

# How we're developing Metro

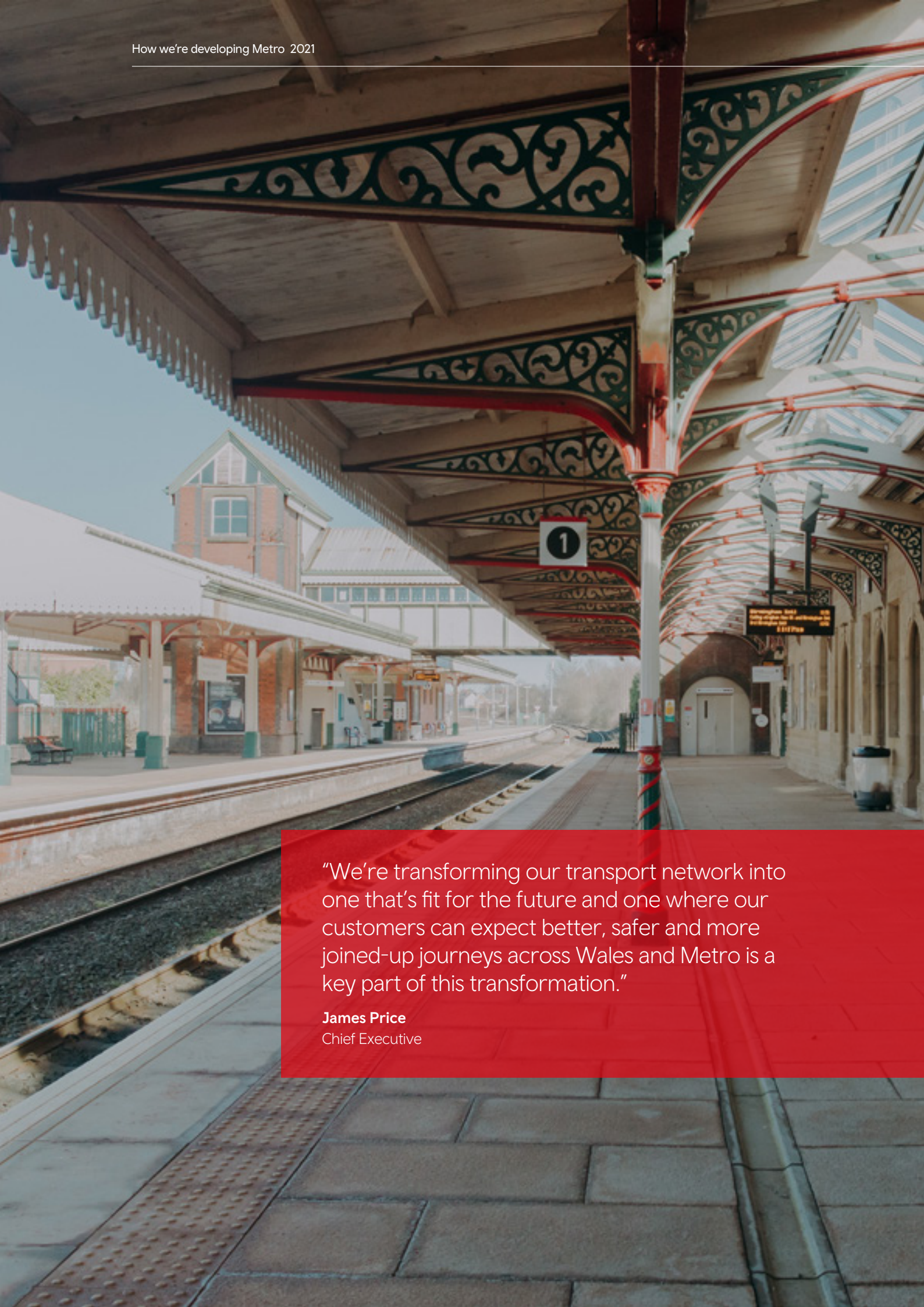
March 2021



TRAFNIDIAETH CYMRU  
TRANSPORT FOR WALES

 **Metro**





"We're transforming our transport network into one that's fit for the future and one where our customers can expect better, safer and more joined-up journeys across Wales and Metro is a key part of this transformation."

**James Price**  
Chief Executive

## A bright future for public transport in Wales

Metro will change the way we travel and will create modern, sustainable bus, rail and active travel (cycling and walking) networks, that will transform people's lives and reduce the environmental impact of our transport network overall. It will also open-up a range of job, leisure and business opportunities, transforming Wales' future economic prospects.

To ensure the success of Metro is achieved across Wales, we'll be working in collaboration with other organisations such as Welsh Government, Local Authorities and Network Rail to deliver the Metro programme.

Metro is all about making it easier to travel, whether you're travelling by train, bus, bike or on foot. It will be an integrated and convenient public transport network that enables people to travel throughout Wales.

We're investing £800 million in new faster and greener trains across Wales and the borders, to improve the service we offer for all our customers. We're also busy behind the scenes building new, more comfortable trains that will provide a modern and more effective Metro service.

Rail and bus services will be a key part of Metro and customers can expect a modern service that offers:

- Quicker journeys
- More capacity
- More frequent services
- More reliable services
- More accessible services
- More affordable travel
- Integrated travel options (train, bus, walking and cycling)
- Greener services

We're currently working on three Metro networks in Wales:

- North Wales Metro
- South Wales Metro
- Swansea Bay and West Wales Metro

Each of the Metro networks are at different stages of development and we're working collaboratively with communities and representatives so that each network has the needs and priorities of the local communities it will serve at its heart, whilst delivering objectives set out in the Well-being of Future Generations (Wales) Act 2015 and the Wales Transport Strategy.

We're currently defining the short-, medium- and long-term projects across Wales, which will help bring Metro to life. Our aim is to help deliver our decarbonisation commitments by reducing car dependency and creating a more sustainable integrated transport network. To complement the Metro networks in South Wales and Swansea Bay and West Wales, we're also working on a South Wales Main Line Programme.

This update provides an overview of the progress TfW are making as well as our future direction.



### North Wales Metro

We're currently working on the initial phases of the North Wales Metro, putting the foundations in place for transformative rail and bus services and active travel. This will make it easier and faster to travel across North Wales with improved bus, rail, cycling and walking connections. Alongside reducing rural isolation and opening-up exciting job, business and leisure opportunities across North Wales and the North West of England, it will also play a vital part in developing the region's wider economy as well as a more sustainable future for tourism in North Wales.

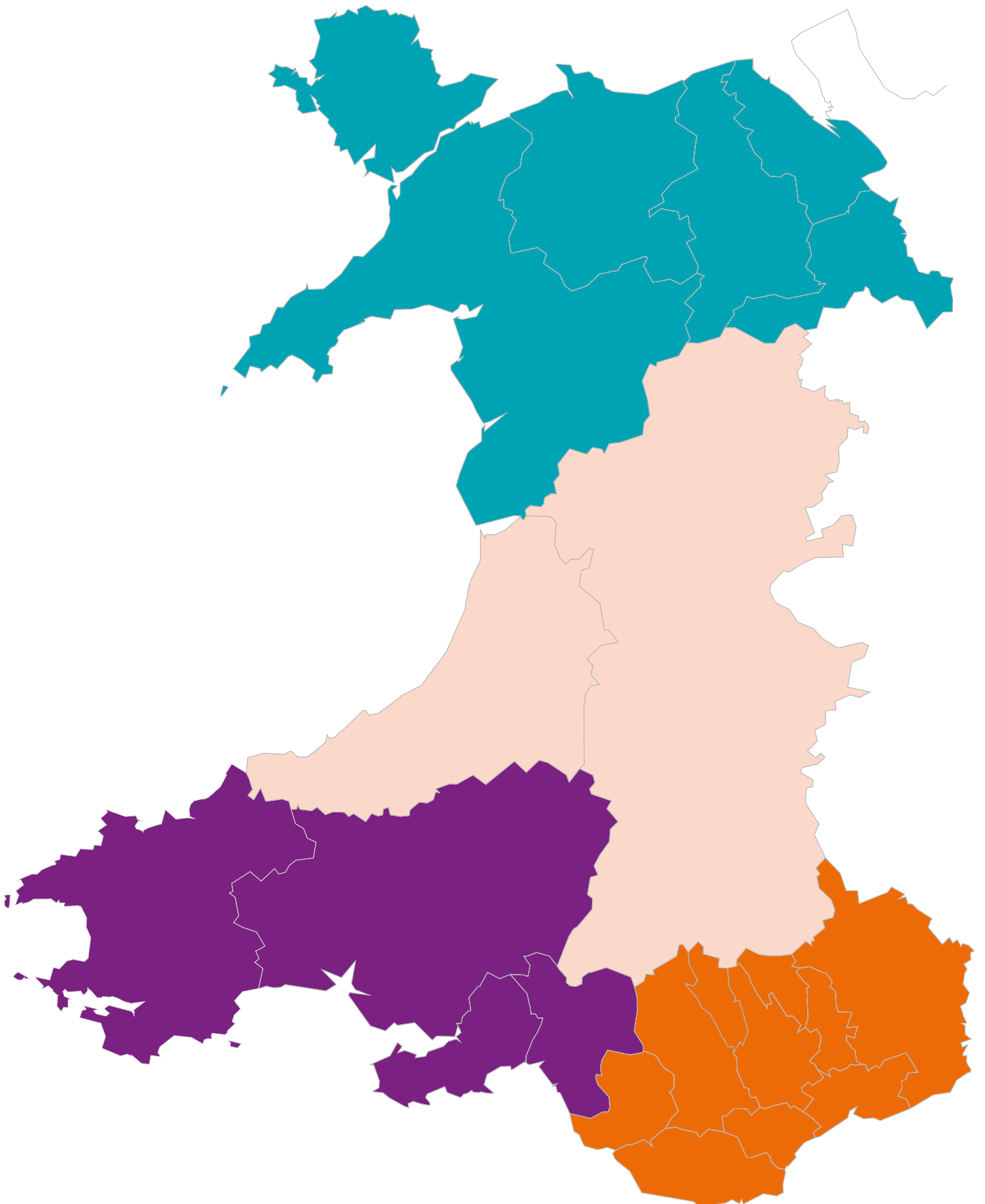
### South Wales Metro

Building the South Wales Metro is an ambitious project. There's a significant amount of construction, engineering and infrastructure work to do to upgrade our rail network. We're investing to upgrade and electrify the railway lines to Aberdare, Coryton, Merthyr Tydfil, Rhymney and Treherbert (core valleys lines) which are an important part of the South Wales Metro. This will then help us work towards our goal of creating an integrated public transport network that will make it easier for people to travel around the Cardiff Capital Region. We'll also improve the integration of our rail, bus and active travel networks.

### Swansea Bay and West Wales Metro

The Swansea Bay and West Wales Metro is in the early stages of development and our aim is to transform the transport network in the region. We're currently undertaking studies in conjunction with the Welsh Government and the region's local authorities to develop plans for this ambitious scheme. Our projects will provide greater integration of the region's transport options, focusing on using rail, bus, cycling and walking to create a transport network that works together to support those who live and work in the region as well as for visitors. These plans will boost the local economy by providing better access to job, business and leisure opportunities.







"We're working hard with partners across North Wales, to make sure we collectively create an integrated transport network we can all be proud of and one that creates more opportunities for improved journeys which benefit local people and visitors."

**Ruth Wojtan**

North Wales Metro Programme Manager



## North Wales Metro

Our aims for the North Wales Metro are to improve access to jobs and services using public transport and active travel across the whole of North Wales and to/from the North West of England. We also aim to reduce rural isolation, help reduce carbon emissions and to encourage more public transport-focused development and regeneration. In May 2019 we launched our new Liverpool to Wrexham service via the Halton Curve, improving links between Liverpool and North Wales.

### What committed improvements can you expect to see?

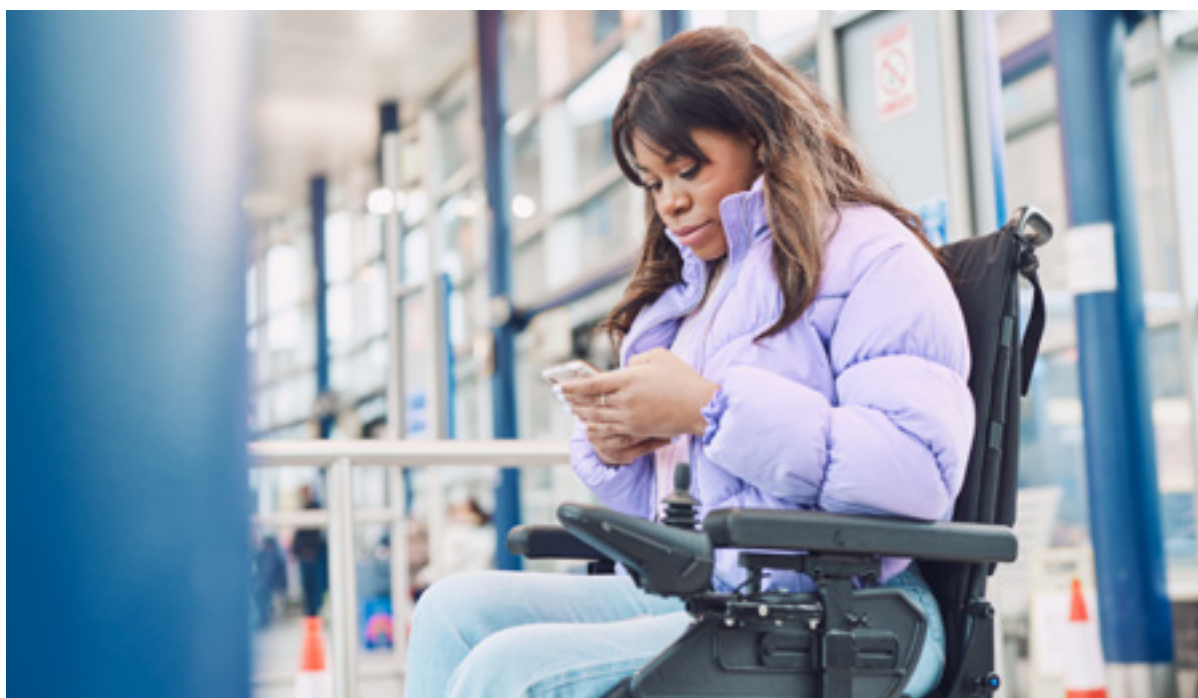
- From late 2021, we'll be introducing fully rebuilt Metro trains on the Borderlands Line, providing a faster service and more capacity as well as improved onboard facilities including air conditioning.
- From late 2022, we'll be introducing brand-new trains throughout the Wales and Borders network increasing capacity, faster journeys and improving the on-board experience.
- We're working on plans to improve our stations, making it easier to change between rail and bus at Wrexham General and between the North Wales Coast and Borderlands Line services at Shotton.
- We're also supporting plans to improve public transport to, from and within Deeside Industrial Park and the wider Deeside Enterprise Zone, opening-up opportunities for local people and businesses.



### Looking ahead at the North Wales Metro

The emerging priority projects we're keen to take forward and research in more detail through business cases and scheme proposals, in partnership with the region and local authorities, include:

<p><b>Rail</b></p>	<ul style="list-style-type: none"> <li>• Introduction of all-stop local commuter services on an upgraded North Wales Mainline complemented with long distance and express services.</li> <li>• Potential new stations and interchange/station upgrades, including Deeside Industrial Park, Bangor, Shotton, Greenfield, Broughton, Wrexham South and Wrexham North.</li> <li>• Operational and capacity improvement measures at Chester station and enhanced links to HS2/NPR/Crewe.</li> <li>• Wrexham Area Rail Improvement to improve capacity and reliability.</li> <li>• Borderlands upgrade leading to eventual integration with Merseyrail services.</li> </ul>
<p><b>Bus and Integration</b></p>	<ul style="list-style-type: none"> <li>• Integration measures at Holyhead for town-port-rail-bus.</li> <li>• Bus route and network design improvements and rail integration at key hubs across North Wales.</li> </ul>
<p><b>Local</b></p>	<ul style="list-style-type: none"> <li>• Snowdonia Park Sustainable Access.</li> <li>• Local bus and active travel measures at places including Flint, Prestatyn and Llandudno.</li> <li>• Park and Ride opportunities.</li> </ul>
<p><b>Other</b></p>	<ul style="list-style-type: none"> <li>• Exploring rail innovation that can support new and/or reopened lines such as Amlwch.</li> </ul>





"We're working with Cardiff and the capital region to continue to upgrade and expand the South Wales Metro, whilst also continuing work on the transformation of the Aberdare, Coryton, Merthyr Tydfil, Rhymney and Treherbert railway lines. This will be supported by integrated bus and active travel networks and services which will make for a better connected and more prosperous region."

**Rob Jones**

South Wales Metro Programme Manager



## South Wales Metro

The South Wales Metro will provide more integrated public transport services combined with capacity increases across the most densely populated part of Wales. To complement our transport investments, we'll continue working with and supporting local authorities for example, with the line to Cardiff Bay and regeneration of Pontypridd, Caerphilly and Merthyr Tydfil railway stations and associated commercial and placemaking opportunities created by Metro.

### What committed improvements can you expect to see?

- We've already started work on the South Wales Metro, with the construction of our new £100 million depot and Metro Control Centre at Taff's Well.
- Our new Taff's Well depot will be home to our new Metro vehicles as well as hundreds of train drivers, conductors, rolling stock engineers and Metro Control Centre staff.
- We'll be providing more weekday and Sunday services than ever before. While you can expect more frequent rail services across much of our network from 2022, we'll also be introducing a number of improvements in the Cardiff Capital Region from 2022 for example, new tram-trains which will provide a turn-up-and-go service on the Treherbert, Merthyr and Aberdare lines and we'll be improving local cycling and walking links, too.
- We're also working with the UK Government, Welsh Government, Network Rail and Cardiff Council to develop and implement plans to enhance Cardiff Central Station.
- We've also started work on:
  - Electrifying around 170 km of track
  - Upgrading all our stations and signalling
  - Building new stations
- We're also working on Cardiff's new multi-modal transport interchange encompassing an improved Cardiff Central Station and brand-new Cardiff bus interchange as well as on-street bus stops, taxi, active travel provision and the Cardiff Bay link.

We're transforming the railway lines to Aberdare, Coryton, Merthyr Tydfil, Rhymney and Treherbert. We've also recently completed a successful three-week programme of work, where we closed the Aberdare, Treherbert and Merthyr railway lines, so our construction teams could work around the clock to undertake essential track upgrade and

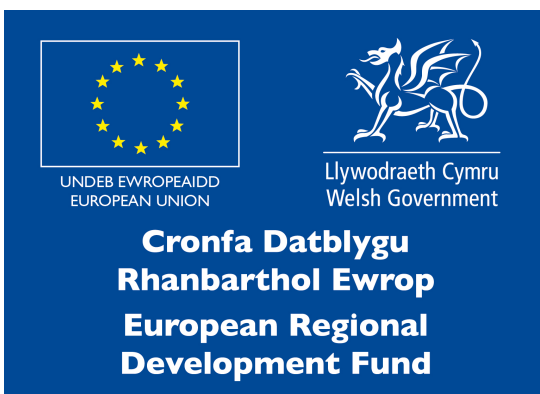
renewals. This included re-railing and installing nearly four-and-a-half miles of new track, clearing nearly 60,000 square metres of vegetation (following detailed ecological investigations), replacing 46 sleepers, installing 42 metres of track drainage and a 2600-metre cable containment system.



## Looking ahead at the South Wales Metro

The emerging priority projects we're keen to take forward and research in more detail through business cases and scheme developments, in partnership with the region and local authorities, include:

<b>Rail</b>	<ul style="list-style-type: none"> <li>• Station enhancements at Treforest Estate, Pentrebach, Porth, Merthyr, Ystrad Mynach, Llanbradach, Caerphilly, Cogan, Barry Docks, Abergavenny, Cwmbran and Pontypool.</li> <li>• New stations at Upper Boat, Pontypridd North, Ely Mill, Roath Park, Gabalfa, Cardiff Airport and Velindre Hospital.</li> <li>• Network extensions from Aberdare to Hirwaun, from Aberbeeg to Abertillery, and Crossrail section Central - Bay – Newport Rd.</li> <li>• Increased frequency of services on the Ebbw Valley line, City and Coryton Lines, and Maesteg Line.</li> <li>• Enhancements at Cardiff Central to improve capacity and customer experience.</li> </ul>
<b>Bus and Integration</b>	<ul style="list-style-type: none"> <li>• Improvements to cross valley connections exploring fast, high frequency priority bus services (often called Bus Rapid Transit or BRT) and tram-train.</li> <li>• Development of a multi-modal transport interchange at Cardiff Central.</li> <li>• Proposals for BRT to be supported by wider bus network redesign and rail integration:             <ul style="list-style-type: none"> <li>- BRT/Bus North East/East Cardiff)</li> <li>- Newport BRT</li> <li>- Cardiff-Newport BRT</li> <li>- BRT/Bus Measures in North West Cardiff and lower Rhondda Cynon Taf</li> </ul> </li> </ul>
<b>Local</b>	<ul style="list-style-type: none"> <li>• We'll also lead and/or support a range of local active travel and regeneration initiatives for example, active travel measures in Newport.</li> <li>• Park and ride and interchange interventions.</li> </ul>



South Wales Metro is part-funded by the European Regional Development Fund through the Welsh Government

"We're excited about the future of transport in Swansea Bay and West Wales. We're working closely with organisations to research, develop and support significant investment and improvements to our rail, bus and active travel networks in the coming years."

**Ben George**

Swansea Bay and West Wales Metro Programme Manager.





## Swansea Bay and West Wales Metro

We're aiming to create a more integrated and convenient public transport network across Swansea Bay and West Wales to reduce the number of cars on local roads. This will help create a more integrated network of bus and rail services, whilst improving local commuter services in the Swansea, Neath and Llanelli areas, as well as provide faster services between Milford Haven, Carmarthen, Swansea and Cardiff.

Our plans for the Swansea Bay and West Wales Metro are in the early stages of development and we've recently recruited a team to help drive forward progress.

### What committed improvements can you expect to see?

- From 2022, we'll be introducing new trains on services through the Swansea Bay area, increasing capacity on services to West Wales and between South West Wales and Manchester. You can also expect faster journeys and a better on-board experience.
- From 2024, we'll be introducing a first-class service between Swansea and Manchester on our new trains, providing a new high-quality service for our customers on long-distance journeys.

### Looking ahead at the Swansea Bay and West Wales Metro

The emerging priority projects we're keen to take forward and research in more detail through business cases and scheme developments, in partnership with the region and local authorities, include:

<b>Rail</b>	<ul style="list-style-type: none"> <li>• Additional and faster intercity services across the region from Bristol Temple Meads to Milford Haven, for example.</li> <li>• New main line stations at St Clears, Landore, Cockett.</li> <li>• Increased frequency of local West Wales services from Swansea to Milford Haven and Pembroke Dock.</li> <li>• Development of a local urban area rail network, including new stations, with a likely initial focus on a Pontarddulais – Neath – Swansea High Street service, and a Burry Port – Swansea High Street service.</li> </ul>
<b>Bus and Integration</b>	<ul style="list-style-type: none"> <li>• Development of a fast, high frequency priority bus services in Swansea/Neath/Llanelli/Port Talbot Urban Area – part of a wider regional bus network redesign and rail/bus integration work.</li> <li>• Integrated transport hubs at railway stations across Swansea Bay and West Wales to connect bus and rail journeys.</li> </ul>
<b>Local</b>	<ul style="list-style-type: none"> <li>• We'll also support a range of local active travel and regeneration initiative, including the Transforming Towns project in Haverfordwest, for instance.</li> <li>• Park and ride opportunities.</li> </ul>

## South Wales Main Line programme

The South Wales Main Line programme covers the primary east – west railway line from the Severn Tunnel to Milford Haven, which is a key route both for passenger and freight services. Working in partnership with Network Rail and the Department for Transport, we're also focused on developing and delivering a long-term programme of local all-stop commuter services, faster express services between West Wales, Swansea, Cardiff, Bristol and London and long-term proposals to increase capacity, decarbonise rail travel and address the impact of climate change on the network.

This programme will complement the South Wales and Swansea Bay and West Wales Metro networks, building on the recent recommendations of the South East Wales Transport Commission. The upgraded South Wales Main line will act as a spine of a new 'network of travel alternatives' when

integrated with Metro. With more South Wales main line railway stations and local services, this programme will help provide an alternative to the M4 for both long distance and regional journeys, enabling wider economic benefits across all of South Wales.

### The programme's priorities

The emerging priority projects we're progressing and researching in more detail through business cases and scheme developments, in partnership with the region and local authorities, include:

#### Rail

- Additional direct services through to West Wales from Bristol Temple Meads and London.
- Enhanced Swanline local stopping services between Swansea and Cardiff.
- New stopping services between Cardiff and Bristol, serving new stations
- Upgrading the relief lines between Cardiff and Severn Tunnel Junction to increase capacity.
- Station enhancement measures at Newport and Bridgend.
- A package of new stations, for example: Magor/Undy, Llanwern, Newport West, Newport East, Cardiff Parkway, Newport Road (Cardiff), Brackla (Bridgend) and M4, Junction34 (Miskin)
- Line speed and capacity enhancements and electrification along the entire South Wales mainline.

#### Local

- Park and ride opportunities.



## Creating a Wales-wide integrated transport network

We're building an integrated public transport network which will create opportunities that enable the people of Wales, now and in the future, to connect with each other, their community, employment and healthcare to create a prosperous Wales.

For an integrated transport network to be effective, we're developing a seamless future ticketing system across Wales, which simplifies fares and offers the best possible price, across various modes of transport.

We recognise the importance of transport interchanges and will work with key stakeholders to identify opportunities to improve facilities and provide customers with an enhanced, more consistent experience. This will also include considering accessible, safe and secure facilities to make changing from one mode of transport to another as seamless as possible.





## Improving bus services in Wales

We're currently reviewing Wales' bus network with local authorities and industry partners, to develop more effective and efficient integrated rail and bus services. Through our Metro programme, we'll integrate bus and rail services in Wales to deliver a network, that delivers faster journey times serving more destinations that offer real alternatives to the private car, whilst supporting the Welsh Government's aspiration of an emission-free bus fleet by 2028.

By building an enhanced, improved and more convenient integrated bus network we aim to reduce the private car usage, congestion and achieve a range of environmental and healthcare benefits.

Working with local operators and local authorities, fflecsi provides a more flexible way to travel by bus, complementing scheduled bus services as well as providing services in areas of lower demand, especially rural areas without scheduled bus services.

**We've already introduced our new pilot fflecsi service in seven areas across Wales:**

- Cardiff North (South Wales)
- Conwy Valley (North Wales)
- Denbigh (North Wales)
- Newport (South Wales)
- Pembrokeshire (South West Wales)
- Prestatyn (North Wales)
- Rhondda (South Wales)



## Building our transport network based on insight

We've set up a dedicated Analytical Unit to improve the quality and consistency of the evidence we use to make decisions about Metro and other transport issues. We're developing our transport data and analysis centre of expertise, transport modelling and appraisal to develop Metro business cases.

### Key areas of focus for our Analytical Unit include:

- Developing, maintaining and updating the three regional transport models for Wales: North Wales Transport Model (NWTM), South East Wales Transport Model (SEWTM), and the South West and Mid Wales Transport Model (SWMWTM).
- Journey-time accessibility modelling.
- Procuring, analysing and developing an accessible databank of transport-related datasets.
- Spatial data analysis and presentation using Geographical Information Systems (GIS).
- Implementing a new Wales National Travel Survey.

Our Analytical Unit published regional transport models for both North Wales and South West and Mid Wales in November 2020. These models alongside the existing South East Wales Transport Model are now available for use to assist the work we're carrying out as part of our Metro programme.

Looking ahead to the future, our Analytical Unit will have an increased role in monitoring and evaluating transport investment in Wales. We'll use an evidence and data-led approach to monitor the impact of the Wales Transport Strategy.

We'll continue collaborating with our Regional Stakeholder Forums, which are made up of representatives from business, tourism, education, health and local authorities, to ensure we develop our understanding of requirements for the future. The information and advice from our stakeholder forum members, along with our Advisory Panel will ensure we're engaging and listening directly to the representative voices of customers, passengers and communities throughout Wales.



## Greener travel

We want Wales' future transport network to encourage more sustainable travel choices and contribute to a reduction in vehicle emissions, which is why active travel (cycling and walking with a purpose) is being integrated into all Metro projects. We'll support local authorities to develop and implement cycling and walking schemes and also develop our own schemes. We'll make sure that active travel is integrated with our placemaking and station improvement programmes.

We'll also make sure Metro project development proposals consider opportunities to improve active travel encouraging more cycling and walking throughout Wales.



We've listed below our current key active travel projects in Wales:

<b>North Wales Metro Local Connectivity – Active Travel</b>	Collaborating with local authorities to identify and prioritise active travel routes to five stations in North Wales.
<b>Cardiff Central Cycle Parking Study</b>	A study to help inform future active travel requirements as part of the wider Cardiff Central development project.
<b>Active Travel Fund Programme – Local Authority Support</b>	Providing support, advice and guidance to local authorities in the development and delivery of their active travel schemes, ensuring connectivity with public transport wherever possible and integration with other TfW projects such as our Station Improvement Plans.



## Metro where you live and work

Metro is exciting for the people, places and communities in Wales and we're building a distinctive brand for Metro which we'll be using when we're building Metro where you live and work. We'll also be running communication campaigns and there'll be local engagement opportunities to make sure that we keep you up to date with progress.

We're currently running our 'Metro – Our opportunity' campaign to share the Welsh Government's vision for Metro and the benefits it will bring. This campaign is just the start of how we'll be sharing our ambitious plans and achievements with you.

We're also currently working hard behind the scenes on a Metro portal, which we're looking to

launch this year and will be an information source about the latest progress on Metro in your area. It will be an interactive portal where you'll be able to click on a specific area in Wales to find out more detail behind the projects. You'll also be able to search for information about forthcoming engineering work which may affect both passengers and neighbours of the railway on our website.



## Dealing with issues and challenges

As with any project there'll always be issues and challenges to consider however, we're committed to tackling any issues and challenges we face and working in collaboration to find the right solution and achieve our mission of, creating customer-focused services through a safe transport network of which Wales is proud.

**We've listed below some of the issues and challenges to give you an idea of what we're faced with moving forward.**

- Investment and funding on a local, regional and national basis.
- Infrastructure and capacity constraints.
- Operational and technical interdependencies.
- Planning requirements and timescales.
- Line speed improvements and electrification.
- Working on non-devolved matters with the Welsh Government and the UK Government, such as rail infrastructure.
- Reallocation of road space.
- Post pandemic travel and the availability of sustained public funding to support bus and train networks.
- Engagement and collaborative working across Wales.
- Variance in fare levels and ticketing products between modes of transport.
- Cross-border integration with the English network.
- Helping communities understand which schemes are funded and being delivered, and which schemes we are developing through planning and approval stages with our partners and funders.

