

= Manchester Metrolink =

Metrolink (also known as Manchester Metrolink) is a light rail tram system in Greater Manchester , England . The system is owned by Transport for Greater Manchester (TfGM) and operated and maintained under contract by RATP Group . In 2015 / 16 , 34 @. @ 3 million passenger journeys were made on the system .

The network consists of seven lines which radiate from Manchester city centre to termini at Altrincham , Ashton @-@ under @-@ Lyne , Bury , East Didsbury , Eccles , Manchester Airport and Rochdale . Metrolink has 93 stops along 57 miles (92 km) of standard @-@ gauge track making it the largest light rail system in the United Kingdom . It consists of a mixture of on @-@ street track shared with other traffic ; reserved track , segregated from other traffic , often running alongside the roadway or in the central reservation , and converted former railway lines . It is operated by a fleet of Bombardier Flexity Swift M5000s .

A light rail system for Greater Manchester emerged from the failure of the 1970s Picc @-@ Vic tunnel scheme to obtain central government funding . A light @-@ rail scheme was proposed in 1982 as the least expensive rail @-@ based transport solution for Manchester city centre and the surrounding Greater Manchester metropolitan area . Government approval was granted in 1988 and the network began operating services between Bury Interchange and Victoria on 6 April 1992 , becoming the United Kingdom 's first modern street @-@ running rail system ; the 1885 @-@ built Blackpool tramway being the only heritage tram system in the UK that had survived up to Metrolink 's creation .

Expansion of Metrolink has been a key strategy of transport planners in Greater Manchester , who have overseen its development in successive projects , known as Phases 1 , 2 , 3a , 3b and 2CC . A second line through Manchester city centre to eliminate the current bottleneck will be operational by the end of 2016 and work on an extension from Pomona station to the Trafford Centre is expected to commence in 2016 with an estimated operational date of 2019 . Furthermore , TfGM have endorsed more speculative expansion proposals for new lines to Stockport , a loop around Wythenshawe , and the addition of tram @-@ train technology .

= = History = =

= = = Predecessors = = =

Manchester 's first tram age had begun in 1877 with the first horse trams of Manchester Suburban Tramways Company and ceased as early as in 1949 , when the last line of the municipal Manchester Corporation Tramways was displaced by motor buses . That company had managed most of the electrification of the trams , executed 1901 to 1903 . Since 1938 , some trams had been displaced by trolleybuses . Electric traction on tyres in the streets of Manchester ended in 1966 .

= = = Origins = = =

A light rail system for Greater Manchester was born of the failure to obtain central government funding for the Picc @-@ Vic scheme linking the existing railway systems north and south of the city centre via a tunnel . Greater Manchester 's railway network suffered from poor north ? south connections , relying on bus connections through the city centre by means of the Centrelink bus service . Piccadilly and Victoria were built in the 1840s by rival companies on cheaper land on the fringes of the city centre . As early as 1839 , in anticipation of the stations being built , a connecting underground railway tunnel was proposed but abandoned on economic grounds , as was an overground suspended @-@ monorail in 1966 . SELNEC Passenger Transport Executive ? the body tasked with improving public transport for Manchester and its surrounding municipalities in the 1960s ? made draft proposals for a Picc @-@ Vic tunnel , " a proposed rail route beneath the city centre " forming " the centrepiece of a new electrified railway network for the region " . Despite

investigatory tunnelling under the Manchester Arndale shopping centre , when the Greater Manchester County Council presented the project to the United Kingdom Government in 1974 , it was unable to secure the necessary funding , and was abandoned on economic grounds when the County Council dropped the plans in 1977 .

In 1982 , the Greater Manchester Passenger Transport Executive (GMPTE ; the successor to SELNEC PTE) concluded that a street @-@ level light rail system to replace or complement the region 's under @-@ used heavy railways was the cheapest solution to improving Greater Manchester 's rail transport network . A Rail Study Group , composed of officials from British Rail , Greater Manchester County Council and GMPTE formally endorsed the scheme in 1984 . Abstract proposals based on light rail systems in North America and continental Europe , and a draft 62 @-@ mile (100 km) network consisting of three lines were presented by the Rail Study Group to the UK Government for taxpayer funding . Following route revisions in 1984 and 1987 , and a trial on 9 February 1987 using Docklands Light Railway rolling stock on a freight @-@ only line adjacent to Debdale Park , funding was granted by HM Treasury with the strict condition that the system be constructed in phases . Additional taxpayer funding came from the European Regional Development Fund and bank lending .

= = = Phase 1 , Bury , Altrincham and Manchester city centre = = =

Conversion of the East Lancashire Railway (Bury @-@ to @-@ Victoria) and Manchester , South Junction and Altrincham Railway (Altrincham @-@ to @-@ Piccadilly) heavy rail lines , and creation of a street @-@ level tramway through Manchester city centre to unite the lines as a single 19 @. 2 @-@ mile (30 @. 9 km) network , was chosen for Phase 1 because the two heavy rail lines were primarily used for commuting to central Manchester , and would improve north ? south links and access to the city centre . The required parliamentary authority to proceed with Phase 1 was obtained with two Acts of Parliament ? the Greater Manchester (Light Rapid Transit System) Act 1988 and Greater Manchester (Light Rapid Transit System) (No. 2) Act 1988 .

On 27 September 1989 , following a two @-@ stage tender exercise , the Greater Manchester Passenger Transport Authority awarded a contract to the GMA Group (a consortium composed of AMEC , GM Buses , John Mowlem & Company , and a General Electric Company subsidiary) who formed Greater Manchester Metro Limited to design , build , operate and maintain Phase 1 of Metrolink . The contract was approved by Michael Portillo on behalf of the Department for Transport on 24 October 1989 , and formally signed on 6 June 1990 .

The Bury line was closed in stages between 13 July 1991 and 17 August 1991 , after which the 1200V DC third rail electrified line was adapted for a 750 V DC overhead line operation . In Manchester city centre , a tramway ? built with network expansion in mind ? from Victoria to Piccadilly via Market Street and Piccadilly Gardens connected Bury to Altrincham via Manchester ; The overhead structures and wiring of the Altrincham line were adapted for light rail . As well as upgrades to signalling and stations on the network , a combined headquarters , depot and control centre was built at Cheetham Hill on Queens Road , north of Victoria station , at a cost of £ 8 million (£ 15 @, @ 500 @, @ 000 as of 2016) .

Initially projected to open in September 1991 , then promised for 21 February 1992 , Metrolink began operation on 6 April 1992 with a service between Victoria and Bury . Along with the Tyne and Wear Metro and Docklands Light Railway , it helped to reintroduce light rail to the United Kingdom . The network was expanded beyond Victoria to G @-@ Mex tram stop on 27 April 1992 ; a service through to Altrincham joined the network on 15 June 1992 , completing Phase 1 and enabling use of all 26 T @-@ 68 vehicles acquired for the operation . Queen Elizabeth II declared Metrolink open at a ceremony in Manchester on 17 July 1992 , adding that Metrolink would improve communication between northern and southern Greater Manchester . After the ceremony the Queen visited Manchester Town Hall and rode from St Peter 's Square to Bury to visit Bury Town Hall .

Then costing £ 145 million (£ 270 @, @ 600 @, @ 000 as of 2016) Phase 1 was expected to carry 10 million passengers per year , but surpassed this figure by the 1993 / 94 fiscal year , and every year thereafter . In recognition of passenger demands and the decommissioning of the Arndale bus

station after the 1996 Manchester bombing , adjustments were made to Phase 1 to the design of Manchester City Council 's city centre masterplan , by modifying Market Street tram stop to handle two @-@ way traffic , demolishing High Street tram stop in 1998 and creating a new stop for Shudehill Interchange in 2002 . Sections of track in the city centre were relaid following damage to the road surface adjacent to the line . By 2003 , Phase 1 was deemed a " long @-@ term success " by GMPTE , and , with overcrowding at peak times , carried more than 15 million passengers per year .

= = = Phase 2 , Salford Quays , Eccles = = =

Extension of the Metrolink network was intended to be continuous with successive expansion phases delivered in strict order of priority . GMPTE wanted to repeat its " success " with Phase 1 by converting other parts of Greater Manchester 's under @-@ utilised suburban rail network . However , changes in circumstances and new opportunities , combined with a shift in government policy following the early 1990s recession stalled the immediate expansion of Metrolink after Phase 1 . Phase 1a , a proposed east ? west route from Eastlands to Dimplington via Salford Quays was muted by uncertainty surrounding the Manchester bid for the 2000 Summer Olympics , the (unbuilt) Trafford Centre , and regeneration of Manchester Docks respectively . Nevertheless , throughout the 1990s , the Greater Manchester Passenger Transport Authority continued to acquire rights to construct Metrolink lines under the Transport and Works Act 1992 .

During the 1990s , Salford Quays became a business district specifically redeveloped for commerce , leisure , culture and tourism with a high density of business units and modern housing , complemented by a cinema complex , office blocks , and waterfront promenade . As it had poor public transport integration and no rail provision , it was earmarked for a potential Metrolink line as early as 1986 and legal authority to construct the line through the Quays was acquired in 1990 . The Quays received millions of pounds of investment and a public consultation and public inquiry resulted in government endorsement in 1994 . In autumn 1995 a 4 @-@ mile (6 @.@ 4 km) Metrolink line branching from Cornbrook tram stop to Eccles via Salford Quays capitalising on the regenerated Quayside was confirmed as Phase 2 of Metrolink . No funding came from central government and money was raised from the Greater Manchester Passenger Transport Authority (GMPTA) , the European Regional Development Fund and private developers . In April 1997 Altram , a consortium of the Serco , Ansaldo and John Laing was appointed to construct the Eccles Line ; Serco , responsible for the Sheffield Supertram would operate the whole network under contract ; Ansaldo provided six additional vehicles ? T @-@ 68As ? and signalling equipment . Construction work officially began on 17 July 1997 .

The Eccles Line was officially opened as far as Broadway tram stop on 6 December 1999 by the Prime Minister , Tony Blair , who praised Metrolink as " exactly the type of scheme needed to solve the transport problems of the metropolitan areas of the country " ; a service to Eccles Interchange joined the network on 21 July 2000 , and was officially declared open by Anne , Princess Royal at a ceremony on 9 January 2001 . On completion , Phases 1 and 2 gave Metrolink a total route length of 24 miles (39 km) . Phase 2 was predominantly privately funded and cost £ 160 @,@ 000 @,@ 000 (£ 242 @,@ 870 @,@ 000 as of 2016) . Salford City Council considered Phase 2 " an important contribution to Salford 's public transport network , providing a fast and frequent service between Eccles , Salford Quays and Manchester city centre " . But , in competition with comparatively quicker and cheaper buses , the line navigated the Quays on a slow and meandering route , and failed to reach its initial passenger targets . Patronage increased during the 2000s as the Eccles Line steadily increased in popularity in keeping with a rise in passenger numbers across the whole Metrolink system and was beginning to become overcrowded by the end of the decade .

= = = Phase 3 = = =

In 2000 , officials and transport planners in Greater Manchester considered Metrolink to be a " phenomenal success " . The system was exceeding patronage targets and reducing traffic

congestion on roads running parallel to its lines . Consequently , when the Transport Act 2000 required passenger transport executives to produce local transport plans , GMPTE 's top public transport priority was a third phase of Metrolink expansion , which would create four new lines along key transport corridors in Greater Manchester : the Oldham and Rochdale Line (routed northeast to Oldham and Rochdale) , the East Manchester Line (routed east to East Manchester and Ashton @-@ under @-@ Lyne) , the South Manchester Line (routed southeast to Chorlton @-@ cum @-@ Hardy and East Didsbury) , and the Airport Line (routed south to Wythenshawe and Manchester Airport) . The East Manchester Line would capitalise on serving the City of Manchester Stadium , a host venue of the 2002 Commonwealth Games . Satisfied it would deliver a key policy commitment with faster expansion and greater value from economies of scale , GMPTE and the Association of Greater Manchester Authorities (AGMA) lobbied central government to provide partial funding to upgrade the current network with a new depot , passenger information displays , and construct four new lines in a single Phase 3 contract (dubbed the " Big Bang ") worth £ 489 @, @ 000 @, @ 000 (£ 742 @, @ 300 @, @ 000 as of 2016) .

Conceding that it would be " very difficult " to bring Metrolink to the City of Manchester Stadium by 2002 , the Government accepted its importance to Greater Manchester and the Commonwealth Games on 22 March 2000 , with an announcement from Deputy Prime Minister John Prescott that a £ 289 @, @ 000 @, @ 000 government contribution to fund Phase 3 would make Metrolink " the envy of Europe " . The remaining £ 200 @, @ 000 @, @ 000 was assembled from the private sector by July 2000 . Following the announcement , preparatory work such as legal costs , land acquisition and construction of rail bridges over the River Medlock was actioned . However , Metrolink made a loss in 2002 and failed to reduce traffic congestion in Manchester city centre . Costs for Phase 3 implementation were revised in the December after the 2002 Commonwealth Games , totalling £ 820 @, @ 000 @, @ 000 (£ 1 @, @ 203 @, @ 000 @, @ 000 as of 2016) , meaning Metrolink required a Government contribution of at least £ 520 @, @ 000 @, @ 000 . With costs predicted to rise further , and concerns raised over light rail procurement nationally , on 20 July 2004 , Alistair Darling (the Secretary of State for Transport) announced the Government had withdrawn its share of funding Metrolink due to excessive costs .

In response , highlighting the legal costs and demolition of homes , schools and offices in anticipation of the new lines , the Get Our Metrolink Back on Track (or Back on Track) campaign spearheaded by the Manchester Evening News and Members of Parliament from Greater Manchester was organised to lobby the Department for Transport to fund Phase 3 . On 16 December 2004 Alistair Darling announced that the government would fund Phase 3 ? but not at any price , capping its investment for Metrolink enhancements at £ 520 @, @ 000 @, @ 000 . An initial £ 102 @, @ 000 @, @ 000 funding package was granted by the Government in July 2005 for Phase 3 preparatory work , and a Carillion @-@ led track renewal programme for 12 miles (19 km) of Phase 1 line ? still using original British Rail track ? that was causing damage to vehicles and discomfort for passengers . Following negotiations between central government and GMPTE and AGMA , Phase 3 funding was confirmed by Douglas Alexander on 6 July 2006 , albeit with adjustments (such as axing the Wythenshawe Loop) and splitting the project into two stages : Phase 3a , elements of expansion funded by government investment ; and Phase 3b , elements requiring an alternative funding source . The MPact @-@ Thales consortium , composed of Laing O 'Rourke , VolkerRail and the Thales Group , was appointed to design , build and maintain the 20 miles (32 km) of new line plus a new depot at Old Trafford . A 0 @. @ 25 @-@ mile (0 @. @ 40 km) spur off the Eccles Line to the new MediaCityUK development at Salford Quays , funded separately by the Northwest Regional Development Agency (NWRDA) , would also fall to MPact @-@ Thales .

== == Phase 3a , Oldham , Rochdale , East Manchester Line == ==

Phase 3a , dubbed the " Mini Bang " , or " Little Bang " , was an extension scheme approved by the government on 6 July 2006 , with final sign off and release of Treasury funds in May 2008 . In addition to the separately NWRDA @-@ funded spur from the Eccles Line to MediaCityUK , Phase

3a involved converting the 14 @-@ mile (23 km) Oldham Loop heavy rail line from Victoria to Rochdale via Oldham , building a new 1 @.@ 7 @-@ mile (2 @.@ 7 km) South Manchester Line from Trafford Bar to St Werburgh 's Road in Chorlton @-@ cum @-@ Hardy (on a closed section of Cheshire Lines Committee railway) , and construction of a new 4 @-@ mile (6 @.@ 4 km) East Manchester Line from Piccadilly to Droylsden . The Oldham and Rochdale and South Manchester Lines were funded by a £ 244 @,@ 000 @,@ 000 lump sum from the government . The East Manchester Line to Droylsden was funded by borrowings by GMPTE that would be repaid over 30 years using fare revenue from Metrolink .

The Oldham Loop Line , subsidised by GMPTE and used for suburban commuting , closed on 3 October 2009 allowing work to convert the line from heavy rail to Metrolink , although preparatory work on Central Park tram stop and a flyover at Newton Heath over the heavy Caldervale Line commenced in 2005 . Conversion of the Oldham Loop for Metrolink allowed for the addition of new stops along the line , including Monsall , South Chadderton , and Newbold ; Kingsway Business Park tram stop was authorised at a late stage of planning in July 2011 once the Phase 3b @-@ Drake Street tram stop was abandoned (on technical and economic grounds) and additional funding was procured from Rochdale Metropolitan Borough Council and Kingsway Business Park 's private developer Wilson Bowden .

The planned opening of Phase 3a services was initially delayed on each line by months due to faults with a new £ 22 @,@ 000 @,@ 000 digital signalling and control system known as the Tram Management System , or TMS , designed by the Thales Group . Services on the spur from the Eccles Line to MediaCityUK tram stop were expected to commence during Summer 2010 , and began on 20 September 2010 , serving MediaCityUK , a 200 @-@ acre (81 ha) development for creative and digital mass media organisations , and The Lowry , a combined theatre @-@ gallery and Greater Manchester 's most visited tourist attraction . On its inauguration , TMS experienced several faults on the expanded Eccles Line , causing " chaos " at MediaCityUK , and 24 service delays on the network between September 2010 and February 2011 . On the South Manchester Line , services to St Werburgh 's Road tram stop were expected to commence in spring 2011 , but delayed until 7 July 2011 , due to problems with TMS . On the Oldham and Rochdale Line , services from Manchester to Central Park and Oldham Mumps were expected to open in spring 2011 and autumn 2011 respectively , but problems with TMS and the need to renew structures delayed services until 13 June 2012 , when 7 @.@ 1 miles (11 @.@ 4 km) of the line from Victoria to Oldham Mumps tram stop opened in a single stage .

After three months in operation , Metrolink services to Oldham were hailed a " huge success " by TfGM , with 250 @,@ 000 passengers on the line between June and September , strengthening TfGM 's position that Phase 3a would raise daily ridership on Metrolink to 90 @,@ 000 . Originally planned to open in spring 2012 , then delayed to autumn 2012 , a service on the Oldham and Rochdale Line from Oldham Mumps as far as Shaw and Crompton tram stop began on 16 December 2012 . In January 2013 , a contract dispute between TfGM and Thales Group over missed deadlines and poor performance of TMS resulted in TfGM withholding payments for unfulfilled construction targets . Services to Rochdale and Droylsden were scheduled for a spring 2012 opening date , but delayed by months because of problems with the implementation of TMS , prompting outrage from Members of Parliament representing these areas . The East Manchester Line to Droylsden opened to selected residents of Manchester and Tameside on 8 February 2013 , and to the general public on 11 February 2013 . On 28 February 2013 , passenger services expanded along the 4 @.@ 6 @-@ mile (7 @.@ 4 km) stretch of the Oldham and Rochdale Line between Shaw and Crompton and Rochdale railway station , completing Phase 3a , and giving Metrolink a total network length of 43 miles (69 km) . On 9 May 2013 , TMS was successfully implemented in the City Zone , providing real @-@ time passenger information displays at all stops in Manchester city centre .

== = Phase 3b : Ashton @-@ under @-@ Lyne , East Didsbury and Manchester Airport == = =

Phase 3b was revealed in July 2006 when Phase 3 was split into two smaller phases . A range of

motivators pushed transport planners to pursue Phase 3b , including attracting new passengers , value to the economy , reduction of road traffic congestion , regeneration , and improved access to town centres , business districts and labour markets . Under Phase 3b plans , Metrolink proposed to extend the East Manchester Line by 2 @. @ 4 miles (3 @. @ 9 km) from Droylsden to Ashton @- @ under @- @ Lyne ; extend the South Manchester Line by 2 @. @ 7 miles (4 @. @ 3 km) from St Werburgh 's Road to Didsbury ; and create a new 9 @- @ mile (14 km) Airport Line to Manchester Airport from a junction at St Werburgh 's Road . Phase 3b enacted plans first drawn up in 1983 , laid before Parliament in 1988 , and approved by the government in 1991 to re @- @ route and extend the Oldham and Rochdale Line at a cost of £ 124 @, @ 500 @, @ 000 with a street running route through Oldham and Rochdale town centres , both of which were poorly served by using the outlying Oldham Mumps and Rochdale railway stations alone .

Tasked with procuring funds for Phase 3b from sources other than central Government , in July 2007 GMPTA and AGMA submitted a bid to the Transport Innovation Fund , which would release a multimillion @- @ pound sum for public transport improvements linked to viable anti @- @ road traffic congestion strategies . A referendum on the Greater Manchester Transport Innovation Fund was held in Greater Manchester on 19 December 2008 , in which 79 % of voters rejected plans for public transport improvements linked to a peak @- @ time weekday @- @ only Greater Manchester congestion charge . In May 2009 , Greater Manchester Integrated Transport Authority (formerly GMPTA) and AGMA agreed to create the Greater Manchester Transport Fund , £ 1.5billion raised from a combination of a levy on council tax in Greater Manchester , government grants , contributions from the Manchester Airports Group , Metrolink fares and third @- @ party funding for " major transport schemes " in the region . Phase 3b was approved with funding on a line @- @ by @- @ line basis between March and August 2010 .

Construction work for all Phase 3b lines began in March 2011 . On the Airport Line , a 580 @- @ tonne steel bridge was erected in Wythenshawe over the M56 motorway on 25 November 2012 . Following the closure of Mosley Street tram stop on 17 May 2013 , the 2 @. @ 7 @- @ mile (4 @. @ 3 km) route of the South Manchester Line from St Werburgh 's Road to East Didsbury tram stop was the first section of Phase 3b line to open on 23 May 2013 ? three months ahead of schedule . The East Manchester Line was completed on 9 October 2013 with a new service routed 2 @. @ 1 miles (3 @. @ 4 km) between Droylsden and Ashton @- @ under @- @ Lyne tram stop , taking the total system length to 47 @. @ 7 miles (76 @. @ 8 km) . The Oldham and Rochdale Line was completed with a street @- @ running service through Oldham Town Centre on 27 January 2014 , and the addition of a street @- @ running service between Rochdale railway station and Rochdale Town Centre on 31 March 2014 , taking the total system length to 48 @. @ 5 miles (78 @. @ 1 km) .

On 3 November 2014 , the network once again expanded , with a 14 @. @ 5 @- @ mile (23 @. @ 3 km) extension to Manchester Airport railway station , bringing the length of the system to 92 @. @ 5 kilometres (57 @. @ 5 mi) , making it the longest tramway in the United Kingdom , and the longest light railway . It opened more than one year early , and at a cost of £ 368 million .

== = Phase 2CC == =

The Second City Crossing (also known as 2CC) is a second Metrolink route across Manchester city centre , first proposed in 2011 as a means to improve capacity , flexibility and reliability as the rest of the system expands due to phases 3a and 3b . Funded by the Greater Manchester Transport Fund , its 0 @. @ 8 @- @ mile (1 @. @ 3 km) route will begin at a rebuilt St Peter 's Square tram stop , and run along Princess Street , Cross Street and Corporation Street to rejoin the existing Metrolink line by Victoria station . Following the submission of a planning document under the Transport and Works Act 1992 , and a public inquiry held throughout 2013 , the Second City Crossing was granted approval on 8 October 2013 by the Secretary of State for Transport , Patrick McLoughlin , and signed off on 28 October 2013 by the Greater Manchester Combined Authority . Construction started in early 2014 with Exchange Square tram stop and the first tracks of the line were laid in late November 2014 . Exchange Square joined the network as a new stop on the

crossing in December 2015 , meaning a Shaw and Crompton @-@ to @-@ Exchange Square service could begin . Completion of the whole line is expected in 2016 / 17 .

= = Operator = =

Metrolink is owned by TfGM and operated and maintained by private transport firms under an operating and maintenance (O & M) contract . Between 1992 and 1997 Metrolink was operated and maintained as a concession by Greater Manchester Metro Limited , between 1997 and 2007 by Serco . From 2007 until 2011 it was operated and maintained by Stagecoach Metrolink ? part of the Stagecoach Group . Metrolink RATP Dev , a part of the French state @-@ owned RATP Group which operates the Paris Métro , bought the Metrolink contract from Stagecoach on 1 August 2011 .

In October 2015 , TfGM announced RATP Group , Keolis / Amey , National Express and Transdev had been shortlisted to bid for the next contract starting in July 2017 .

Metrolink has been headed by Peter Cushing since February 2013 .

= = = Branding and public relations = = =

The name Metrolink and a system @-@ wide aquamarine , black and grey corporate branding and vehicle livery was devised by Fitch RS and Design Triangle , and first revealed at a press launch in June 1988 . Previously , during the planning and promotional stages , the system was known as Project Light Rail , and borrowed an orange and brown identity used by Greater Manchester Transport and GM Buses . In August 1991 , in partnership with BBC Manchester , Metrolink ran a " Nickname Metrolink " competition to find an affectionate short name for the system , comparable to " The Tube " for London Underground and " The L " for the Chicago elevated transit system . Most submissions were inspired by textile manufacturing , Greater Manchester 's historic staple industry , using names such as " The Thread " and " The Shuttle " , but the winning entry was " The Met " . In 2008 , a distinctive yellow and metallic silver vehicle livery , and corresponding yellow system @-@ wide corporate re @-@ branding was introduced by Manchester @-@ based Hemisphere Design and Marketing Consultancy , designed in partnership with Peter Saville , Dalton Maag and Design Triangle . Yellow was chosen by Hemisphere for its high visibility and to reflect Greater Manchester 's culture of confidence and optimism .

Metrolink has been a " Football Development Partner " with the Manchester Football Association since August 2010 , meaning it is the association 's Official Travel Partner , and supports grassroots association football in Greater Manchester by selecting a " Team of the Month " . Metrolink is a sponsor of the annual Manchester Food and Drink Festival . On 6 December 2010 , to celebrate the soap opera 's 50th anniversary , Coronation Street featured a storyline with an explosion which caused a crash on the Metrolink system at Weatherfield . Although a fictitious event , at least six calls were made to GMPTE asking if services had been affected .

Transport planners in Greater Manchester describe Metrolink as both " an icon of Greater Manchester " , and " an integral part of the landscape in Greater Manchester " . The Guardian describes Metrolink as " Manchester 's efficient and much @-@ loved tram system " . Under ownership of the Guardian Media Group , the Manchester Evening News spearheaded the Get Our Metrolink Back on Track campaign in 2004 ? 05 . Under Trinity Mirror ownership , the Manchester Evening News used the Freedom of Information Act 2000 to reveal that Metrolink received over 10 @, @ 000 complaints between May 2011 and May 2012 .

In 2013 , then Manchester City F.C. manager Roberto Mancini and players Joe Hart , Vincent Kompany and James Milner recorded special stop announcements to be used on Metrolink 's East Manchester Line on dates when Manchester City play at home at the City of Manchester Stadium (served by the Etihad Campus tram stop) . The announcements were first used on 17 February 2013 , for Manchester City 's FA Cup Fifth Round tie against Leeds United A.F.C ..

= = Infrastructure = =

== Stops and lines ==

As of December 2015, Metrolink has a network length of 57 miles (92 km) and 93 stops ? along seven lines which radiate from a " central triangular junction at Piccadilly Gardens which forms the hub of the Metrolink system " in the City Zone . The lines are : the Airport Line (which terminates at Manchester Airport) , the Altrincham Line (which terminates in Altrincham) , the Bury Line (which terminates in Bury) , the East Manchester Line (which terminates in Ashton @-@ under @-@ Lyne) , the South Manchester Line (which terminates in East Didsbury) , the Eccles Line (which terminates in Eccles) , and the Oldham and Rochdale Line (which terminates in Rochdale) . Some stops , such as Cornbrook , are shared between lines , and may be used as interchange stations ; others , such as Altrincham Interchange , are transport hubs which integrate with heavy rail and bus stations . Each stop has at least one high @-@ floor platform measuring a minimum of 2 metres (6 @. @ 6 ft) wide , accessed by ramp , stairs , escalator , lift or combination thereof . Low @-@ floor platforms commonly used for light rail throughout the world were ruled out for Metrolink because the system inherited 90 @-@ centimetre (35 in) high @-@ floor platforms from British Rail on lines formerly used for heavy rail . Shelters and canopies at stops were supplied by JCDecaux , and ticket vending machines by Scheidt & Bachmann . Card readers are installed on all stop platforms , ready for the TfGM ' My Get Me There ' smart card being trialled in 2014 ; and when this is fully implemented all smart card users will touch @-@ in and touch @-@ out at a platform reader . Each line has track with standard gauge specification , powering vehicles electrically from 750 V DC overhead lines . Between 1992 and 2007 , electricity for the Metrolink system was procured by the operator , based on price only . In 2007 , GMPTE changed the contractual requirements to ensure that sustainable power would be factored into choosing an energy supplier , and in July 2007 , Metrolink became the first light rail network in the UK with electricity supplied entirely from sustainable energy via hydropower . Now , energy for the system is generated by biomass .

== Depots ==

Metrolink House at Queens Road in Cheetham Hill is the headquarters of Metrolink . Constructed during Phase 1 , it served jointly as a control centre , HQ , office space , and depot for the storage , maintenance and repair of vehicles . Under the original proposals , Metrolink House was much larger , with a design which would support network expansion , but this design did not obtain the necessary planning permission from Manchester City Council . Consequently , Metrolink House was scaled down to a 4 @-@ hectare (9 @. @ 9 @-@ acre) £ 8 @, @ 000 @, @ 000 site with limited capacity , and , in light of Phase 3a network expansion , Metrolink built a second depot at Elsinore Road in Old Trafford in 2011 . This second depot occupies the site of a former warehouse , and can house up to 96 vehicles . On 7 May 2013 Metrolink completed the transfer of its main operational functions from Cheetham Hill to Old Trafford , meaning its control room ? known as the Network Management Centre ? is housed jointly with the Customer Services team by its newer depot .

== Wi @-@ Fi ==

In July 2013 , the Transport for Greater Manchester Committee announced that it planned to enhance the experience of travelling on Metrolink by tapping in to Manchester City Council 's grant from the UK Urban Broadband Fund and using it to provide Metrolink passengers with free Wi @-@ Fi when on board . The scheme began with a trial on a single tram ? number 3054 ? connected to the FreeBeeMcr broadband network with the intention of rolling it out across the whole Metrolink network by Spring 2015 . It was rolled out fleet wide in March 2015 .

== Proposed changes and expansion ==

===== Buckley Wells =====

Buckley Wells tram stop has been proposed to provide better passenger access in southern Bury , and would be on the Bury Line between Bury Interchange and Radcliffe tram stop .

===== Middleton extension =====

As of 2013 , Rochdale Metropolitan Borough Council aspires to link Middleton to the Metrolink network by constructing a branch off the Bury Line routed from Bowker Vale tram stop to Middleton town centre . Rochdale Council first proposed this extension of Metrolink to Middleton in 2008 , and priced the scheme at £ 80 @, @ 000 @, @ 000 .

===== Oldham extension =====

In January 2016 , Jim McMahon , MP for Oldham West and Royton , proposed two loop extensions to the metrolink system around Oldham . The link would add a spur from Westwood tram stop to Middleton town centre , before joining the Bury line near Bowker Vale , in line with the proposed Middleton extension .

The Ashton Loop would extend the line beyond Ashton town centre to Oldham Mumps . Both would connect Rochdale to its neighbouring towns without the need to travel in and out of Manchester city centre . Initial high level feasibility work was undertaken by officials at Transport for Greater Manchester which demonstrated the route is technically possible .

===== Salford expansion =====

In Salford City Council 's 2004 ? 2016 unitary development plan :

Extending from Eccles Interchange along the A57 road to Barton @-@ upon @-@ Irwell and then across the Manchester Ship Canal to the Trafford Centre .

Re @-@ opening the Tyldesley Loopline from Eccles to Little Hulton via Walkden with Metrolink services .

Tram @-@ train between Manchester and Wigan via Salford , as proposed by the Regional Spatial Strategy for North West England .

===== Stalybridge extension =====

As of 2011 , Tameside Metropolitan Borough Council aspires to extend the East Manchester Line from Ashton @-@ under @-@ Lyne to Stalybridge .

===== Stockport tram @-@ train strategy =====

In January 2015 Stockport Metropolitan Borough adopted a Rail Strategy proposing substantial conversion of current rail alignments around Stockport to tram @-@ train operation , running into an interchange at Stockport bus station . These proposed services expand on , and are consistent with , those outlined in the TfGM tram @-@ train strategy document . Earlier plans (now discarded) had envisaged the Metrolink line to East Didsbury being extended to Stockport along the Mersey Valley . The revised plan proposes instead a revised alignment for this link via Edgeley and Stockport railway station .

Stockport town centre to Manchester city centre via Heaton Norris , Reddish South and Belle Vue (linking with the proposed Manchester ? Marple tram @-@ train line) ;

Stockport town centre to Manchester Airport via Edgeley and Baguley ;

Stockport town centre to Altrincham via Edgeley and Baguley ;

Stockport town centre to East Didsbury (and on to Manchester city centre) , via Edgeley and Gorsey Bank ;

Hazel Grove to East Didsbury via Gorsey Bank .

In the Rail Strategy , Stockport MBC also outline longer term aspirations to establish tram @-@ train services between Stockport town centre and Marple ; and between Stockport town centre and Ashton town centre .

===== Trafford Park line =====

TfGM holds powers to commission a new line from Pomona to Port Salford via Trafford Park and the Trafford Centre , and committed to procuring a funding mechanism for its construction in 2011 . Drawing on proposals made by Trafford Metropolitan Borough Council in 1984 , TfGM made this a strategic priority in each of its local transport plans since the Transport Act 2000 , attesting that Metrolink provision will improve public access to key attractions , support the development of business and freight zones , and reduce traffic congestion on the M60 motorway . In 2004 , Peel Holdings raised concerns that the lack of Metrolink provision to the Trafford Centre may impact on its Chill Factore development , and offered to contribute towards its cost . In summer 2013 , the Greater Manchester Combined Authority and the Greater Manchester Local Enterprise Partnership announced it may fund the construction of the line as far as a stop at the Trafford Centre using the Earnback mechanism of the Greater Manchester City Deal ; with an extension to Port Salford and Eccles to be developed and costed separately . TfGM estimated that it would require £ 350 @,@ 000 @,@ 000 to open this route to passengers by its target of 2018 / 19 (subject to a satisfactory business case , Transport and Works Act Order and public consultation) . In November 2014 , the UK Treasury confirmed earnback funding for the Trafford Park Line as part of the devolution deal for the Greater Manchester Combined Authority .

===== Tram @-@ trains =====

Metrolink and the TfGM Committee have prepared five costed proposals for extending Metrolink using tram @-@ train technology over the existing heavy rail network in the region ; along the Mid @-@ Cheshire Line (between Stockport and Hale) , the Hope Valley Line (between Manchester and Marple) , the Glossop Line (between Manchester and the dual termini at Hadfield and Glossop) , the Manchester to Sheffield Line (between Manchester and Hazel Grove) , and along the Manchester to Southport Line (between Manchester and Wigan via Atherton) , with an estimated total funding requirement of £ 870 million as of 2013 . TfGM intend to proceed to the identification of potential rail industry funding options , subject to a review of lessons from a tram @-@ train pilot scheme in Sheffield .

===== Wythenshawe Loop =====

Although axed in 2005 to control costs , the Wythenshawe Loop on the Airport Line remains an aspiration of TfGM . As of October 2014 there is renewed interest from TFGM , particularly as the route could link with HS2 Manchester Interchange . It would create a loop from Roundthorn tram stop to the University Hospital of South Manchester (Wythenshawe Hospital) and Newall Green and back to Roundthorn , and improve access between Wythenshawe and Manchester city centre on a route which is physically impaired by the River Mersey and M60 motorway .

===== Rolling stock =====

Metrolink is operated by fleet of M5000 trams , the number of which will reach 120 by 2017 . The first M5000 trams were introduced in 2009 , and replaced the former fleet of thirty @-@ two T @-@ 68 and T @-@ 68A trams , which had operated the network since opening in 1992 , these were withdrawn from service during 2012 ? 14 .

In order to be compatible with the former heavy rail stations Metrolink inherited , the network uses high @-@ floor trams with a platform height of 900 mm (35 in) .

== M5000 ==

In December 2009 , Metrolink took delivery of the first M5000 tram . Built by Bombardier Transportation and Vossloh Kiepe , the initial eight M5000s were ordered to allow services to be increased . They are part of the Flexity Swift range of light rail vehicles , and have a design similar to the K5000 vehicle used on the Cologne Stadtbahn .

With the approval of the spur to MediaCityUK , a further four were ordered . To provide rolling stock for the phase 3 extensions and replace the existing fleet , the order was increased successively to 94 . In December 2013 , a further ten M5000s were ordered to provide trams for the Trafford Park line planned to open in 2020 , while in the interim supporting a service between MediaCityUK and Manchester city centre and other capacity enhancements . In September 2014 , a further 16 were ordered , this will bring the fleet up to 120 .

== Ancillary vehicles ==

Metrolink has one Special Purpose Vehicle from 1991 . Numbered 1027 with its support wagon 1028 , it is a bespoke diesel @-@ powered vehicle with a crane , inspection platform , mobile workshop , and capacity for a driver and three passengers . It was designed to assist with vehicle recovery and track and line repairs .

== Former fleet ==

== T @-@ 68 / 68A ==

To commence operations , a fleet of 26 T @-@ 68 trams were delivered in 1992 . To provide extra trams for the Eccles Line , six modified T @-@ 68A trams were purchased in 1999 . The T @-@ 68A vehicles were based on the original T @-@ 68s , but had modifications replacing destination rollblinds with dot matrix displays , and retractable couplers and covered bogies necessary for the high proportion of on @-@ street running close to motor traffic .

Three of the earlier T @-@ 68 fleet were similarly equipped , and were known as T @-@ 68Ms . Mechanically and electrically the T @-@ 68M vehicles remained essentially a T @-@ 68 , but had modifications to its brakes , mirrors , and speed limiters to suit the Eccles line . Initially only these vehicles were permitted to operate the Eccles line but the entire fleet was modified between 2008 and 2012 for universal running , under a program known as the T @-@ 68X Universal Running programme .

All of the T @-@ 68 and T @-@ 68As were withdrawn between April 2012 and April 2014 .

Tram no . 1007 , the first to pass through the City Centre on the opening day , is due to be restored into Heaton Park Tramway , and is believed to be the only T @-@ 68 to be kept from scrapping etc .

== Incidents ==

Unlike some Metro systems in the United Kingdom , the Manchester Metrolink has a high degree of street interaction between pedestrians and motorists with on @-@ street running trams - this is most notable in Manchester city centre . All trams are equipped with a standard horn and a warning horn . A number of fatal incidents have occurred on the network since opening in 1992 :

On 18 October 2002 , a pedestrian died after a collision with a tram after falling onto tram tracks near Manchester Central .

On 25 June 2005 , a pedestrian died after a collision with a tram at Navigation Road stop .

On 5 June 2011 , a pedestrian died after a collision near Piccadilly Gardens .

On 15 December 2011 , a blind man died after a collision with a tram near St Peters ' Square .

On 6 February 2013 , a pedestrian died after a collision with a tram at the Failsworth stop .
On 11 January 2014 , a pedestrian died after a collision with a tram at the Market Street stop .
On 16 February 2016 , a cyclist died after a collision with a tram at the Robinswood Road stop .

= = Travelling = =

= = = Service and hours of operation = = =

Before inauguration , GMPTE 's original concept was for Metrolink 's operator to provide a service every ten minutes from Bury @-@ to @-@ Piccadilly and Altrincham @-@ to @-@ Piccadilly 6 a.m. ? Midnight , Monday to Saturday . Greater Manchester Metro Limited , the system 's original operator , argued for adjustments , citing the need to provide an efficient and commercially viable operation in line with vehicle running times and passenger demand . Due to power limitations , this pattern was modified to a twelve @-@ minute service throughout the day , doubling to a six @-@ minute service in peak periods , resulting in a " ten trams per hour " service pattern on routes running from Altrincham and Bury to Manchester every six minutes . Operators are required to provide this level of service at least 98 % of the time , or incur a financial penalty charge . This six @-@ minute service pattern has been adopted on the rest of the network as the system has grown . Heavy snowfall during the winter of 2009 / 10 impaired Metrolink services and the operator was criticised for failing to have cold weather procedures . This prompted a program to improve reliability and performance of the system in freezing conditions . Metrolink operated icebreaker @-@ style vehicles at night during snowfall in January 2013 to provide normal services .

A survey in 2012 revealed that passengers who used Metrolink everyday for commuting rated service levels as poor and / or unreliable , with those respondents particularly frustrated by delays and disruptions . TfGM recognised that the older vehicles in its fleet ? the T68 / T68As ? were outdated and the cause of much disruption , and agreed to replace them with M5000s by 2014 . Among those who used Metrolink less regularly , the system scored far better in the survey . A survey in 2014 by the non @-@ departmental government body Passenger Focus found that of the five major light rail systems in the United Kingdom ? Metrolink , Sheffield Supertram , NET , Midland Metro and Blackpool tramway ? Metrolink had the lowest overall satisfaction rating in the United Kingdom . Respondents were surveyed on value for money , punctuality , seating availability , tram stations and overall satisfaction . Metrolink was below average on all criteria , and 47 % believed Metrolink was value for money compared to a national average of 60 % .

In January 2016 , Transport for Greater Manchester agreed a baseline Service Specification to grade bidders seeking to operate the concession from July 2017 ; once the Second City Crossing is in operation . In the baseline service pattern , there are no designated ' peak ' periods of service operation ; instead there will be an ' enhanced ' service operating from start of service to 8pm Monday to Friday , and to 6pm Saturday ; and a ' core ' service running at all other times . In the ' enhanced ' service pattern , trams will run with a 6 @-@ minute frequency to Shaw & Oldham , Bury , Ashton , Altrincham , Manchester Airport and East Didsbury ; and with a 12 @-@ minute frequency to Rochdale , Eccles and MediacityUK . When the Trafford line opens , services will run to the Trafford Centre with a 12 @-@ minute frequency . In the ' core ' service pattern , all lines will run with a 12 @-@ minute frequency .

Services I & J operate only on a Sunday between 08 : 00 & 17 : 30 instead of services G & H (shown above)

= = = Ticketing = = =

Metrolink fares were originally set by the system 's operator , but are now set by the TfGM Committee at levels that cover both the running costs and the cost of borrowing that has part @-@ funded the expansion of the system ; Metrolink receives no public subsidy . Fares typically rise each January above the rate of inflation . The fare tariff is based on a division of the network 's stations

into fare zones . Persons under 16 years of age , persons of pensionable age , and people with disabilities qualify for concessionary fares , some of which are mandatory and others discretionary , as determined by the Greater Manchester Combined Authority . The Greater Manchester Combined Authority permits reduced fares for persons under 16 years of age , and free or reduced fares on Metrolink after 9 : 30 a.m. for pensioners . In normal circumstances , tickets cannot be purchased on board Metrolink vehicles , and must be purchased from a ticket vending machine before boarding the vehicle . Fare evasion in 2006 was estimated at 2 ? 6 % of all users , and in 2012 at 2 @. @ 5 % of all users . Checking tickets and passes and issuing Standard fares is the responsibility of Metrolink 's Passenger Services Representatives (PSRs) , who provide security and assistance on the network ; between 1992 and 2008 , Greater Manchester Police had a dedicated Metrolink unit responsible for policing the system . The original ticket vending machines were designed by Thorn EMI . In 2005 GMPTE announced that rail passengers travelling from within Greater Manchester into Manchester city centre can use the Metrolink service between the eight City Zone stations for free . Passengers must present a valid rail ticket , correctly dated with Manchester Ctlz as the destination . In 2007 TfGM rolled out new ticket vending machines , designed to accept credit / debit card payments and permit the purchase of multiple tickets in a single transaction . These were replaced in 2009 with touchscreen machines , designed with the Scheidt & Bachmann Ticket XPress system . In October 2012 , TfGM announced it was devising a simpler zonal fare system , comparable to London fare zones , and preparing to introduce get me there , the region 's new contactless smartcard system , for use on all public transport modes in Greater Manchester , including Metrolink .

= = Tram services = =

Monday to Saturday service :

Seven services which all run every 12 minutes :

- (A) Altrincham ? Etihad Campus
- (B) Altrincham ? Deansgate @-@ Castlefield (peak only , 07 : 00 ? 20 : 00)
- (C) Bury ? East Didsbury
- (D) Bury ? Piccadilly (peak only , 07 : 00 ? 20 : 00)
- (E) Eccles ? Piccadilly via MediaCityUK
- (F) Manchester Airport ? Cornbrook
- (G) Rochdale Town Centre ? Ashton @-@ under @-@ Lyne
- (H) Shaw & Crompton ? Exchange Square

One early morning service which runs every 20 minutes :

- (K) Manchester Airport ? Firswood (03 : 00 ? 06 : 00)

The combined Monday ? Saturday daytime frequency on the Bury and Altrincham routes is every 6 minutes . (Deansgate ? Altrincham & Bury ? Market Street)

Sunday and public holiday service :

Six services which all run every 12 minutes from 09 : 00 ? 17 : 30 and every 15 minutes at all other times .

- (A) Altrincham ? Etihad Campus
- (C) Bury ? East Didsbury
- (E) Eccles ? Piccadilly via MediaCityUK
- (F) Manchester Airport ? Cornbrook
- (G) Rochdale Town Centre ? Ashton @-@ under @-@ Lyne (after 17 : 30)
- (H) Shaw & Crompton ? Exchange Square (after 17 : 30)
- (I) Rochdale Town Centre ? Exchange Square (08 : 00 ? 17 : 30)
- (J) Victoria ? Ashton @-@ under @-@ Lyne (08 : 00 ? 17 : 30)

One early morning service which runs every 20 minutes :

- (K) Manchester Airport ? Firswood (03 : 00 ? 06 : 00)

= = Patronage = =

The Department for Transport reported passenger journeys for the 2015 / 16 financial year at 34 @. @ 3 million ; a 10 @. @ 1 % increase from 31 @. @ 2 million the previous year . Patronage has risen steadily since its opening , from a start @- @ point of 8 @. @ 1 million in the 1992 / 93 fiscal year . Travel increased from 18 @. @ 2 million journeys in 2001 / 02 to 20 million journeys in 2008 / 09 ; numbers fell to 18 @. @ 7 million in 2009 while parts of the system were closed for upgrades , but recovered to 19 @. @ 6 million for the 2009 / 10 fiscal year . Metrolink revised its method for calculating passenger boardings in 2010 / 11 , meaning figures are not directly comparable with previous years . TfGM projects that 41 @. @ 7 million passenger journeys per year will be made on the Metrolink system by 2016 / 17 .

A survey in 2012 revealed that 12 % , or around one in 10 people in Greater Manchester use Metrolink to travel to work , and 8 % use the system every day . The system is most commonly used by 21- to 30 @- @ year olds , and was used most markedly by residents of the Metropolitan Borough of Bury ? accounting for around a third of their commuter journeys .