

Running the Tyne and Wear Metro

The Tyne and Wear Metro is a light rail system with 78km of track and 60 stations, many of them interchanges with bus and other rail services to provide integrated public transport. It was conceived in 1971, opened in 1980, completed in 1984 and extended in 1991 and 2002.

While faithfully serving the travelling public for over 30 years, political upheaval, market deregulation and cost pressures have ensured the way Metro is run and managed has continuously evolved. But with a major modernisation programme now under way, its future looks bright.



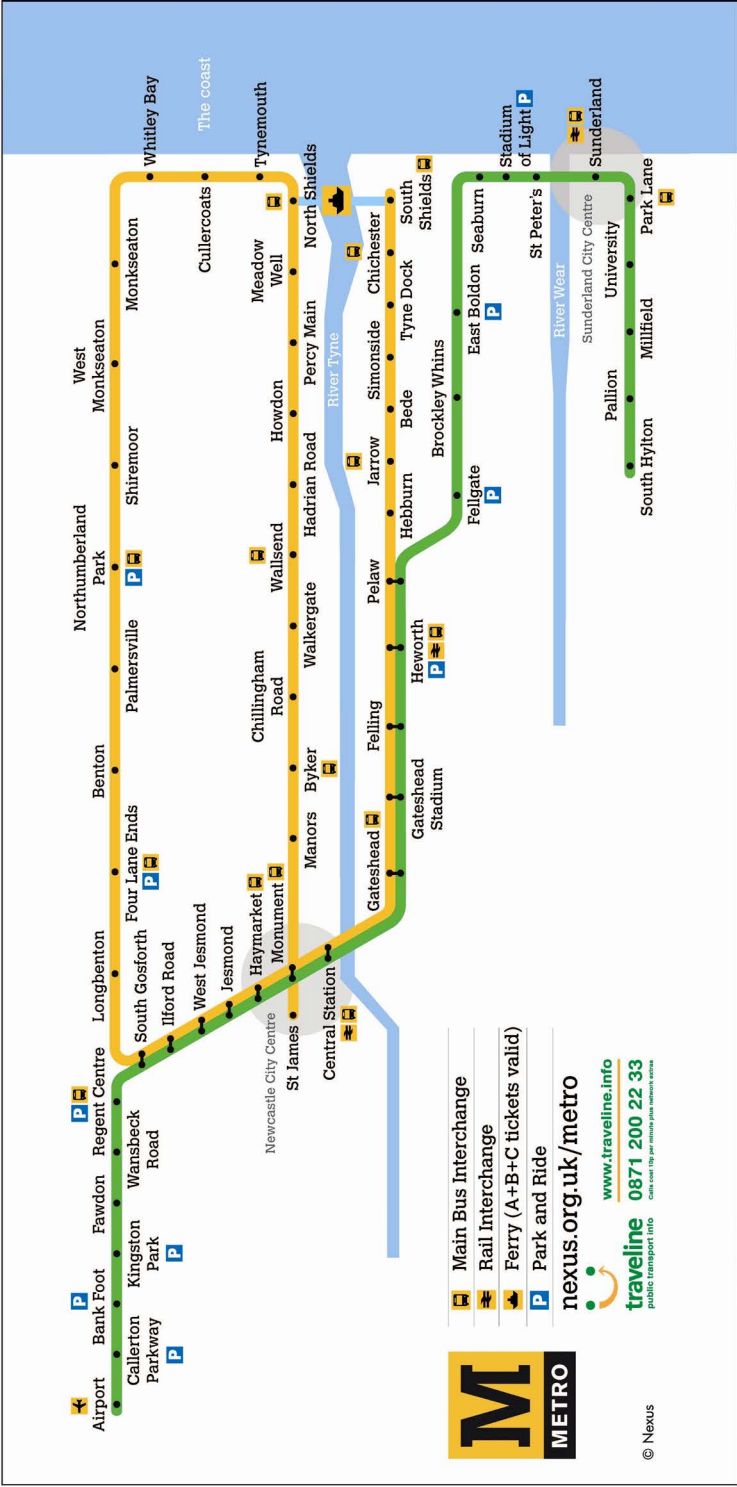


The Original Metro

The Tyne and Wear Metro is a light railway rapid transit system, initially built with 55km of track and 44 stations to serve parts of North Tyneside, Newcastle, Gateshead and South Tyneside. Detailed planning was started in 1971, as a core element of a planned integrated passenger transport system, with construction commencing in 1974. The original system was fully open by 1984. Two extensions to Newcastle Airport and to Sunderland were added to the system by 2002.

Operating the System

Metro was originally conceived in 1971 by the former Tyne and Wear Passenger Transport Authority, a regional body to promote and manage public transport on behalf of local authorities in the area. In 1974 Tyne and Wear Metropolitan County Council (T&WMCC) came into being and set up the Passenger Transport Executive (PTE) to continue the management of public transport and administer funds on behalf of the council. In 1996 the PTE took on the trading name Nexus.



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nexus.org.uk/metro

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Costs vary by route and time of day

Public Transport Info

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Nexus owns Metro, and the Shields Ferry. It funds those bus services requiring public subsidy, and also main line rail services between Sunderland and Newcastle. There were difficulties during construction of the Metro in 1976/77 between the PTE, (then) British Rail whose lines were being converted, and the rail unions as to who should own and operate Metro. The PTE eventually prevailed.

T&WMCC was abolished in 1986 and since then Nexus has owned and managed Metro on behalf of the Tyne and Wear Integrated Transport Authority (ITA), which brings together councillors from the five unitary authorities of North Tyneside, Newcastle, Gateshead, South Tyneside and Sunderland in a single strategic body. In 1996, British Rail was privatised but again Nexus held on to ownership of Metro.

Further changes took place in 2010 when DB Regio Tyne and Wear Limited (a subsidiary of the German transport corporation) was appointed to operate Metro to a specification set by Nexus. However, Nexus continue to own, manage and modernise the system, with the ITA having overall responsibility for fares policy and Nexus taking all fare revenue.

The ITA receives money for all of its services from a levy on the five district authorities, in proportion to their population. They also apply for and receive grants from central Government and other sources. The revenue from fares and advertising keeps the subsidy per journey lower than comparable UK systems but fares in themselves do not meet the full cost of operating Metro, even with the highest patronage per kilometre of any light rail system outside London.

In recent years Metro has covered just below 70% of its operating and maintenance cost from fares revenue with the remainder coming from national and local Government subsidy. In 2011, the income to Metro was £41.5m while the operating cost was £60.5m.

Users of the Metro would observe that it is a well used frequent service, with trains often packed at peak times and still well occupied in evenings and weekends. The timetable has changed over the years to respond to demand. It has settled down to a 12 minute frequency for all parts of the system, with extra trains at peak times. The ‘green’ and ‘yellow’ routes overlap between South Gosforth and Pelaw to provide a train every six minutes and additional peak services increase the frequency to a train every three minutes through this ‘central area’. The great benefit of this is that during busier times of day, passengers don’t need to look at a timetable for the majority of journeys but just turn up for the next available train. There are real time indicators on all platforms to inform passengers.

The fact that the standard two-car trains, with a crush-load capacity of 600, always stop and allow people to board and disembark quickly gives the service a considerable level of reliability. Passenger numbers rose to a 20-year high in 2009 of 41 million journeys, though there has been a recent falling back in the current economic climate to 37.5 million.

Further Improvements

In the decade that followed the Sunderland line’s opening, new stations and amenities were added to the existing Metro network, which now totals 78km. The opening of Northumberland Park Station in 2005 was an example of how high quality public transport can enhance economic development.

The £5.7m station in North Tyneside is at the heart of a large new housing and retail project by private developer Northumberland Estates. The station was funded by the developer and quickly became the busiest in the area, used by 640,000 passengers a year.



There were 1,500 homes within 800 metres walking distance when the station opened on what was a mixed brown and greenfield site on the urban fringe. Further housing continues to be provided in 2012 close to the station. Northumberland Park is also five minutes by dedicated bus to Cobalt, one of the largest new office parks in the UK.

Northumberland Park was Metro's 59th station and in 2008 the 60th opened at Simonside. The latter £3.2 million project was funded by Nexus from land sales and a grant from the European Regional Development Fund. The station is a wayside halt in a deprived community in South Tyneside with low levels of employment and car ownership. It creates a quicker and more frequent public transport link to employment and training opportunities in South Shields, Gateshead and Newcastle.

By 2006 the focus was on making the case to Government for funds for two strategic programmes. These were to secure the system's long-term future as assets and infrastructure approached the end of its planned life of 30 years, and to modernise ticket sales. Meanwhile continual improvements were made to amenities at key locations.

Pelaw station, the main change point for passengers between lines from South Shields and Sunderland, was upgraded in 2007 with an internal glass waiting area installed on the island platform plus covered entrance routes. The car park at Hebburn was tripled in size in 2009 in a developer-funded project.





Between 2008 and 2010, the deep underground station at Haymarket used by six million passengers a year was completely rebuilt. The project was funded through the lease of air rights above the station, at the north end of Newcastle's main Northumberland Street shopping area, to trigger a £20m mixed use retail and office development, named Haymarket Hub.

Nexus raised £6 million investment from this, which provided a new street-level concourse with increased retail, a third escalator, and remodelled interiors throughout, creating a brighter and more spacious feel. Haymarket showcased a new evolution for Metro station design from architects Sadler Brown, the first major change since the opening of the Sunderland line in 2002 and the original architectural templates of the Faulkner Brown practice, set down in the 1970s.

Vitreous enamel panelling was retained but with individual panels manufactured to a much smaller 'letterbox' shape, allowing the creation of curved surfaces in place of the square appearance of older stations. Off-white was replaced by a cleaner true white internally contrasting with black for signage and exteriors. Elements of the original Metro identity – the use of the bespoke Calvert font in signage, the 'supergraphic' giant station name on platform walls, and the iconic 'yellow M' logo – were retained and enhanced to provide strong brand continuity.

Haymarket proved a design success and blueprint for the refurbishment of further stations. It also featured a new art commission, Canon, by Lothar Goetz, with colour interventions at points of passenger amenity, such as exits and information points.

Sunderland station also benefitted from an innovative funding mechanism and the input of artists in the refurbishment of platforms, completed in 2010. Three artists contributed to the challenging project to improve the low-ceilinged 150-metre island platform, the most notable being Jason Bruges Studio, which created an animated light wall populated by the shadowy moving figures of ‘ghost’ passengers.

The Sunderland Metro station is shared with national rail services, but £7m capital funding was obtained through the Department for Transport via the principle of hypothecation of service decrement costs. The sum represents the prospective revenue to be saved over 18 future years by reducing the frequency of regional ‘heavy rail’ trains between Sunderland and Newcastle from two to one an hour and replacing them with the cheaper Metro service.

Metro: All Change

The bid to modernise Metro was based on research that showed that every £1 invested in the system generated £8 in the regional economy. Compared to the consequences of letting the system decline and fail, the successful outcome ensured the next decade will see fundamental change.

The £25 million Government-funded Ticketing and Gating project will see Metro’s original Creuzet machines replaced in 2012 by new models accepting note and card payment for the first time. The machines are smart-enabled and linked to the return of gate lines at 13 station and validators at all 60 in preparation for the roll-out of the Pop card brand.

Smart ticketing on Metro is the foundation for the wider introduction of the technology across the north east, both for public transport and other public services, education and commercial applications, through NESTI (North East Smart Ticketing Initiative – a collaboration of 12 local authorities and the Tyne and Wear Integrated Transport Authority).

The delivery of the ‘Metro: all change’ modernisation programme dwarfs this in capital terms, with a £350m funding commitment from 2010 to 2021 for the wholesale renewal of Metro infrastructure (with the exception of the ‘new’ Sunderland line), stations and trains. This, combined with local contributions takes planned investment to £385m, representing the largest transport project in the region’s history.



Work is already well underway in phases moving around the Metro system. Much is ‘behind the scenes’ through the replacement of track and technology in a continuing series of weekend and sometimes longer line closures.

The project is delivering the refurbishment of the original 90 Metrocars, the first of which entered service in early 2012, along with refurbished stations, such as Chillingham Road, Meadow Well and Howdon which are already complete.

More information on the Metro and other Nexus services can be found on the website www.nexus.org.uk.

Thanks to Huw Lewis of Nexus for preparing this article.

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