elsewhere. This includes maintenance attention to the assets at Bury Interchange in advance of the proposed redevelopment of the site.
- **37: Working together with the rail industry, deliver accessible and inclusive stations.** Many National Rail stations within GM are not fit for purpose in these terms. Almost half of stations have no step-free access, having only steps or non-compliant ramps – and there are often many other deficiencies in the customer-facing assets. Together with the introduction of Bee Network co-branding by 2027, we will work with the rail industry to agree minimum standards and bring forward a plan to develop and deliver a programme of improvements – making all of our rail stations accessible by 2040, with a significant increase by 2028.
- **38: Examine the scope for the carriage of bicycles, non-standard cycles and mobility devices as we develop the rapid transit network (and consider future vehicles and infrastructure).** The trial of allowing pet dogs on trams in 2022 ultimately led to a permanent change in 2023 that removed a specific barrier to using part of the rapid transit system. In 2024, a guided pilot has taken place to test the safe carriage of bikes, non-standard cycles and mobility on off-peak tram services – involving a range of people, and controlled scenarios. We will consider the results of the pilot and consider how this flexibility could be safely introduced.
- **39: Embed meaningful consideration of equalities in all planning and decision-making,** including representative groups at an early stage to shape future service and infrastructure design. That includes the contents of this draft GM Rapid Transit Strategy, which has been published so that its draft contents can form part of the wider engagement activities undertaken as we refresh our Local Transport Plan.

Growing our rapid transit system: longer vehicles, more vehicles

As described earlier in this draft strategy, capacity poses the most significant challenge to our vision for supporting sustainable growth. Patronage growth is expected to continue, with capacity challenges anticipated in coming years. Whilst the nature of some trips may have changed, the critical issue of providing enough rapid transit capacity remains.

Providing additional capacity by increasing service frequency on Metrolink or suburban rail services is extremely difficult due to limited track capacity, particularly in the city centre. The subject of providing a step change in Regional Centre rapid transit capacity is tackled later in this draft strategy. In contrast, there is potential to provide additional capacity on the busway by increasing service frequencies.

Growth in demand for rapid transit will therefore be accommodated as far as possible by acquiring longer trams for Metrolink, by promoting the use of longer trains (and platforms) for suburban rail, and by considering frequency on the busway.

We will:

- **40: Progress the development and procurement of Metrolink ‘Next Generation Vehicles’ (NGV).** In the past we have been able to address crowding issues by buying new M5000 trams and coupling them together as ‘doubles’, but the contract for procuring these has come to an end. As the existing fleet ages, there will be a decrease in their reliability and availability. Eventually they will need replacing. Progressing the development and procurement of NGV for Metrolink will therefore be vital to maintain and improve capacity. We expect that they would be walkthrough vehicles making full use of existing Metrolink platforms. In length, they would be much like the current ‘double’ trams – but would eliminate the space occupied by central driver cabs and couplers to provide an increase in carrying capacity. Any contract for procuring them would need to be future-proofed so that more could be ordered for any new or enhanced Metrolink services, including tram-train capability. The supporting systems including power, signalling, depots and stabling would also need to be carefully considered, as would customer features. In the interim, it will be important to maximise the reliability and availability of the existing fleet.
- **41: Promote the use of longer trains (and platforms) for suburban rail.** One of the most straightforward improvements we can seek is to provide longer trains to meet growth in demand and address overcrowding. This will be particularly important if we are to meet our Right Mix vision. Longer trains may need platform lengthening, but can generally be delivered without the need for additional network capacity. We will work with the rail industry to influence service planning with the aim of increasing passenger capacity on services across the network.

- **42: Continue to be responsive to demand on the busway.** Opened in 2016, the Leigh-Salford-Manchester busway has become an established part of our rapid transit system. The success of the busway can be seen in the considerable growth in demand for the service. On becoming part of our Bee Network in September 2023, frequencies were increased and more buses deployed. We will continue to be responsive to demand on the busway as part of the structured, transparent, area-based 'Network Reviews' that are set out in the [GM Bus Strategy](#).



Growing our rapid transit system: new stops and stations

Major population or employment centres located near to existing rapid transit lines could benefit from improved access to public transport by delivering new stops and stations, with third party investment as appropriate. It is easy to underestimate the costs of additional stops and stations – including the journey time impacts for existing services making extra calls. Lack of network capacity on a constrained network to accommodate those extra calls can also make new stations particularly difficult to deliver for suburban rail, and it may only be with investment in transforming the network infrastructure (see later in this draft strategy) that they become possible.

We will:

- **43: Bring forward new stops and stations.** The following proposals are currently in different stages of development and delivery, in some cases working with the rail industry:
 - **Cop Road** on the Oldham & Rochdale Metrolink line, serving the Beal Valley and Broadbent Moss developments in Oldham that comprise approximately 1,900 homes and 22,000 square metres of employment space.
 - **Elton Reservoir** on the Bury Metrolink line, serving the Elton Reservoir development in Bury that comprises approximately 3,500 homes, three schools and two local centres.
 - **Sandhills** on the Bury and Oldham & Rochdale Metrolink lines, serving the Victoria North development in Manchester that comprises approximately 15,000 homes and other amenities.
 - **Mosley Common** on the busway, serving the North of Mosley Common development in Wigan that comprises approximately 1,100 homes.
 - **Golborne** rail station on the West Coast Main Line, five miles south of Wigan North Western station and one mile north of Golborne Junction – near to the site of the previous Golborne Station.
 - **Cheadle** rail station on the Mid Cheshire Line connecting Cheadle into the regional public transport network, transforming accessibility to Stockport Town Centre and beyond.
- **44: Undertake further work with partners to identify suitable locations for new stops and stations** that have a strong business case and that support GM's ongoing growth. Again, only major centres are likely to be able to present a compelling business case that secures the necessary funding for them, and network capacity needs to be considered.

- Rail and station (existing)
- Tram and stop (existing)
Note: not all stops are named on this map
- Busway (existing)
Note: not all stops are shown on this map
- Bus franchising
- Proposed rail station
- Proposed Metrolink stop
- Proposed busway stop



Growing our rapid transit system: **key connecting links in the Regional Centre**

Inner Salford (including The Quays and MediaCityUK), Piccadilly and Manchester Airport are areas to which rapid transit links already exist, and that need to continue their major jobs growth whilst keeping us on a pathway to the 'Right Mix'.

At present, accessing Salford Quays and MediaCityUK from many parts of GM requires an interchange from bus or train onto a tram in the Regional Centre, or an interchange from a train onto a bus at Salford Crescent. The Bee Network is expected to make these multi-modal trips seamless for our customers. However, our customers' journeys could still benefit from faster rapid transit journeys to this major growth area.

From much of the north of GM, access to Piccadilly and its connections to Manchester Airport is poor. A change is required at either Victoria or Salford Crescent onto services that are both crowded at peak times and of limited frequency.

Key connecting links in the Regional Centre could be improved. **We will:**

- **45: Seek options for improved links to Inner Salford (including The Quays and MediaCityUK).** This will be undertaken in the round, considering a multi-modal approach and taking into account proposed rail industry improvements such as the addition of a third platform at Salford Crescent. Improving links here could provide faster journeys for many of our customers, and assist with relieving the congested central area of the rapid transit system.
- **46: Seek options for improved links between Victoria and Piccadilly.** On the Metrolink network, there are currently only 5 trams an hour on this link, all of which come from the Bury line. This represents the lowest frequency connection between stops within the city centre and acts as a constraint to customer journeys to Piccadilly and onward to Manchester Airport. Whilst interchange is a natural feature of a high frequency rapid transit network, the low frequency on this key connecting link means that journeys from Metrolink's Oldham & Rochdale line require an interchange with a relatively long waiting time. This issue applies also to train services that only call at Victoria, such as those that come from the Atherton corridor. Increasing the Metrolink frequency between Victoria and Piccadilly is not possible within the current network design. On the rail network, at present only one train per hour uses the Ordsall Chord which enables direct services to run between the key transport hubs at Victoria and Piccadilly – enabling through journeys from across the wider network. The rail industry investment in the Ordsall Chord is currently underutilised due to wider capacity constraints, and proposals have been developed by the rail industry's Manchester Task Force for achieving two trains per hour. We will continue to press for infrastructure investment to realise the full potential of the Ordsall Chord.

Ultimately, the only solution that facilitates a seriously improved link between Victoria and Piccadilly may involve major new capacity to and through the Regional Centre.



Transforming our rapid transit system: serving major centres away from existing lines

Improved connectivity for population and employment centres that are located away from the existing rapid transit system will be achieved in the first instance by 'first and last mile' interventions through multi-modal integration as part of the Bee Network (which has been described earlier in this draft strategy). This can help build the market for future rapid transit lines. For major centres that are away from existing rapid transit lines, there may be a case for new lines or extensions.

We will:

47: Ensure that any proposals for new or extended rapid transit lines facilitate services that are frequent and fast – running on mainly segregated alignments – and provide excellent access to and/or through the major demand drivers for rapid transit (the Regional Centre today, and Manchester Airport in the future) as well as connecting our major town centres. Experience from the Metrolink network – and from rapid transit systems elsewhere – shows that services that achieve a good degree of financial independence by covering more of their running costs need to do this. It allows them to attract high volumes of the middle distance trips for which rapid transit is best suited, and to generate greater revenue. The higher speed and reliability of current and former rail corridors allow them to provide the excellent access that is attractive to our customers, enabling these lines to make a more positive contribution to network finances. The lower speed and reliability of street-running lines can cause them to be less attractive to our customers and make a less positive contribution.

48: Prioritise proposals for new or extended rapid transit lines, develop business cases for those that have nearer term potential, and reserve space for those that have longer term potential. Our Five Year Transport Delivery Plan 2021-26 contains over 30 proposals for potential new, extended and converted rapid transit lines to expand the system. It is vital now to prioritise these options to facilitate the development and delivery of new phases of rapid transit system expansion across GM. Our aim is a steady, rolling pipeline that builds up development and delivery skills and moves them from scheme to scheme, driving efficiency and applying lessons learned. Where schemes are considered longer term prospects, space-saving of the corridors will be recommended. This is an approach historically used in GM to set out rapid transit routes in Local Plans, and seek to reserve space for their potential future delivery when relevant planning applications along the route arise.

Further details are given later in this draft strategy in 'Our expansion options'.

Transforming our rapid transit system: serving major centres on existing lines

The National Rail network in GM is an intensively used mixed-use railway with a legacy of two-track alignments. Services interact with each other at flat junctions, and these contribute greatly to capacity limitations and performance issues. There are also key capacity constraints, including the longstanding issues on the Castlefield Corridor in central Manchester and emerging issues in and around Stockport. These issues lead to infrequent and unreliable suburban rail services on some existing lines.

Despite increasing patronage, in recent years several suburban rail lines have seen service reductions. This is partly due to competition for track capacity with inter-city services, which generate a greater financial return to the rail industry and central government. The focus on revenue does not take sufficient account of the wider benefits that suburban rail services can bring to local communities, and this is one of the issues that the GM Rail Board seeks to address.

Another legacy feature is that the Regional Centre stations – Piccadilly, Oxford Road, Deansgate, Victoria, Salford Central and Salford Crescent – are at the periphery and do not provide excellent access to the heart of the city centre. In contrast, the Metrolink network does achieve excellent access for passengers to much of the city centre. But track capacity in the city centre means that there is a limit on additional Metrolink services that can run through the core.

We will:

- **49: Promote suburban rail frequency enhancements, working with the rail industry.** There are several stations with a sizeable population catchment that are served only by hourly trains or less. Whilst limited network capacity in the central area may be a constraint to improving service frequencies (in this case, there are other options – see item 50 immediately below) the potential benefits and associated trade-offs should be explored, and we will work closely with the rail

industry to make the case for the necessary improvements to infrastructure and services. In practice, a minimum service level of two trains per hour will help to make suburban rail a viable alternative to the car. An improvement to at least four trains per hour will provide a turn-up-and-go service. The significant increase in capacity needed to achieve our Right Mix vision will require this sort of improvement.

As one clear example, Mossley and Greenfield stations have high demand potential which is not realised due to low service frequencies – an hourly service in the off-peak, with limited extra services in the peak. The Transpennine Route Upgrade will increase capacity and reduce journey times along the line through Mossley and Greenfield. We will use new mechanisms as part of the ‘Trailblazer’ devolution deal to work with the rail industry to influence the programme to improve services at these stations.

- **50: Examine de-coupling rapid transit lines from their constraints using tram-train technology and underground technology.** The scope for full conversion of suburban rail lines to tram-only operation – as was achieved by Metrolink with the Bury and Altrincham lines in the 1990s and the Oldham and Rochdale line in the 2010s – is now probably exhausted. The two main options to release the suburban rail constraints described above are use of tram-train technology (so that services can run onto the central area Metrolink network) and use of underground technology (so that services can run into a tunnel in the central area).

The most obvious example for tram-train technology is extending existing Metrolink services that run through the city centre and terminate at Piccadilly out towards Glossop, Hadfield, and Marple. With appropriate infrastructure, this would take trains off key junctions on the approach to Piccadilly and out of the surface platforms there – freeing up capacity for other services. It would also make better use of trams that currently terminate at Piccadilly by carrying passengers from the Glossop, Hadfield and Marple lines to and through the city centre without the need for interchange. For other lines, the opportunities to connect into the central area Metrolink network are less clear cut, and underground technology might be the best approach to improve services (including for existing Metrolink lines). Depending on the approach that is pursued, there are opportunities to:

- release capacity for wider regional, inter-city, and freight services;
- provide more attractive ‘turn up and go’ rapid transit service levels;
- provide the opportunity for customers to travel between a suburban station and a city centre stop in a single journey, and make cross-city trips;
- add new stops to serve major population and employment centres.

The use of tram-train technology has a further advantage by making maximum use of existing light rail and heavy rail infrastructure by joining it together without major new construction such as a tunnel – convenient for our customers whilst also being cost-efficient and carbon-conscious.

51: Develop a tram-train Pathfinder to unlock future schemes. Whilst tram-train technology has successfully been implemented in the UK and around the world, it has not been done in GM. Recognising this, TfGM have planned a phased approach that seeks to mitigate risks. This is by developing an initial Pathfinder project as a proof-of-concept that is designed to maximise the learning for larger scale and longer term projects.

Three potential schemes were identified within Our Five Year Transport Delivery Plan 2021-26. Following detailed consideration, the Pathfinder North scheme was identified as the preferred option to be progressed. This comprises an extension of the existing Metrolink Oldham and Rochdale line, joining the National Rail network for the section between Rochdale and Castleton, and connecting onwards to Heywood and Bury via the East Lancashire Railway heritage corridor.

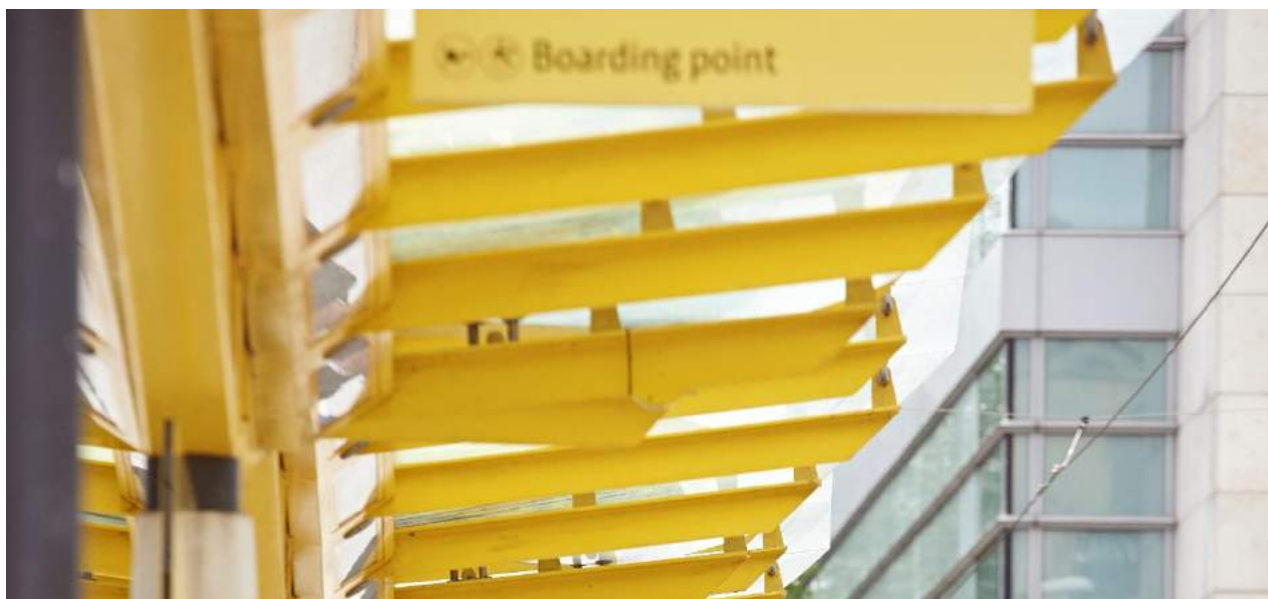
The scheme would require new and upgraded Pathfinder Infrastructure on both the heavy rail and light rail networks, and new tram-trains – along with the careful planning that would allow the new service to run across both networks. The Metrolink ‘Next Generation Vehicles’ described earlier in this draft strategy would be procured with tram-train capability to serve the scheme.

Our Five Year Delivery Plan 2021-26 sets out an aim to complete a business case for early delivery as far as Heywood, and a commitment to develop options for the next phase to Bury. Following the announcement of a funding allocation within the Department for Transport’s City Regional Sustainable Transport Settlement (CRSTS), TfGM is developing an integrated business case for the proposed Pathfinder infrastructure and the ‘Next Generation Vehicles’ needed for the route. The business case will need to be agreed with the Department for Transport.

- **52: Prioritise proposals for rapid transit line conversions to use tram-train and underground technology, develop business cases for those that have nearer term potential, and reserve space for those that have longer term potential.**

The actions here are the same as in item 48.

Further details are given later in this draft strategy in ‘Our expansion options’.



Transforming our rapid transit system: a second rapid transit hub around the Airport

The growth of the Manchester Airport area is expected to make it a second main demand driver for rapid transit in Greater Manchester (the first being the Regional Centre).

There are more than 20,000 jobs at Manchester Airport, which puts it at the same scale as the larger Greater Manchester town centres. The proportion of middle distance trips to work – to which rapid transit is well-suited – is much higher than to our town centres. Manchester Airports Group envisions a future in which 59,000 jobs are located at the Airport. Wider development envisaged in the area – including up to 10,000 jobs at Airport City North and further jobs growth around Wythenshawe Hospital and Medipark – will further increase travel demand.

A large increase in the number of trips to Manchester Airport and the immediate surrounding area is therefore expected by 2040. Achieving the Airport's growth targets will require significant increases in public transport mode share for staff and passengers for social and environmental reasons, and also for purely economic reasons in relation to avoiding congestion and slow journey times. Rapid transit will need to play its part in this.

As well as supporting proposed improvements to the existing Manchester Airport station, **we will:**

- **53: Continue to maintain the powers for the 'Western Leg' of the Metrolink Airport line and seek modifications where needed.** Originally planned as the western part of the full Metrolink Airport line, this scheme had a Transport and Works Act Order granted in 1997 and statutory powers required for its construction and operation remain in place. Recent work has focussed on integrating the route with the proposed Manchester Airport High Speed Station as part of High Speed 2 and Northern Powerhouse Rail, and we secured the inclusion of proposed amendments to the High Speed Rail (Crewe - Manchester) Bill in the government's second 'Additional Provision', deposited in Parliament in July 2023. Clearly, whilst the cancellation of the northern sections of HS2 introduces much uncertainty into years of strategic transport planning, Greater Manchester's ambition remains a new Manchester Airport High Speed Station that accommodates Northern Powerhouse Rail and a multimodal interchange including with Metrolink. The 'Western Leg' powers will be considered in that context, working with partners.
- **54: Develop complementary rapid transit options to facilitate expected growth in and around the Airport.** New rail-based rapid transit lines to the Airport would tend to focus on using existing rail infrastructure, with bus-based rapid transit tending to focus on locations more distant from existing rail infrastructure. A range of ambitions for new rapid transit services to the Airport are proposed. Some offer alternative ways of serving the same trips, and so it will be necessary to make choices between these alternatives – and care has to be taken that the markets served would see a genuine improvement. For some longer distances it will be as quick or quicker, if using public transport, to travel via the Regional Centre and connect with trains to the Airport (today) or to use Northern Powerhouse Rail (in future).



Transforming our rapid transit system: a step change in Regional Centre rapid transit capacity

There is a serious possibility that the rapid transit system in the Regional Centre will not have sufficient capacity to accommodate expected 2040 demand, driven by continued population and economic growth – and the need for non-car modes to accommodate a higher proportion of that increased travel demand in line with our Right Mix vision for a doubling of rapid transit trips.

Work undertaken over a number of years by TfGM suggests that this problem will exist even after the measures to lengthen trains and trams described earlier in this draft strategy are taken up, and will be particularly acute on the south-west to north-east axis via the Metrolink core, and the north-west to south-east axis via the Castlefield Corridor.

A major increase in Regional Centre rapid transit capacity could accommodate a substantial increase in travel demand, while facilitating more conversion of suburban rail services than would be possible by tram-train extensions of existing Metrolink services alone. In turn, that could release capacity on the National Rail network to create room for growth on remaining services. And it could allow increased capacity on existing Metrolink lines through frequency uplifts.

This would not just be about capacity for trips to and from the Regional Centre though – it would be about connectivity, allowing faster and more frequent cross-city trips through the Regional Centre, joining up the city-region with new direct and indirect services to create new journey opportunities.

We will:

- **55: Explore tunnelled options to enable faster, more frequent and higher-capacity rapid transit services to, from and through the Regional Centre – working with the rail industry.** Previous work on additional surface-level routes, running mainly on-street, has shown that these would only be capable of delivering modest and uncertain improvements in capacity, and could be disruptive during construction. Early work to explore tunnelled options has considered the various connections that could be made between existing rapid transit lines to enable through-running of services across the Regional Centre and beyond. These could be 'Regional Metro' style solutions – similar to the Paris RER, the Munich S-Bahn and London's Elizabeth line – with some longer distance versions being similar to Thameslink, which spans London and the South East.

Clearly, the capital cost of any of the tunnelled solutions described above would be multi-billion. Whilst it would be expected to be lower in cost than the longer tunnel required for the Elizabeth line (which contains several very large underground stations) it is recognised that there is much work to do to on the business case for any such investment. Options that interact with existing National Rail lines also need to be developed working with the rail industry and – as described earlier in this draft strategy – with an integrated approach to new inter-city lines. However, finding a long-term solution to Regional Centre rapid transit capacity is crucial for the continued economic growth of GM, the North and the UK.



Integrating rail into the Bee Network by 2028

The Bee Network is already a reality with Metrolink and the Starling Bank bike hire scheme joined by the first buses brought under local control from September 2023. We have now franchised 50% of the bus network. This has yielded ridership growth of 5% in the last 6 months through strongly improved reliability, customer service and fleet. All buses will be franchised, and the first phase of the Bee Network complete, in 2025.

Building on the 'Trailblazer Deeper Devolution Deal with central government, we are collaborating with the rail industry to integrate rail services into the Bee Network by 2030. As part of the second phase of the Bee Network, 8 suburban rail corridors have been prioritised for integration by 2028. Numbered clockwise from north, they are:

1. Rochdale stopping services
2. Ashton-under-Lyne and Stalybridge
3. Glossop, Hadfield and Rose Hill Marple via Guide Bridge
4. Alderley Edge and Buxton via Stockport
5. Airport stopping services
6. Wigan via Golborne
7. Wigan via Atherton*
8. Wigan via Bolton*

* continuing to Southport

The integration of these rail lines is a significant milestone in seamlessly connecting rail services within the Bee Network. This integration will enhance convenience, offer more choices, and promote a low-carbon lifestyle made possible by integrated land use and transport planning.

Delivery Plan:

Bee Network integration by 2028 and beyond

Between now and 2028 rail integration delivery will focus on 8 priority corridors across GM. This will bring customer-facing improvements that align rail services with the Bee Network, including consistent branding, information, fares, accessibility, and station enhancements. This will deliver early realisation of customer benefits, create an environment for passenger growth and provide the first step in establishing a single cohesive recognisable 'Bee Network' product that incorporates rail.

Building on work undertaken as part of the GM Rail Integration Case for Change, we have developed a GM Rail Integration Proposition, which is based five Customer Integration Pillars (overleaf).

The GM Rail Integration Proposition and five Customer Pillars will be the focus areas of Bee Network Rail Integration, and will form the basis of our approach to integrate the rail network into the Bee Network at pace by 2028, followed by ongoing, wider rollout thereafter.

While progress is being made towards rail integration, it's essential to lay the groundwork for a lasting partnership with both the rail industry and government that extends beyond 2028. This partnership will serve as a catalyst for economic growth, providing access to opportunities, boosting ridership, and ultimately decreasing the need for financial subsidies.

There is a compelling case that local accountability will deliver value, efficiencies and return benefits locally, regionally and nationally. This can only be achieved through a meaningful and accountable partnership with the rail industry and government. This means GM needs to work directly with Great British Railways (GBR), being the Co-Client for rail outputs, taking a lead role in the specification of fares, services, and customer standards in the GM and North West area.

It's vital that developing such a relationship ensures mutual benefits for both the government and GM, and results in:

- Driving growth and attracting investments into the rail and public transport systems.
- Ensuring local accountability, empowering authorities to tailor services to meet specific customer needs, leading to a more efficient utilisation of resources.
- Enhancing performance and reliability, instilling trust and confidence among customers in the public transport system.
- Improving accessibility to homes and job opportunities, thereby enhancing overall connectivity and economic potential for residents.
- Supporting decarbonisation efforts by encouraging public transport usage over private vehicles, consequently reducing congestion and environmental impact.
- Encouraging private sector investments, further stimulating economic growth and development across the region.



The rail industry proposal delivered by 2028

To facilitate the delivery of the 8 priority corridors by 2028, we have developed a collective understanding of what Bee Network Rail Integration means. This is known as the GM Rail Integration Proposition and takes a strategic approach through five Customer Integration Pillars.

Bee Network Development

Network and service enhancements across all local GM routes, with minimum frequencies of at least 2 trains per hour (tph) at all stations, with 4 tph where demand warrants (many stations only have 1 tph).

New, environmentally friendly rolling stock serving GM local services, with improved on-board facilities and step-free boarding. Due to start rolling out from 2027.



Station Facilities, Accessibility

By 2028 majority of routes and journeys on GM local services to be fully accessible.

By 2028 significant increase in number of GM stations that are fully accessible.

By 2040 all stations fully accessible, including modal interchanges and step-free boarding.



Customer Experience, Information, Branding

Bee Network branding across all trains and stations.

Bee Network customer service standards fully implemented across all parts of the multi-modal network.

Fully integrated digital proposition for the Bee network that provides a seamless customer experience (e.g. Multi-Modal info at stations and on trains, Bee Network App, frontline, customer facing staff).



Fares & Ticketing

PAYG across eight priority corridors by 2028, with full roll out by 2030.

Launch of integrated fares within Bee Network cap.

Multi-Modal Fares simplification across GM and wider travel to work area by 2030.








Transit Orientated Development and Regeneration

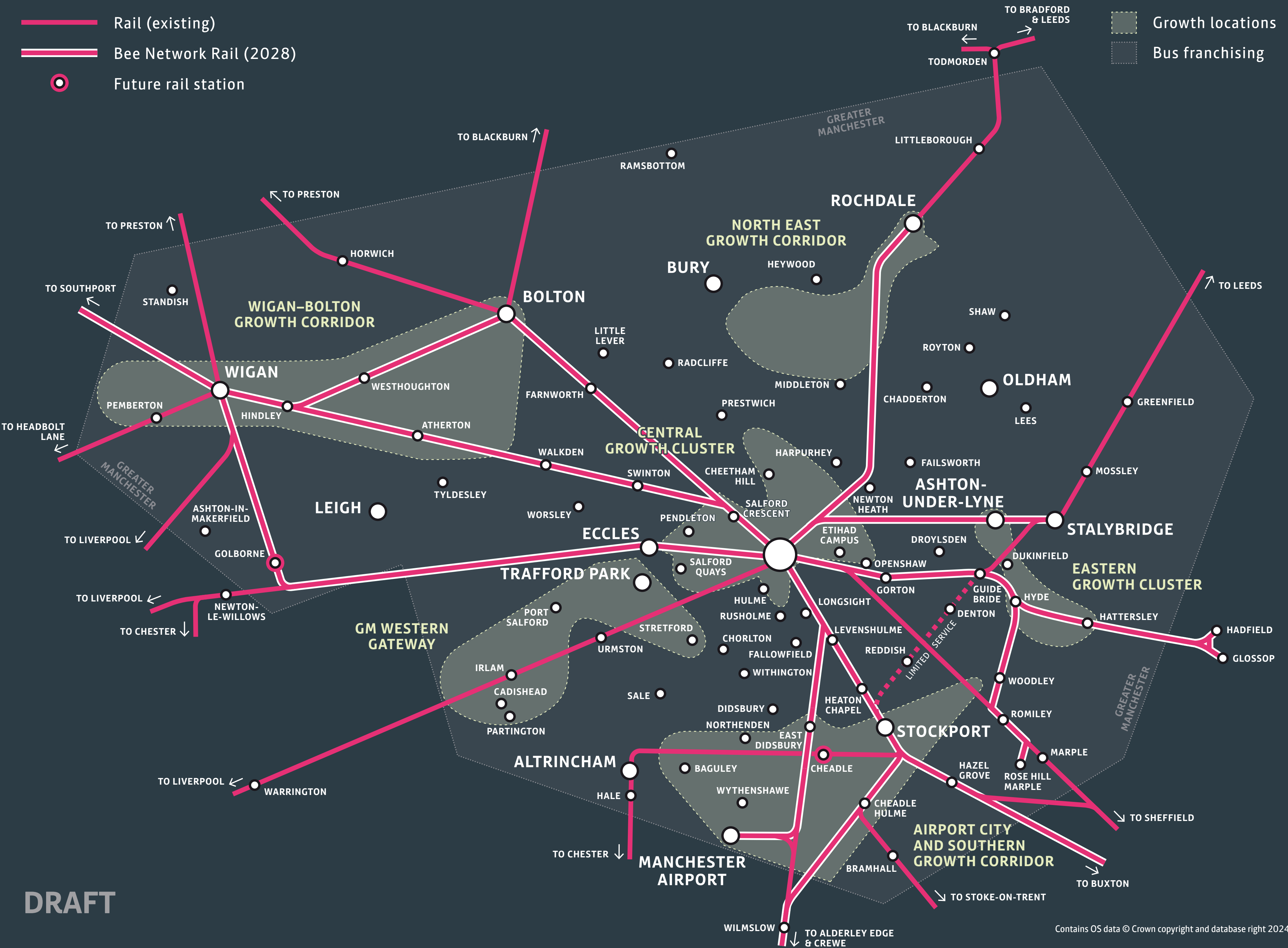
Deliver Golborne and Cheadle new stations by 2026 – 2027.

Urban realm and regen opportunities delivered by 2028 at central Manchester, Salford and Stockport stations, and then wider thereafter.



-  Rail (existing)
-  Bee Network Rail (2028)
-  Future rail station

-  Growth locations
-  Bus franchising



DRAFT

Our expansion options

Prioritisation

The timeframe for opening a new, extended or converted rapid transit line is typically 8 to 10 years, due to the need to make a case, finalise funding, obtain statutory powers, and design, construct and commission the line – and the timeframe is longer if major new central area capacity is needed.

It is therefore vital to prioritise our options for new, extended or converted rapid transit lines, to facilitate the development and delivery of new phases of rapid transit system expansion across Greater Manchester.

This will allow us to focus our finite scheme development resources on those lines that would most effectively move us towards our Right Mix vision – and to understand better the likely future pressures on central area rapid transit capacity.

Prioritising will also allow us to maintain a proper focus on all the other key actions described earlier in this draft strategy that do not involve new, extended and/or converted rapid transit lines.

In line with national requirements, we are currently carrying out a refresh of our Local Transport Plan, starting with the GM Transport Strategy 2040 and continuing to creation of the next Five Year Delivery Plan (2027-2032). This draft strategy will play a key role in shaping our priorities for new, extended and/or converted rapid transit lines within these documents.

A principles-based approach

A principles-based prioritisation has been undertaken to identify c.15 emerging priorities that will go forward for further detailed prioritisation in 2024. Derived from the earlier sections of the rapid transit strategy, the following principles have been applied. These set out that expansion of our future rapid transit system with new, extended and/or converted lines should:

- make best use of existing network infrastructure
- serve major centres, whether on or away from existing lines, and link to jobs in key growth areas
- provide frequent and fast services – running on mainly segregated alignments
- provide excellent access to and/or through the main demand drivers for rapid transit – the Regional Centre today, and Manchester Airport in the future
- consider integration with land use planning, and existing and new inter-city rail services and lines

These principles will also be relevant for taking a view on any proposals for expansion of our rapid transit system that emerge in the future.

Emerging priorities

for new, extended and/or converted rapid transit lines

The outcomes of the principles-based prioritisation are set out below, including commentary on scheme development work undertaken to date. For some schemes many years of work have shaped the current position, whilst others are at an earlier stage of development.

Moving clockwise around the city-region – the schemes are numbered in this clockwise order, not in any particular priority order – a balanced approach to the potential expansion of the rapid transit system within Greater Manchester can be seen. This provides a strong platform for further detailed prioritisation and scheme development.

At the end of this section, maps are provided that show the rapid transit network as it exists today, the 8 rail lines to be integrated into the Bee Network by 2028, the emerging priorities for new, extended and/or converted rapid transit lines, complementary Quality Bus routes, and potential options for a step change in Regional Centre rapid transit capacity.

Northern and Eastern

The North East Growth Corridor – focussed on the Atom Valley developments – is a major new employment opportunity for the city-region, with the potential for over 20,000 new jobs as well as 7,000 new homes. The majority of the new jobs are anticipated to be at the Northern Gateway site, which is of a transformative scale in its own right. With the Kingsway and Stakehill sites also playing important roles, the corridor has the potential to significantly change the economic growth potential of the wider area. Our emerging priorities could connect areas across the Growth Corridor and provide connections to surrounding areas via sustainable public transport infrastructure.

1. Bury – Heywood – Rochdale – Oldham

TfGM is currently using funding allocated in the Department for Transport's City Region Sustainable Transport Settlement (CRSTS) to develop an Outline Business Case for the introduction of a Tram-Train Pathfinder route connecting Bury, Heywood, Rochdale, and Oldham – plus the Metrolink 'Next Generation Vehicles' that would be needed to operate the service. The total route length of around 25km already has rails in use by Metrolink, National Rail and the East Lancashire Railway. All existing passenger and freight services must be considered in planning any new service. The scheme could make use of existing network infrastructure, link people to jobs across the key growth area of Atom Valley, and connect the major population centre of Heywood to the wider rail network at Castleton and Rochdale (this has not been the case since 1970). The route as a whole could be mainly segregated and provide a fast orbital journey – as an example, cutting public transport journey times between Rochdale and Bury in the peak from around 40 minutes to around 25 minutes. Lessons learned on Pathfinder will be crucial to developing viable business cases for tram-train schemes on a larger scale, which could unlock the future expansion of Greater Manchester's rapid transit system.

2. North Manchester to Middleton and Northern Gateway corridor

There is a clear gap in the rapid transit system between the Metrolink Bury line and the National Rail Calder Valley line. In seeking to fill this gap, work to date has identified some challenges for Metrolink to Middleton, including navigating the physical features of any route and achieving a viable business case for investment. However, the significantly increased development coming forward as part of Places for Everyone (as well as potential alternative approaches such as bus-based rapid transit) means that proposals for Metrolink to Middleton continue to be examined as part of a broader study of the transport issues and opportunities in the corridor connecting North Manchester with Middleton, the Northern Gateway development and Heywood. This work is considering also the areas of Victoria North, North Manchester General Hospital and Harpurhey, Blackley and Langley, as well as considering integration with potential future bus services to Northern Gateway from Bury and Oldham. The role of the Calder Valley line is a further consideration at the edge of this corridor.

Eastern

The principles-based prioritisation exercise supports the Eastern Growth Cluster which is proposed to create a significant new employment engine in Tameside by linking key development opportunities there, including investment in the town centres of Ashton-under-Lyne and Hyde, 2,000 new homes around Godley Green Garden Village, and key centres for education and skills.

3. East Manchester to Glossop, Hadfield and Marple corridor

In addition to seeking improvements to the existing suburban rail service as part of bringing these lines into the Bee Network by 2028, the potential introduction of tram-train services on the existing lines to Glossop, Hadfield and Marple (including service options via Hyde) performs well against our prioritisation principles. With appropriate infrastructure investment, conversion to tram-train operation could have potential to raise service frequencies beyond those that could be achieved by suburban rail alone (through bypassing some of the intensively used sections, flat junctions, and central area capacity constraints described earlier in this draft strategy).

These potential services would make use of existing network infrastructure, be fast and frequent by running on mainly segregated alignments, and provide excellent access to and through the Regional Centre for customers. They could make good use of Metrolink services that currently terminate on the city fringe at Piccadilly. Previous study work has suggested that there could be a strong case for investment, but also that these services must be considered holistically – including consideration of improving the existing suburban rail service, the relationship with other rail services, and appropriate phasing and integration of infrastructure with wider transport and land use proposals in the Piccadilly area. That includes proposals for High Speed 2 and Northern Powerhouse Rail – on which, as set out earlier in this draft strategy, we will continue to work together with partners for the best outcome following the cancellation of High Speed 2 infrastructure to Manchester in 2023.

In the nearer term, the corridor to Glossop, Hadfield and Rose Hill Marple is one of the 8 priority corridors for integration into the Bee Network by 2028, as discussed earlier in this draft strategy.

4. Tameside to Stockport via Denton and Reddish

Study work in the mid-2010s showed that tram-train services between Tameside and Stockport, on the line via Denton and Reddish, were likely to have a weak case for investment. More recent Restoring Your Railways study work has shown that the case for train services is also weak. Population density along this route has large gaps to the west at the Audenshaw Reservoirs and to the east at Reddish Vale. Despite this, the important strategic resource of the existing railway line via Denton and Reddish means that further assessment is still recommended as part of a potential wider network of services, so that this route is not precluded from playing its part in the future – for example by linking Tameside with other proposals between Stockport and the Airport.

Southern and Airport

The principles-based prioritisation exercise supports, in addition to the potential for tram-train services on the line to Marple described above, other emerging rapid transit priorities for the Airport and Southern Growth Corridor. This corridor – with the potential for 22,000 new jobs – supports the realisation of Greater Manchester’s international potential, the growth of employment across the Manchester Airport area, and the continued redevelopment of Stockport town centre and Wythenshawe town centre. The cancellation of the northern sections of High Speed 2 means that Stockport’s role as the southern gateway into GM is more important than ever – and any rapid transit expansion needs to take into account the proposed redevelopment of Stockport railway station, which would help to secure this role. Whilst Altrincham town centre lies just outside the Airport and Southern Growth Corridor, its role as a growing business location and prosperous residential area mean that its connections to the Airport also need consideration as part of any rapid transit expansion. Overall, there has been a longstanding desire to achieve sustainable transport routes across the south of the city-region as a counterpart to the highways network. The emerging priorities in this section seek to address this.

5. South Manchester to Stockport / Hazel Grove

Metrolink to Stockport from East Didsbury has a long history of proposals, with an extension having been poised for a Transport and Works Act Order application in the early 2000s. In previous work it consistently showed a business case that was weaker than the other Metrolink Phase 3 extensions that ultimately progressed to construction and operation. However, there are now significant new opportunities to be re-considered, including development within Stockport town centre (with 4,000 new homes where public transport and active travel will be the first option) and wider economic opportunities across the Airport and Southern Growth Corridor. Stockport Council’s ‘Next Stop Stockport’ programme provides a vehicle to bring together partners in pursuit of the economic opportunities and to embed these benefits in the Metrolink business case. Work is in progress and will continue to establish the business case, including potential tram and tram-train options as part of a wider future network to link with services between Stockport and the Airport, between Stockport and Ashton via Denton and Reddish, and to Hazel Grove using the Adswold freight line.

6. Stockport to Airport

For a potential tram-train service between Stockport and the Airport, recent business case work shows promise for making greater use of the Mid Cheshire line via the new station at Cheadle. This service would depend on the prior completion of the Metrolink Airport line 'Western Leg' (described earlier in this draft strategy, and again below). There is also an opportunity to consider a joined up approach with rapid transit services from East Didsbury to Stockport and/or Hazel Grove – these schemes might share infrastructure or become combined services.

Note: To ensure that options are kept open, TfGM and Stockport Council are working with Network Rail on their replacement of the life-expired Greek Street and Stockholm Road bridges. In 2023, a Strategic Outline Business Case to use City Region Sustainable Transport Settlement (CRSTS) funding to safeguard space for potential future tram-train routes at these bridges was approved. Work continues with Network Rail to implement the required options at each of these bridges.

The wider Airport area as a second rapid transit hub

In the longer term, the expected growth of employment and housing in and around Manchester Airport will bring the potential for the area to become a second rapid transit hub in Greater Manchester. Growth targets for the Airport – considering both air passengers and workers accessing jobs in the Airport area – should be achieved with a step change in non-car mode share. With a large catchment area for both air passengers and workers, rapid transit investment is expected to be needed to achieve this for middle distance trips. The following schemes need a holistic approach:

7. Metrolink Airport line Western Leg

Proposals for the completion of the 'Western Leg' of the full Metrolink Airport line have previously been supported by a business case, and some powers required for its construction and operation remain in place. Recent work has focussed on integration with the proposed Manchester Airport High Speed Station, and we secured the inclusion of proposed amendments to the High Speed Rail (Crewe - Manchester) Bill in the government's second Additional Provision, deposited in Parliament in July 2023. Greater Manchester's ambition remains a new Manchester Airport High Speed Station that accommodates Northern Powerhouse Rail and a multimodal interchange including with Metrolink, and we will work together with partners towards this.

The Western Leg could serve a number of key growth areas including Wythenshawe Hospital and Medipark, existing and proposed housing at Newall Green and Davenport Green, and the expanded Terminal 2 and Airport City – as well as offering additional services on the Airport line and a substantial reduction in journey times compared to the existing Eastern Leg via Wythenshawe Town Centre. Consideration should therefore be given to phasing of the Western Leg, with the potential for earlier phases to be brought forward whilst proposals for Manchester Airport High Speed Station are resolved. With Metrolink referred to in the mitigations for the Places for Everyone allocation at Davenport Green, there is also potential for this development to make proportionate land or financial contributions.

8. Tram-train services to the north-west, west and south-west of the Airport

The Western Leg is envisaged as a core component of unlocking a network of future services to the Airport zone using tram-train technology. Potential services between the Airport and Stockport have already been described on the previous page. Study work has shown there could be a case for rapid transit services between the Airport and areas to its north-west, west and south-west, particularly for options that directly connect the Metrolink Altrincham line to the Airport via the existing Mid Cheshire line and the proposed Western Leg.

9. Busway corridors to the west and east of the Airport

Busway corridors to the west and east of the Airport could also provide more local connections. From Trafford to the west, this would be through the Davenport Green development to provide a more attractive alternative to the car for journeys between Altrincham and the Airport. From the east, this could enable enhancements to a range of bus routes connecting into Stockport and Cheshire East, including from Bramhall, Cheadle Hulme, Handforth, Hazel Grove, Heald Green, Poynton, Stanley Green, Woodford, and Wilmslow. However, the extent to which these corridors could truly achieve bus rapid transit conditions with segregation from general traffic remains an open question. These bus-based options will also need to be considered against rail-based proposals which could provide alternative forms rapid transit to the Airport.

Western and Central

This section of the principles-based prioritisation exercise supports two key growth locations, the Western Gateway – which could create 25,000 new jobs, capitalising on the unrivalled port connectivity and planned new significant employment, retail and leisure developments – and the western side of the Central Growth Cluster including the Salford Quays and Salford Crescent area.

10. Trafford Park line

A short extension of the existing Metrolink Trafford Park line could effectively serve the major developments at Trafford Waters, Salford Stadium and Port Salford, and could provide a frequent and relatively fast service running to and through the Regional Centre on a mainly segregated alignment. Those factors mean that this proposal performs reasonably well against our prioritisation principles. Whilst previous business case work has not yet identified a strong enough case for investment, proactive reservation of space for potential routes has taken place – and further assessment of the options and business case for this scheme is recommended.

11. Warrington (CLC) line

Introduction of tram-train services on the National Rail route to Warrington (CLC line) performs strongly in the principles-based prioritisation exercise. This corridor has large existing and planned population catchments (Urmston, Irlam, Cadishead, Partington and New Carrington) that are

currently not well-served by rapid transit. However, this route does not have the same advantage that the Glossop, Hadfield and Marple routes enjoy – of potentially being able to extend existing Metrolink services that currently terminate on the city fringe to become tram-train services.

Instead, introducing tram-train services on the Warrington (CLC) line would require additional city centre Metrolink capacity to accommodate any new services. Given the great difficulties of providing this via the on-street Metrolink network, this line also needs to be considered as a candidate for the use of underground technology – either by routeing its services via tunnel as part of a potential step change in Regional Centre rapid transit capacity (see overleaf) or taking advantage of surface capacity freed up by other routes being routed via tunnel.

Whilst previous work has not to date identified a viable business case for re-use of the former railway between Cadishead, Partington, New Carrington and Timperley, further assessment of a short spur stemming from the Warrington (CLC) line is still recommended when the broader options for that line are considered. In addition to the existing communities at Cadishead and Partington, the New Carrington development anticipates approximately 5,000 homes in total and 350,000 sqm of employment floorspace for industry and warehousing.

12. Salford Quays to Salford Crescent

A short Metrolink extension of less than 1.5km of new construction could connect The Quays and MediaCityUK with the National Rail network at Salford Crescent. The most obvious benefits would be to customers on the rail lines going north-west from Salford Crescent via Bolton and Wigan. However, many cross-city train services also call at Salford Crescent – trains from Rochdale, Ashton, Stalybridge and the Airport call there today, and others could do in future. This short extension could make use of existing network infrastructure, link to jobs in key growth areas, provide a frequent and fast service running mainly on a segregated alignment, and integrate with existing and new inter-city rail services – it therefore performs very well against our prioritisation principles. With customers potentially enjoying a single interchange at Salford Crescent to access The Quays and MediaCityUK, rather than lengthier and slower trips via the city centre, its benefits could be more widespread than they first appear – and it could assist with relieving the congested central area of the rapid transit system. Our Five Year Delivery Plan 2021-26 sets out the aim to complete a business case for early delivery of a Quality Bus route in this area. These two schemes could follow different routes and complement each other, as demand for public transport in this area increases.

13. Further connections between Salford Crescent, Inner Salford, and Manchester city centre

Building on the immediately above, in the longer term there is potential for the introduction of further new Metrolink connections between Salford Crescent, Inner Salford, and Manchester city centre. Whilst there could be some duplication with bus services on the A6, including busway services, transformative proposals for the A6 are proposed as part of local development frameworks at Salford University that bring opportunity for further expansion of the rapid transit system. Considerations include the role that a shorter Metrolink spur from St. Peter's Square to Spinningfields or Salford Central could play, and interfaces with the Atherton line (see overleaf).

Wigan and Bolton

The Wigan-Bolton Growth Corridor anticipates the creation of 12,000 new quality homes, employment growth, and health innovation opportunities.

14. Leigh, and Wigan via Atherton considering spurs to Bolton and/or Leigh

The Leigh–Salford–Manchester Busway has proved highly successful since it first opened in 2016, as set out earlier in this draft strategy. With 3 million trips in the year 2019/20 prior to the pandemic and over 2.6 million trips in 2023/24, patronage continues to recover and grow. In the nearer term, the potential of the busway should be fully exploited now that it is part of the Bee Network – including consideration of services (routes, frequencies and stopping patterns) as part of the structured, transparent, area-based ‘Network Reviews’ that are set out in the [GM Bus Strategy](#).

In addition to continuing to ensure the busway is delivering maximum benefits for Leigh and surrounding area, it is intended to consider if there is a case for Leigh as a Metrolink terminus. This work will include assessment of the potential economic and regeneration opportunity for the area along the route, in addition to gaining an understanding of the technical implications of converting any sections of the busway to Metrolink operation.

Further to this, introduction of tram-train services on the National Rail route to Wigan via Atherton performs strongly in the principles-based prioritisation exercise. This corridor has large population catchments that are currently not well-served by rapid transit. However, like the Warrington (CLC) line, it does not have the same advantage that the Glossop, Hadfield and Marple routes enjoy – of potentially being able to extend existing Metrolink services that currently terminate on the city fringe to become tram-train services.

Instead, introducing tram-train services on the Wigan via Atherton line would require additional city centre Metrolink capacity to accommodate any new services. Given the great difficulties of providing this via the on-street Metrolink network, this line also needs to be considered as a candidate for the use of underground technology – either by routing its services via tunnel as part of a potential step change in Regional Centre rapid transit capacity (see below) or taking advantage of surface capacity freed up by other routes being routed via tunnel.

When options for tram-train or metro services on the Atherton line are examined, consideration is to be given to spurs toward Bolton and Leigh. Whilst previous work has not to date identified a viable business case for these spurs, the new opportunities brought by the Wigan-Bolton Growth Corridor merit revisiting this.

In the nearer term, the Atherton line is one of the 8 priority corridors for integration into the Bee Network by 2028, as discussed earlier in this draft strategy.

Complementing this work, options for extending Merseyrail services from Headbolt Lane into the bay platform at Wigan Wallgate could also be investigated in partnership with the Liverpool City Region.

Central and pan-GM

The **Central Growth Cluster** is expected to create over 90,000 new jobs, and rapid transit would need to play a significant role in supporting this growth potential. Meeting our ambitious 'Right Mix' vision will require a step change in capacity at the centre of our rapid transit system – facilitating growth in movements both to and through the heart of the Regional Centre. Early-stage work has explored a range of potential tunnelled options to deliver this step change.

15. A step change in Regional Centre rapid transit capacity

Emerging findings suggest that the strongest options for capacity and connectivity would be:

- The **north-west to south-east axis** – connecting the Bolton and Wigan (via Atherton) rail lines with the Airport and Stockport rail lines. This could deliver high-frequency, high-capacity services using a longer distance 'Regional Metro' approach similar to the Paris RER, the Munich S-Bahn and London's Elizabeth line. Given the longer distance nature of some of the services on the Bolton, Wigan, Airport and Stockport lines, this could also be seen as similar to Thameslink. It would be expected to release vital capacity on the Castlefield Corridor which acts as a considerable constraint to connections and reliability today.
- The **south-west to north-east axis** – our emerging findings show that even if longer, walkthrough trams were implemented across the Metrolink network as part of a roll-out of Next Generation Vehicles, capacity could still be on the limit or exceeded in 2040. Connecting Metrolink lines (particularly those that have no on-street running i.e. Altrincham, East Didsbury and Bury) using a tunnel could allow even longer vehicles and higher frequencies on these lines, and free up capacity on the remaining Metrolink lines to run higher frequencies and new services. This axis also has potential for wider National Rail connections including the routes to Warrington (CLC) and Rochdale (Calder Valley).

With a view to longer term evolution of a tunnelled system across the Regional Centre, implementation of the options described above would still leave a north-south gap in the rapid transit system. Future work on options development is expected to consider a 'Local Metro' solution – alongside consideration of other non-tunnelled options – for this gap.

Mapping the emerging priorities

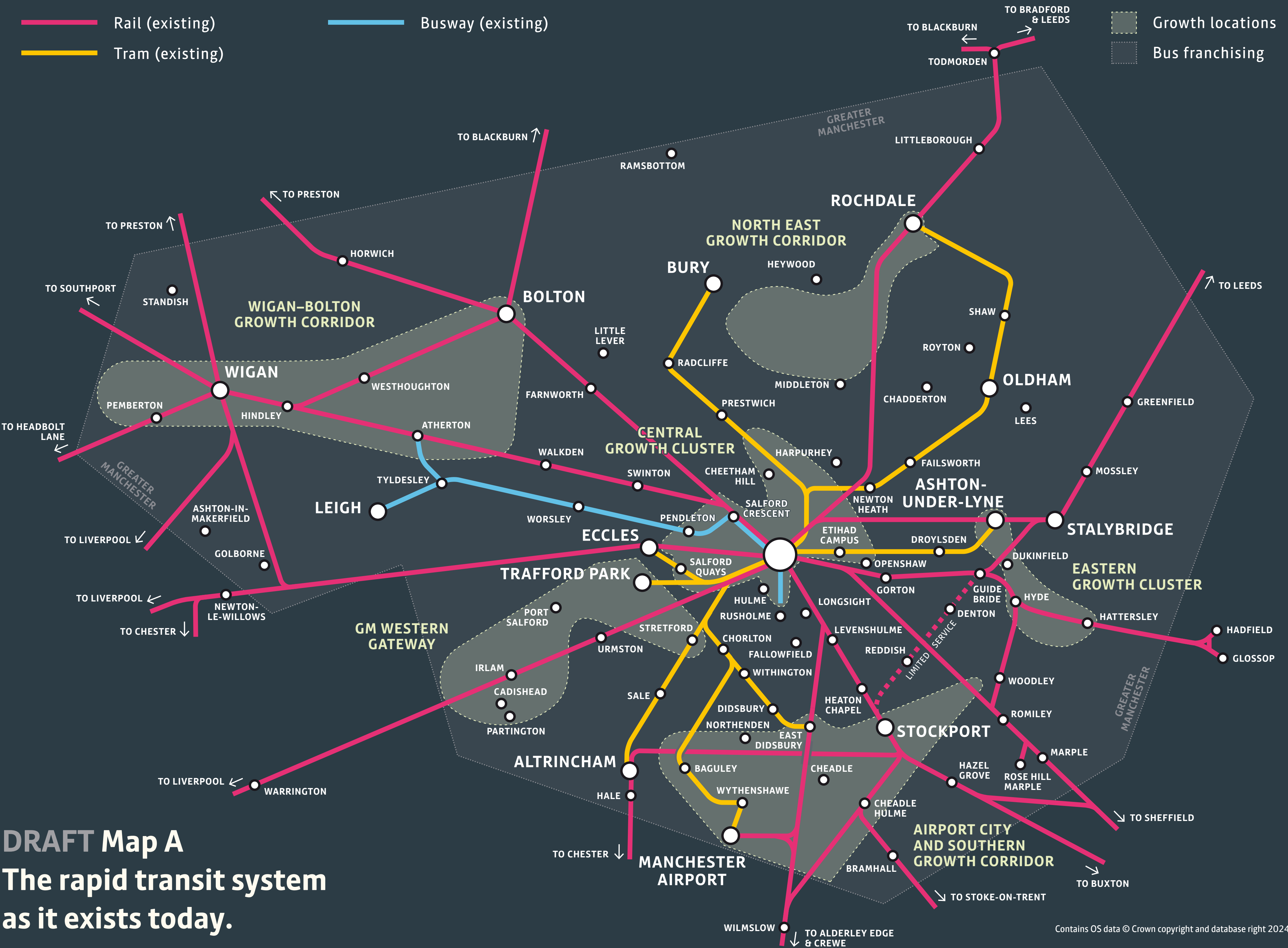
The emerging priorities for rapid transit system expansion following the principles-based prioritisation set out above are summarised overleaf in draft map form:

- **Draft Map A:** The rapid transit system as it exists today.
- **Draft Map B:** Bee Network rail integration – 8 priority corridors by 2028.
- **Draft Map C:** c.15 emerging priorities for new, extended and/or converted rapid transit lines.
- **Draft Map D:** Complementary Quality Bus routes (selected corridors in relation to rapid transit).
- **Draft Map E:** Emerging options for a step change in Regional Centre rapid transit capacity.

— Rail (existing)
— Tram (existing)

— Busway (existing)

▭ Growth locations
▭ Bus franchising

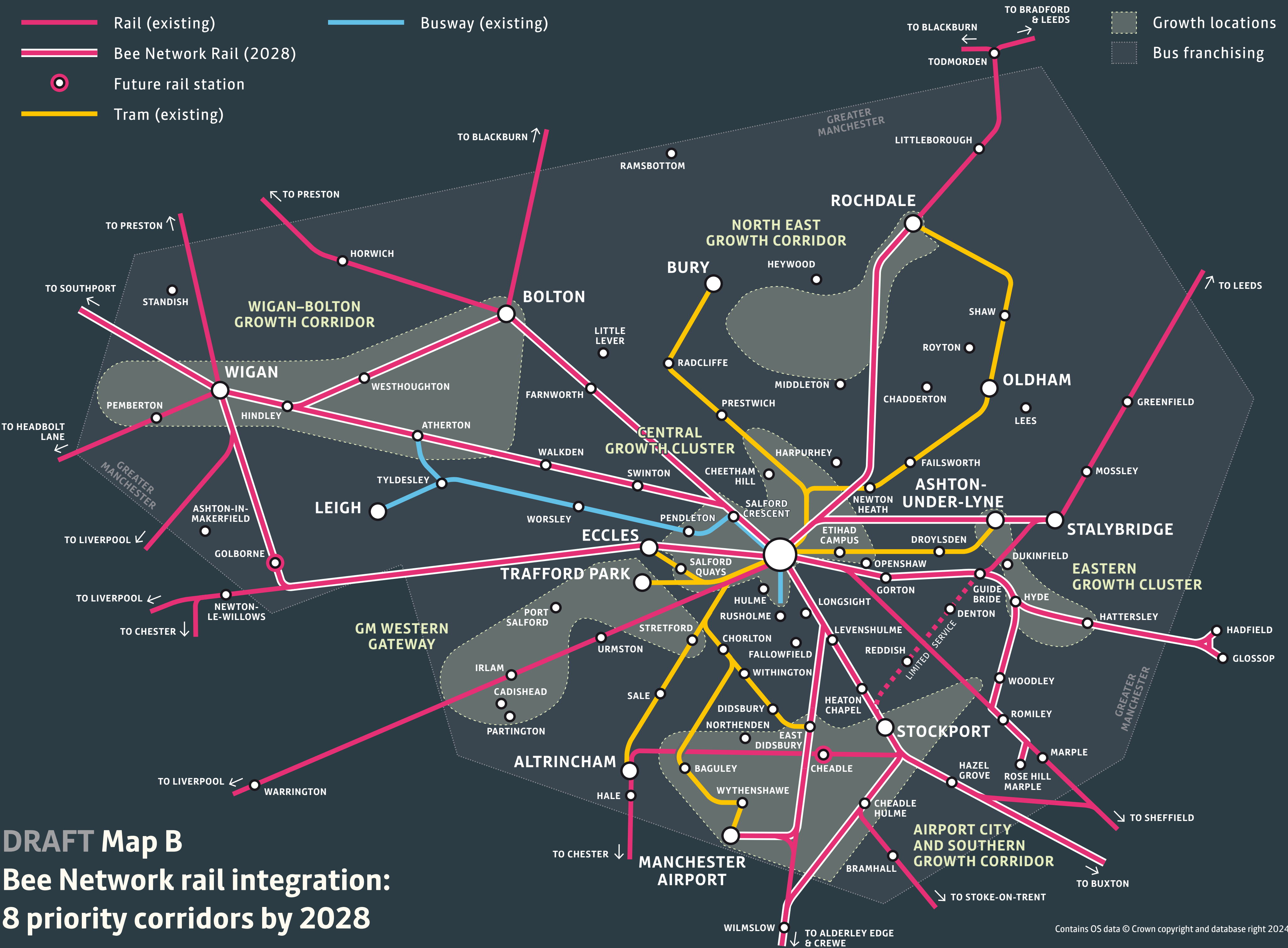


DRAFT Map A

The rapid transit system as it exists today.

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- Rail (existing)
- Bee Network Rail (2028)
- Future rail station
- Busway (existing)
- Tram (existing)
- Growth locations
- Bus franchising

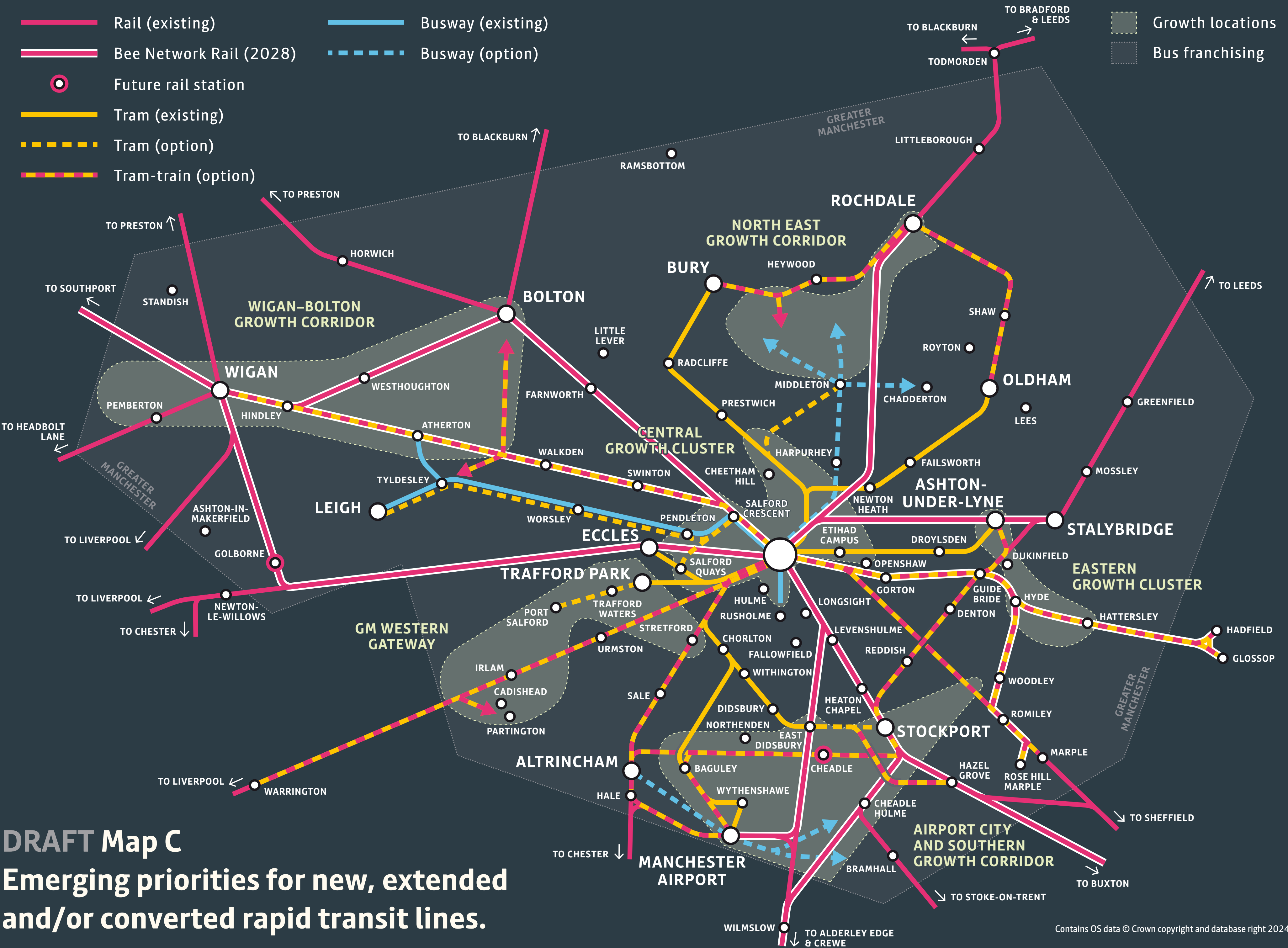


DRAFT Map B

Bee Network rail integration:

8 priority corridors by 2028

- Rail (existing)
- Bee Network Rail (2028)
- Future rail station
- Tram (existing)
- Tram (option)
- Tram-train (option)
- Busway (existing)
- Busway (option)
- Growth locations
- Bus franchising

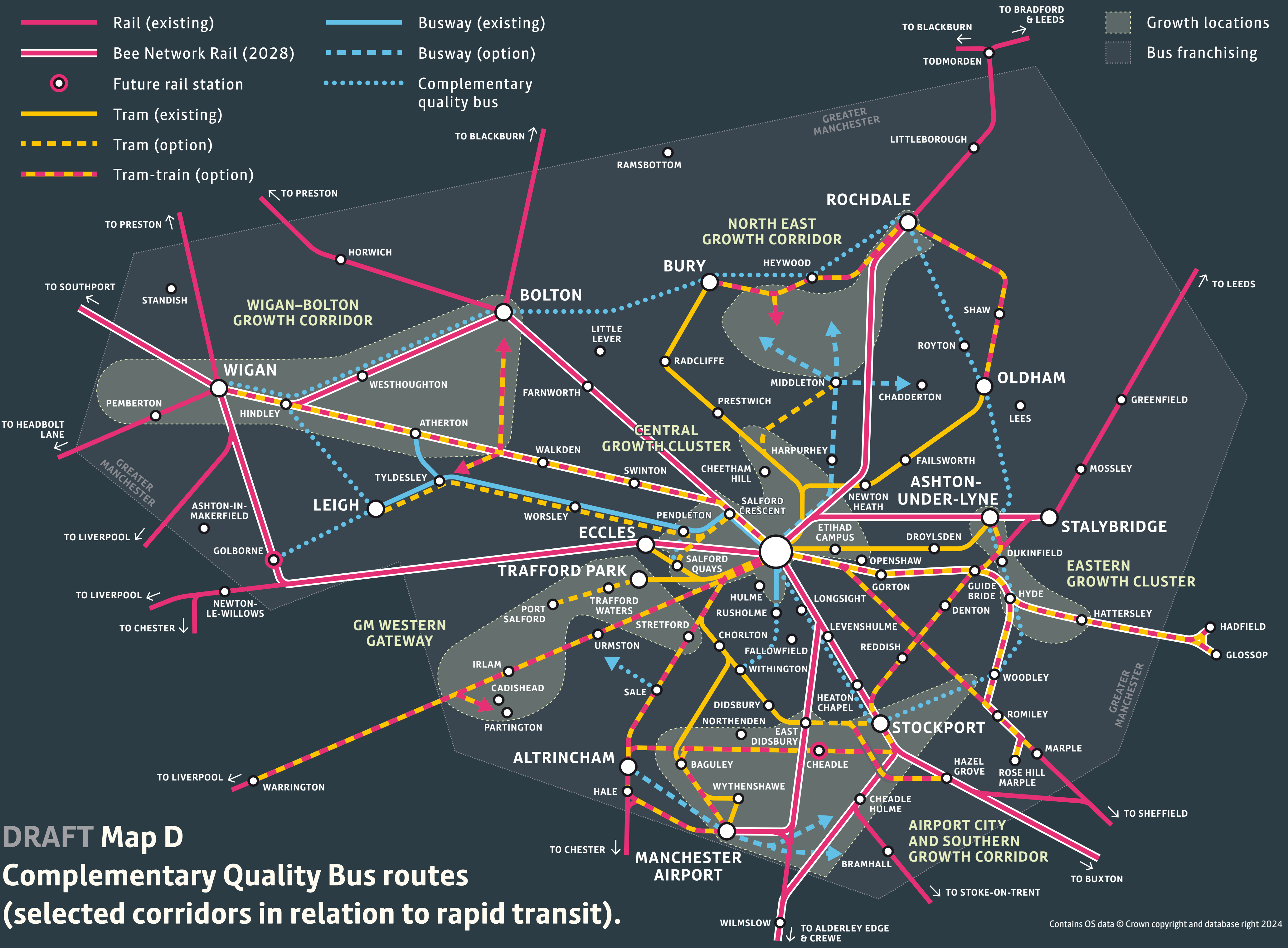


DRAFT Map C
Emerging priorities for new, extended and/or converted rapid transit lines.

- Rail (existing)
- Bee Network Rail (2028)
- Future rail station
- Tram (existing)
- Tram (option)
- Tram-train (option)

- Busway (existing)
- Busway (option)
- Complementary quality bus

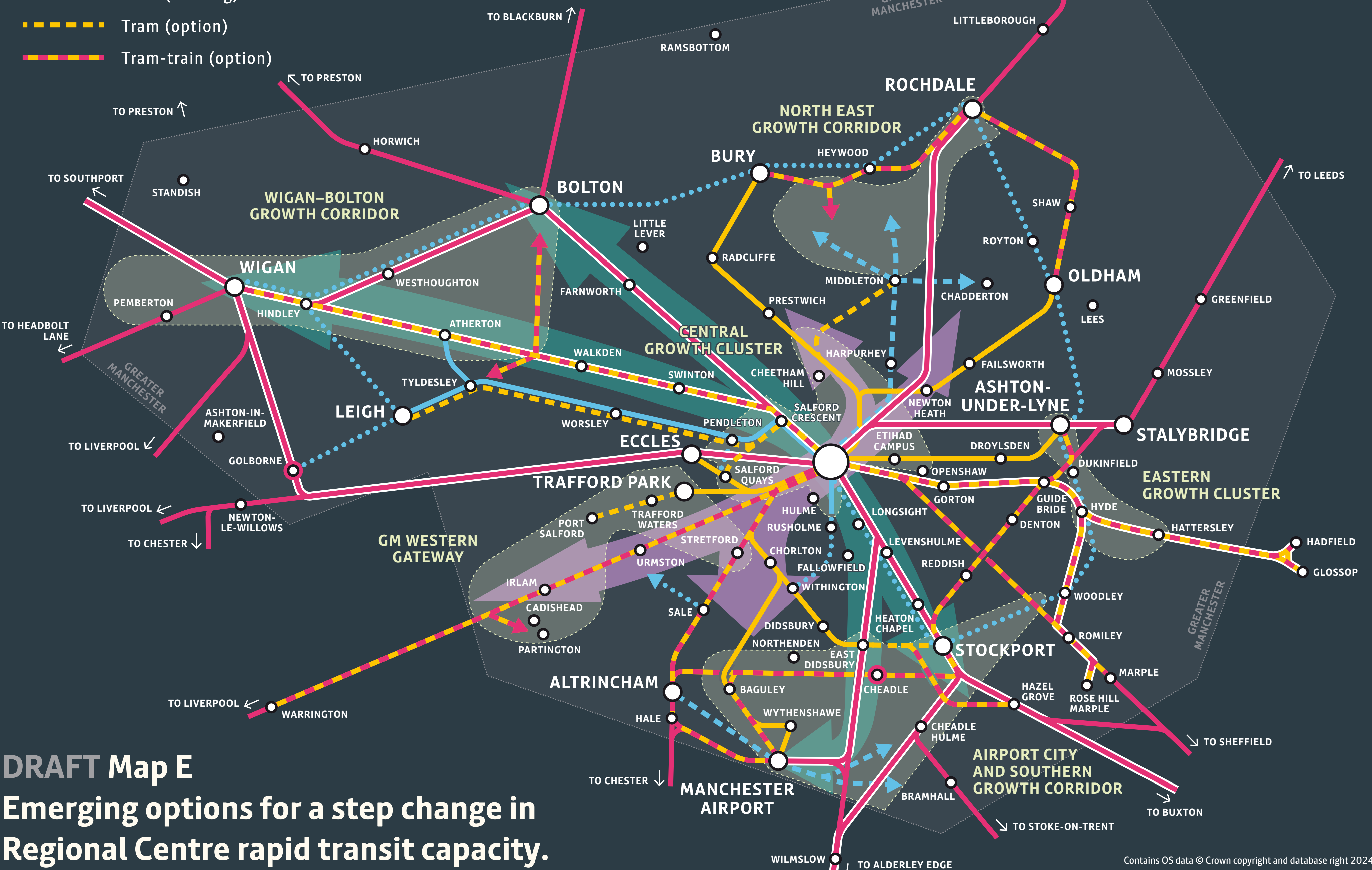
- Growth locations
- Bus franchising



DRAFT Map D
Complementary Quality Bus routes
(selected corridors in relation to rapid transit).

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- Rail (existing)
- Bee Network Rail (2028)
- Future rail station
- Tram (existing)
- Tram (option)
- Tram-train (option)
- Busway (existing)
- Busway (option)
- Complementary quality bus
- Potential Regional Centre rapid transit capacity: NW – SE
- Potential Regional Centre rapid transit capacity: SW – NE
- Growth locations
- Bus franchising



DRAFT Map E
Emerging options for a step change in
Regional Centre rapid transit capacity.

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Looking ahead – where we go next



Whilst this draft strategy has set out the ways in which we intend to act and gives clear examples, its fullest ambitions would require significant funding to be delivered – along with statutory powers for some of the items such as new, extended and/or converted rapid transit lines.

It is anticipated that a number of delivery plans – for example, concerning the full integration of rail into the Bee Network – will come forward over time to support implementation of the draft strategy.

The main next steps for the draft strategy itself are:

- **Wider engagement** on the contents of this draft strategy alongside our Local Transport Plan refresh (which starts with refreshing the GM Transport Strategy 2040 and is followed by the creation of the next Five Year Delivery Plan covering the years 2027-2032). A key next step is therefore commencement of targeted engagement sessions through 2024 to hear a wide range of opinions on what our future rapid transit network should look like and help shape the final contents of the strategy. These sessions will be planned:
 - with groups of people who could be affected in different ways by the contents of the draft strategy (for example, the Disability Design Reference Group);
 - with business (for example, the Business Transport Advisory Council);
 - with government (for example, the Department for Transport).

This engagement process will continue as our plans evolve in support of the strategy, including consideration of place-based and community approaches to engagement.

- Further work on **future funding** arrangements, including as part of the Single Settlement and for the anticipated City Region Sustainable Transport Settlement 2 (CRSTS2) period 2027/28 to 2031/32 – with an indicative overall CRSTS2 allocation of £2.5 billion for GM, subject to further engagement and agreement with central government. This work, which will need to consider better use of existing funding and new forms of funding, will run alongside further work on prioritisation of new, extended and/or converted rapid transit lines, which are some of the largest potential schemes in this draft strategy.
- Continued development and delivery of our **existing commitments** including those in the City Region Sustainable Transport Settlement 1 (CRSTS1) Delivery Plan 2022/23 to 2026/27 that will **sustain** and **grow** our rapid transit system, and are a foundation for future success.
- Continuing work on **transforming** our rapid transit system:
 - Working with the rail industry to fully integrate rail into the Bee Network, with 8 priority corridors to be integrated by 2028 and interim milestones of the contactless ticketing pilot by 2025 (Stalybridge to Victoria and Glossop to Piccadilly) and co-branding by 2027. A key next step is agreeing our long-term partnership with the rail industry to embed local accountability for our rail network.
 - Development of the Metrolink Next Generation Vehicles and Tram-Train Pathfinder through their Outline Business Case stage. These will be crucial to addressing capacity challenges and developing viable business cases for tram-train schemes on a larger scale respectively – unlocking future expansion of GM’s rapid transit system.
 - Further detailed prioritisation during 2024 of the c.15 emerging priorities for new, extended and/or converted rapid transit lines, to sequence a potential future expansion programme – this is alongside ongoing business case development, working with local authorities to space-save for potential future routes in Local Plans, and planning for central area capacity and network optimisation.



BEE NETWORK



Transport for
Greater Manchester