

Cardiff's Transport White Paper: Transport Vision to 2030

Changing how we move around a growing city



This document is available in Welsh /
Mae'r ddogfen hon ar gael yn Gymraeg



Introduction

Since I've taken on this job I've found there are few things in Cardiff that stir up more debate among residents than transport.

If you look at it from the point of view of the average Cardiff resident driving into the city to work every day, struggling for their bit of road space with the 80,000 other car commuters from outside the city's boundaries then absolutely, traffic congestion, traffic pollution and a public transport system which struggles to adequately serve the people who live and work here are all issues of major concern - and so they should be.

Right now we are living in a world where the Climate Emergency is changing how we feel about our future. It is beginning to shape our behaviour and point towards the actions we will all have to take to save the planet for our children and grandchildren. That's why getting our transport system right is so important for our city's future and for our children's future too.

Did you know Cardiff's current transport network was designed half a century ago for a city of 200,000 people? Today, once commuters, shoppers and visitors are taken into account our city has a daily population of almost half a million. No wonder our transport network is creaking – it's no longer fit for purpose.

A public transport system – underfunded for years – and an ever increasing number of cars on our roads is bringing our city to a standstill. We now know the harm this number of cars does:

- It is our biggest contributing factor to climate change
- Air pollution is reaching legal limits, affecting the health of every one of us, especially the most vulnerable
- It holds back businesses and our daily lives with drivers spending an average of 143 hours a year stuck in peak-time traffic jams

And these problems are before you consider the fact Cardiff's population is **set to grow by a further 50,000 people over the next decade**, with more and more jobs coming to the city centre attracting more and more commuters.

Urgent action and bold solutions are required. Our Green Paper started a serious debate about the problems the city is facing and some potential solutions. Over 5,000 respondents, including 2,500 young people, shared their thoughts with us, alongside numerous organisations, experts and institutions. Today that debate carries on in Cardiff pubs, at school gates, and all over social media. It's clear, we can't go on as we are. There are too many cars on our roads, our public transport isn't good enough. Bus and train services are too infrequent. A growing number of people want to cycle but don't feel safe. We all want cleaner air and to do our bit to combat climate change.

That's why we're delighted to bring forward this Transport White Paper. In it you will hear an exciting vision for the city, and how we plan to deliver it.

It includes:

- Expanding on the Metro plans for new tram-train routes and stations
- Introducing new Bus Rapid Transit services and Park & Ride sites, and making bus travel far cheaper
- Re-prioritisation of our streets to give more space to people walking and cycling

All of this is a serious undertaking, some of which will take 10–20 years to deliver. It also won't be cheap.

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Cardiff has **a daily population of almost half a million people**, no wonder our transport network is creaking - it's no longer fit for purpose

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This is why we, as Cardiff Council's Cabinet, have become more and more convinced that to undertake the kind of radical change required we will need to investigate a form of charging mechanism that could help deliver on the following:

1. tackle climate change
2. reduce congestion
3. improve air quality
4. Provide ring fenced funding to invest in much-needed public transport initiatives

As part of a robust decision making process we will consider a number of options. However, our preferred option would include an exemption for Cardiff residents from any charge.

One option that we believe could work would be a road user charging scheme with a minimal (e.g. £2) charge for vehicles coming into Cardiff. This could reduce the number of vehicles coming into the city, whilst achieving reductions in carbon emissions, improving air quality, reducing congestion and helping to raise the money required to help pay for improvements to our transport network. Money which could help make Cardiff one of Europe's greenest, healthiest and most sustainable cities.

And that's what we want to deliver a greener, healthier, less congested city, with an affordable public transport system that works for everyone. This will require partnership working with the region and Welsh Government on a scale unheard of before.

Finally we are calling on you to help. We will only see change realised if we collectively make changes. So today: please make a pledge to alter one of your own daily transport habits. You will find pledge ideas contained in this document and any change you make could in turn inspire others as we all try to change this city for the better.

Cities that get transport right - work. They make life easier and better for residents, commuters and visitors. Cities that get transport wrong have the opposite effect, and right now, right here, with a Climate Emergency declared, the argument for change couldn't be any more immediate. It's simply time to act in the interests of all.



Councillor Caro Wild

Why do we need to change the way we travel around Cardiff?

Responding to the Climate Emergency

It's vital we all play our part in addressing climate change. Research shows the public's concern about climate change is at an all-time high. In Cardiff, 81.2% of people who took part in the Ask Cardiff Survey said they were either "very" or "fairly concerned" about climate change¹. Climate strikes and demonstrations are taking place across the world, including here where our schoolchildren and young people have marched on the National Assembly. The science is clear - urgent action is needed to cut carbon emissions. The high use of single-person car journeys into and around Cardiff only adds to the city's carbon figures. Changing how people travel is seen as one of the biggest contributions cities can make to reducing their impact on the climate.

We need to build a public transport network that encourages people out of cars and into more environmentally-friendly ways of travel. The climate emergency adds urgency to the decisions we need to take for our children's futures. We are not only working towards the UK's net zero emissions by 2050 target, we want to get there faster.

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With 100,000 or so people commuting into Cardiff each day – **around 80,000 of them by car** – it is easy to see why transport is consistently the most important issue for Cardiff residents

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Clean Air

Road traffic is also the main cause of air pollution. The health effects of air pollution have been extensively researched and are well documented. Along with physical inactivity it is one of the biggest health issues of our time. In Cardiff we have some of the highest levels of Nitrogen Dioxide (NO₂) pollution in Wales. In fact levels exceed the EU and national limits for NO₂ in some areas. We have a Clean Air Plan which aims to address NO₂ levels in the short term, but we want to get the air we breathe in the city as clean as it can be. Improvements to sustainable travel options and increasing the number of journeys made by active travel (walking and cycling) is a key part of this plan.

Poor air quality affects all of us, however we travel, but some people are more vulnerable. The people who suffer most from poor air quality are often the very young, the very old and those already suffering with ill health. For some, it can be fatal. For Cardiff and Vale University Health Board area, the number of equivalent deaths due to long-term air pollution are estimated to be in the range of 178-227 per year. Polluted air reduces average life expectancy across the UK by 7-8 months². Improving air quality and increasing levels of physical activity doesn't just protect our health, it can help to reduce the level of spending required on health services.





Creating Safe and Healthy Communities

Transport has a major role to play in making where we live safer, happier and more attractive. It is easy to forget that the most common cause of death for children between the ages of five and 14 years is being hit by a vehicle. Fear of traffic and the cars clogging up our streets have put a stop to children playing outside and limited their independence across much of our city³.

Recent research shows that two thirds of drivers feel that it is often not safe for children to walk or cycle because of traffic in UK cities⁴. Streets which are safe for children are streets which are good for all of us. By having a transport network that focuses on people, as well as vehicles, we can make sure our streets, neighbourhoods and public spaces are safer, cleaner, and quieter. Creating places where we choose to spend time with family and friends.

Having safe communities and attractive public spaces is also crucial if we are to promote active travel (walking and cycling). Not only is it the greenest way to get around - generating less pollution and helping to tackle climate change - it also helps keep us fit while saving us money.

A city for everyone

Travelling around our city is not always as easy as it should be, especially for people who are often the least mobile in our society. People with disabilities or reduced mobility, those with specific access needs, older people and children and young people should be able to enjoy all our city has to offer and get to the places they need to go easily and affordably. Jobs, training, schools, health-care services, leisure opportunities and childcare facilities should all be connected by our transport network. We need to make sure that everywhere in our city is open and accessible to everyone.

100,000

PEOPLE COMMUTING INTO THE AUTHORITY FROM OUTSIDE **EACH DAY**



80,000

TRAVELLING **BY CAR**



190,000

COMMUTER TRIPS MADE BY **CARDIFF RESIDENTS**



100,000

PEOPLE TRAVELLING BY CAR (ESTIMATED)



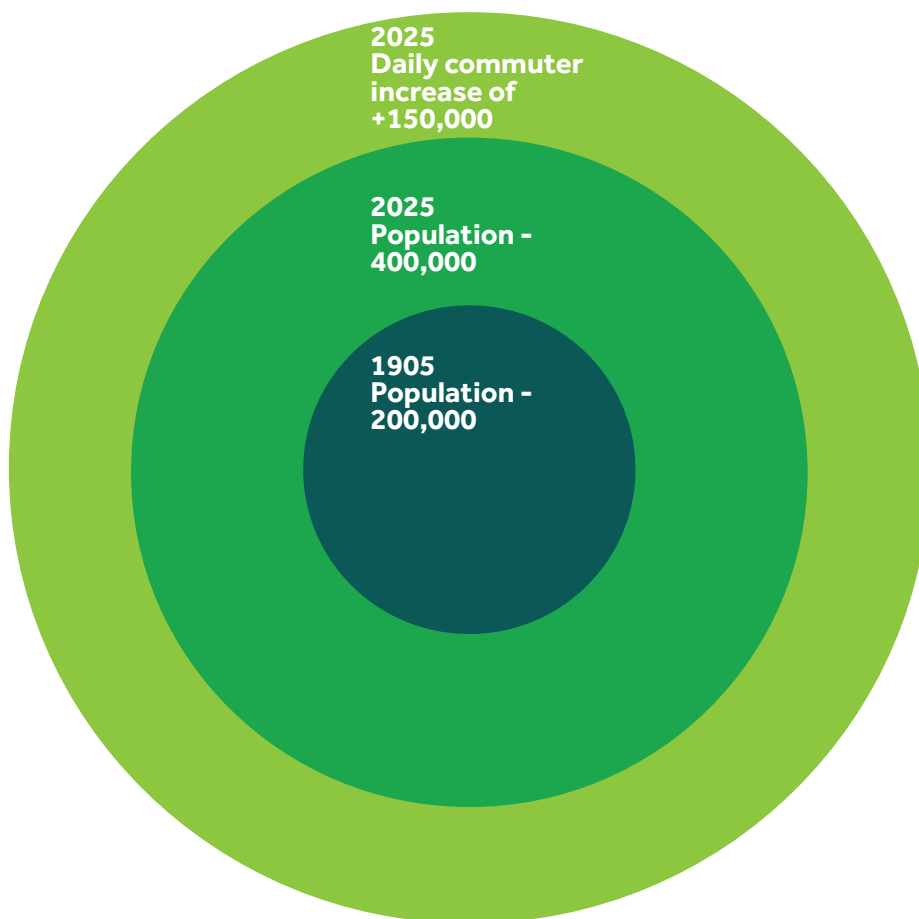
“Transport has a major role to play in making where we live **safer, happier and more attractive**”

³Moving forwards: Healthy travel for all in Cardiff and the Vale of Glamorgan, Annual Report of the Director of Public Health for Cardiff and Vale of Glamorgan 2017

⁴Cities for People, Brake 2019

City growth

| Cardiff growth



Managing a growing city

Over the next 20 years, Cardiff is expected to be the fastest-growing major UK city.

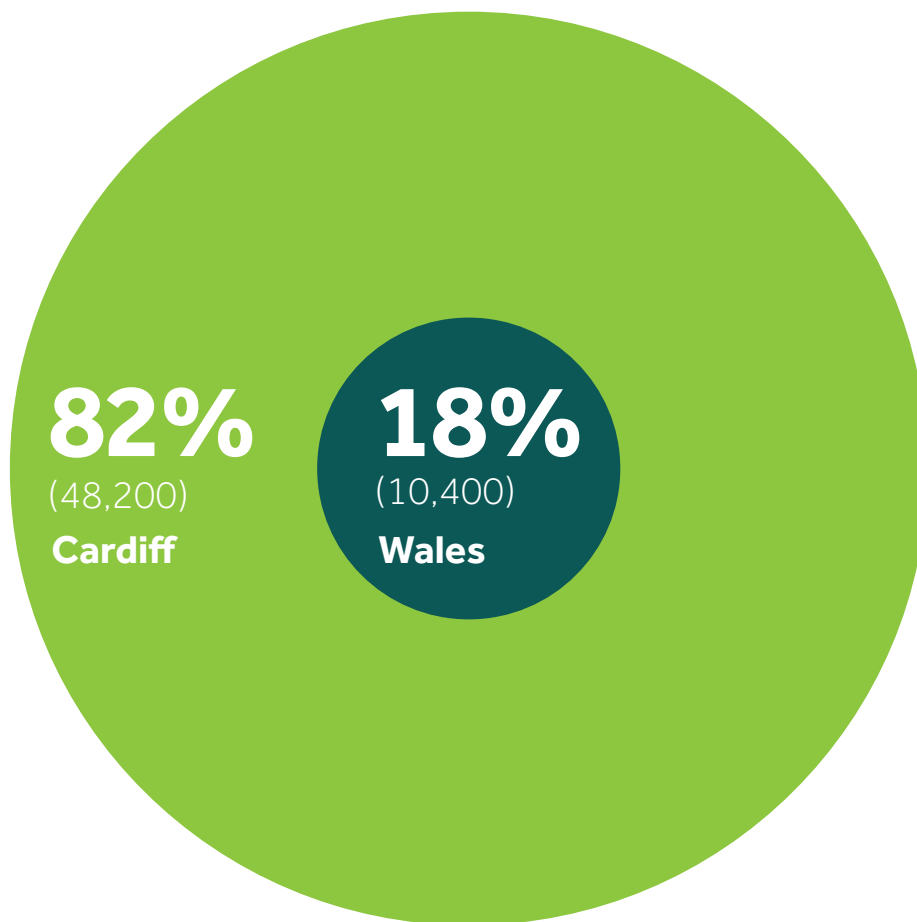
In fact, our population is projected to grow by more than every other local authority in Wales combined across that time. However, a city of soon to be 400,000 people will be operating on a transport system built to serve a much smaller population. As of 2018, there are around 100,000 people commuting into the authority from outside each day⁵, with around 80,000 of them travelling by car⁶. In addition to this there are nearly 190,000 commuter trips made by Cardiff residents, with nearly 160,000 of these within Cardiff, and around 30,000 travelling to work outside.

So it is easy to see why transport is consistently the most important issue for Cardiff residents, but the number of people commuting here means that getting our transport network right, is just as important for the

region as it is for those living in the city. The completion of the first phase of Central Square means that Cardiff has a central business district at the heart of the city centre, right next to a regional transport hub, but we need to make sure that excellent transport links support every part of the city and every community. With new homes being built in the north and west of Cardiff, new employment opportunities planned for the east of the city and a series of projects - like the indoor arena planned for the Bay - getting transport right is more important than ever.

“Over the next 20 years, Cardiff is expected to be the fastest-growing major UK city”

Jobs growth: Cardiff vs the rest of Wales⁷



Tackling Congestion & Supporting Business

Congestion doesn't just annoy residents and commuters. It also costs money.

Since 2018 drivers in the city are losing 143 hours a year stuck in traffic during peak times. That's around 19 full working days at a cost of around £1,056 per driver. 19 full days you could spend with friends, family and doing the things you enjoy.

In the city centre during peak times, the average speed is just 9mph⁸. More than half of time travelling during peak periods (56-57%) is spent in delay, adding 17 minutes to what should normally be a 30-minute journey. As of 2018, the average journey time for the day as a whole is 28% more than when traveling during off-peak times⁹.

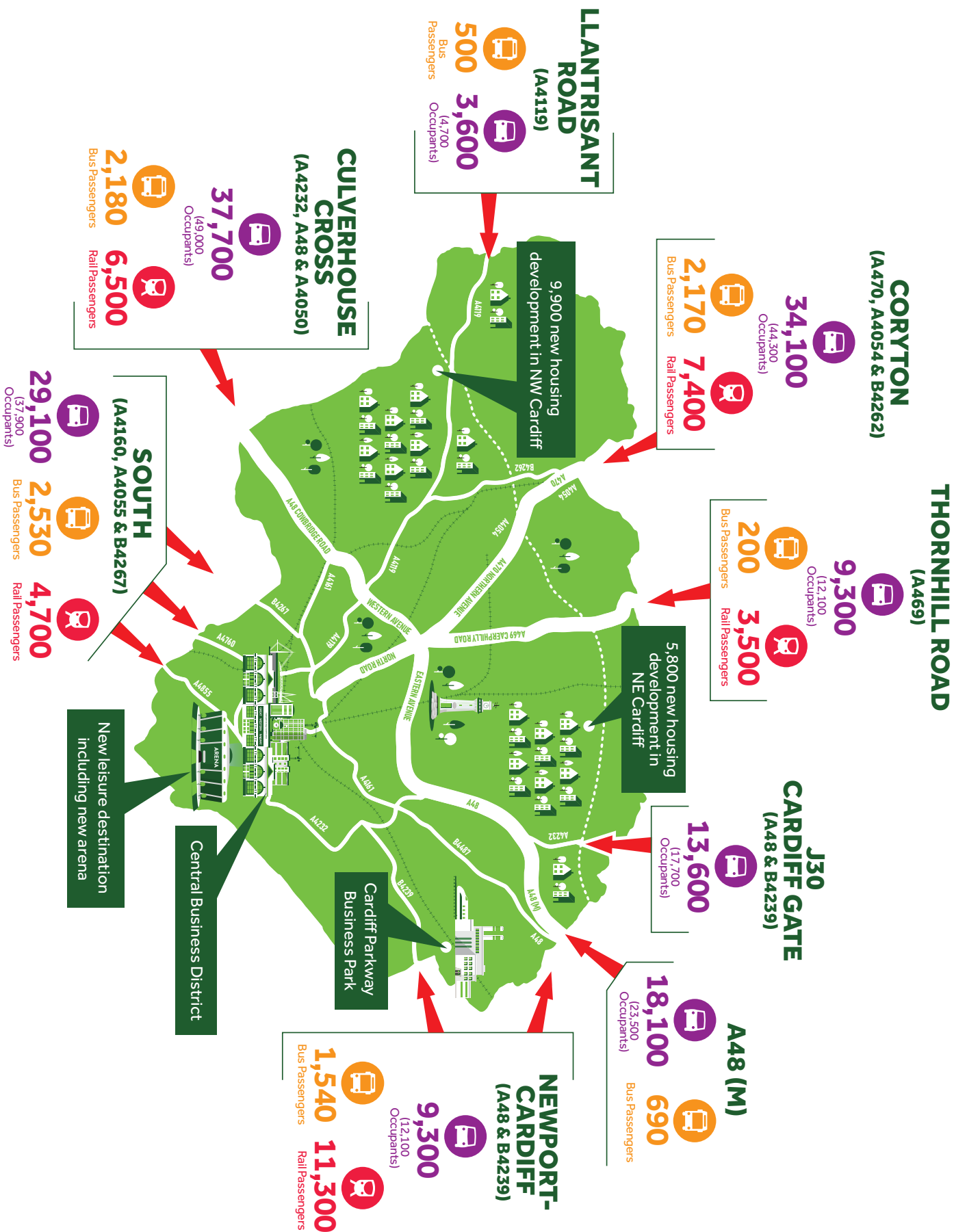


⁷2014-2019 NOMIS No. People in Employment (Aged 16-64)

⁸ Inrix Global Traffic Scorecard.

⁹TomTom Traffic Index

Growing Pains:
how people travel
into Cardiff daily



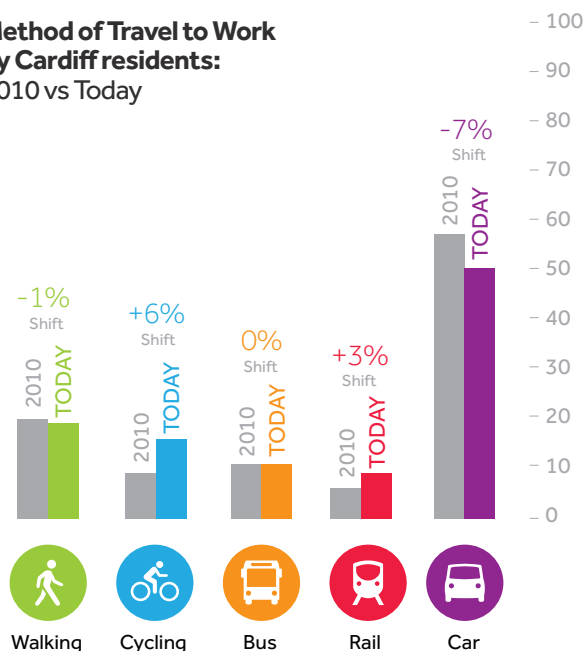
Moving Forward

In 2018 we published a Transport and Clean Air Green Paper, 'Changing how we move around a growing city' and asked you for your views on the future of transport in Cardiff. The responses made clear that Cardiff needs to be a well-connected city where everyone can easily, reliably and safely get to where they need to go in the greenest, healthiest and most affordable way. This White Paper builds on feedback we've received on the Green paper and our Clean Air Plan, to set out a series of detailed measures we plan to now take to make Cardiff's transport system fit for the 21st century. Achieving this will require major improvements to public transport, significantly enhanced opportunities for active travel and major innovations in the way road traffic is managed. Taken together, this can lead to a major shift in the way we move about Cardiff. We have already come a long way.

The numbers of people cycling and commuting by rail has increased, whilst car use has fallen - but it is not enough. This Transport White Paper sets out a bold blueprint for Cardiff, which puts people at the heart of our transport plans and will fundamentally change the way people move around our city. For all the reasons outlined above we do need to see lower car use and we have ambitious targets for active travel in the city. The percentage of journeys made by active modes will increase significantly, with cycling continuing to grow in popularity. Walking will always be hugely important part of our transport system and is vital for our local communities. The number of walking journeys may fall slightly, but the rising number of trips made by easily-accessible public transport will begin and end with a walking element.

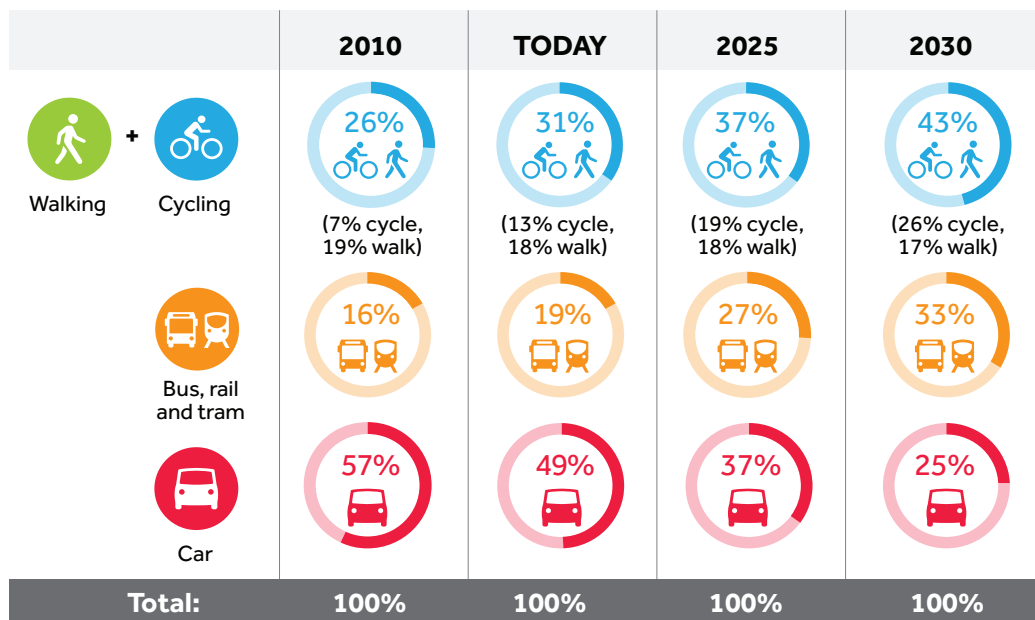
Walking regularly can reduce the risk of type 2 diabetes, stroke and high blood pressure, contribute to good mental health, and lower levels of anxiety and stress¹⁰. Encouraging walking and cycling, and reducing air pollution, should result in significant improvements in cardiovascular health. Rates of diabetes obesity and cancer should fall, our mental health should improve and overall life expectancy should increase.

Method of Travel to Work by Cardiff residents: 2010 vs Today



“Encouraging walking and cycling, and reducing air pollution, should result in **significant improvements in cardiovascular health**. Rates of **diabetes obesity and cancer** should fall, our **mental health** should **improve** and **overall life expectancy** should increase”

Targets for travel to work journeys by Cardiff residents



1. The Cardiff Metro

If you live in or around Cardiff then you may have heard about the South Wales Metro. It is an integrated public transport network, including rapid bus services, trains, tram-trains and active travel, and is being developed by Welsh Government and Transport for Wales.

The Metro is being designed to improve journey experience and to increase the amount of public transport travel across the city and south-east Wales. It will also help reduce carbon emissions using newer and cleaner fleet enabling more journeys to be taken by public transport. One of the main benefits of the Metro will be getting people in and out of Cardiff from the wider Capital Region quickly and efficiently.

This is much needed but if we are to cater for the needs of a growing capital city, then new rail lines and services must be considered now too.

That is why our proposals for a new Cardiff Crossrail tram-train line and a new Cardiff Circle tram-train line are so important. They will give thousands of people the options they need to change the way they travel in the city. Signalling and track improvements on the core metro, running between Radyr and Cardiff Bay, will unlock the pathways and capacity to enable the delivery of the Crossrail and Circle line routes.

Running from Creigiau, Crossrail's tram-train service could extend to the new housing developments that are planned beyond our boundaries, most notably the new houses planned between junctions 33 and 34 in Rhondda Cynon Taff. Connecting east to Newport is also possible.



The new line would travel through the major new housing site at Plasdwr – where around 7,000 new homes will be built – through Fairwater and Ely and the new housing development at Ely Mill, all the way to Cardiff Central Station. It will then run on through Cardiff Bay and the docks, on to Splott and Tremorfa. Crossrail would connect the city's newest developments, and its most deprived and disconnected communities, with the city centre and key business and employment hubs.

The Cardiff Circle Line would see new track connecting the Coryton Line to the Taff Vale Line north of Radyr to create a light-rail orbital route around the city. This would deliver a step change in connecting our city's suburbs. The Circle Line will also link up to a new Park & Ride facility at Junction 32 of the M4 corridor, helping to move commuting traffic from the north, off the roads and onto rail. A completed Circle Line would also improve frequency of service allowing the existing Coryton and City Line service to be upgraded from two services an hour to four services an hour, in both directions.

While bold, these proposals are also necessary, especially if we are to manage the city's growth in a sustainable way. Given its importance in keeping the capital city – and the city-region moving and working – then these proposals are of national importance.

To deliver the Cardiff Metro and enhance the South Wales Metro we will:

1

Deliver the Cardiff Crossrail tram-train line, integrating the Bay and City lines and increasing services to four per hour. The new communities in the west of the city and existing communities in the east which are currently poorly served by public transport will be connected by 2030 (phase 1 by 2024);

2

Deliver the Cardiff Circle tram-train line to complete an orbital route around the city;

3

Develop new Metro, in areas of the city such as Ely and Caerau, including bus rapid transit routes which can be delivered in the short term;

4

Deliver an integrated transport interchange at Cardiff Central, including a new central bus station in 2022 and supporting key transport interchanges across the city;

5

We will also support Welsh Government, Transport for Wales (TfW) and other partners in the development of the Metro which will:

- Deliver phase 1 of Crossrail - a new tram-train service from Radyr to Cardiff Bay, via the City Line and a new link south of Central and across Callaghan Square, by 2024;
- Deliver new stations at Loudon Square (Butetown), in the heart of Cardiff Bay, Crwys Road and Roath Park by 2024;
- Deliver new stations at Gabalfa by 2028 as well as Victoria Park, Velindre, Roath Dock and Splott thereafter;
- Establish a new Mainline Train Station at Cardiff Parkway in St Mellons;
- Deliver station improvements at all existing train stations including extensive regeneration of Queen Street Station;
- Launch a fully integrated ticketing system for all public transport in Cardiff - including the Metro, bus and Nextbike - allowing one ticket to be used across the whole transport system.



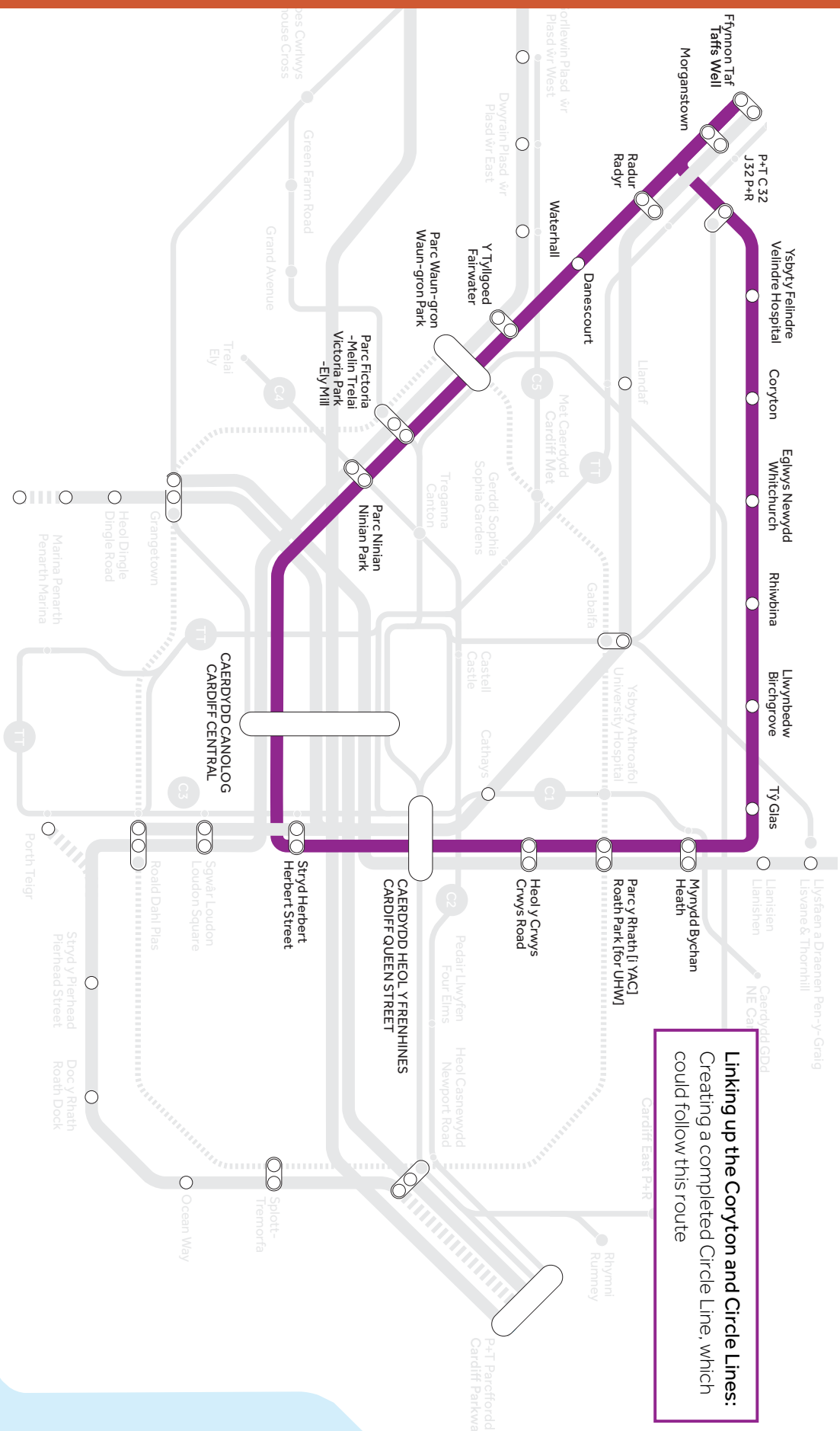
75%

of Green Paper responses supported being able to use the same ticket across the South Wales metro, the bus network and Nextbike (integrated ticketing)



Cardiff Cross Rail





2. Bus Growth

More people travel by bus in Cardiff than any other form of public transport. Buses connect communities, take us to work or to school providing easy access to shopping, leisure, childcare, health and other essential services. We know people value these services – a trip on any bus in Cardiff is sure to end with a 'Cheers drive!'.

Bus services also link Cardiff with the region and are an integral part of the regional network. Buses are especially vital for some of the region's most vulnerable residents, including those people who cannot afford to own a car or are unable to drive. Groups including children and young people, older people and people with disabilities are often particularly reliant on bus travel.

We know, however, that a real issue with Cardiff's current bus services is that they too often require people to journey into the city centre before they can connect with the service that takes them to their final destination. Where journeys involve a change of bus this can also mean extra cost, a major issue for young people and low-income households travelling to education and jobs. We also know that delays and journey times mean buses can be an unattractive alternative to cars. For some people it can take over an hour on the bus to get to any major destination outside the city centre.

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For some of the region's most vulnerable residents, buses are especially vital

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We need to make all of this a thing of the past. Moving forward, Cardiff will be served by next generation buses, travelling on bus corridors and supported by technology which gives buses priority at signals and junctions. Regular, rapid bus services will link to the region and join up seamlessly with train services.

When running on bus-priority lanes, buses are great queue-busters, free from the delays, traffic and congestion experienced by other motorists. We will make sure buses in Cardiff are greener, more reliable and more affordable, with prices as low possible, taking us to the destinations we want when we want, supported by easy-to access travel information which is accurate and simple to understand.

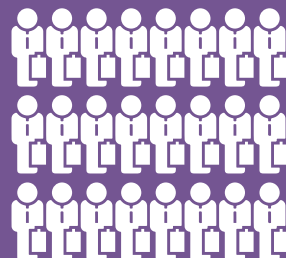
Buses help reduce congestion by taking cars off our roads



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To improve travel by bus into and around Cardiff we will:

1

Reduce bus fares across the city with the aim of introducing £1 journeys

2

Improve bus services by:

- Establishing a **new cross-city bus network, linked to the new Metro network**, which includes a bus loop around the city centre and new bus stations in the east and west of the city;
- **Improving access to key destinations within the city** including the University Hospital of Wales and Cardiff Metropolitan University;
- Using **SMART corridors to prioritise buses at traffic lights**;
- **Improving access to regional destinations** - including Newport, Pontypridd and Penarth - by delivering new bus links and SMART corridors to the East, North and West of the city;

3

Make sure all buses in Cardiff are clean, green and efficient by shifting to electric buses and cleaner engines;

4

Take major traffic off Cardiff roads by establishing new Park & Ride facilities at strategic areas - including Junction 33 and Junction 32/A470 - making journey times quicker, cheaper and stress free.

87%

of **Green Paper** responses supported the reshaping of the **bus network**

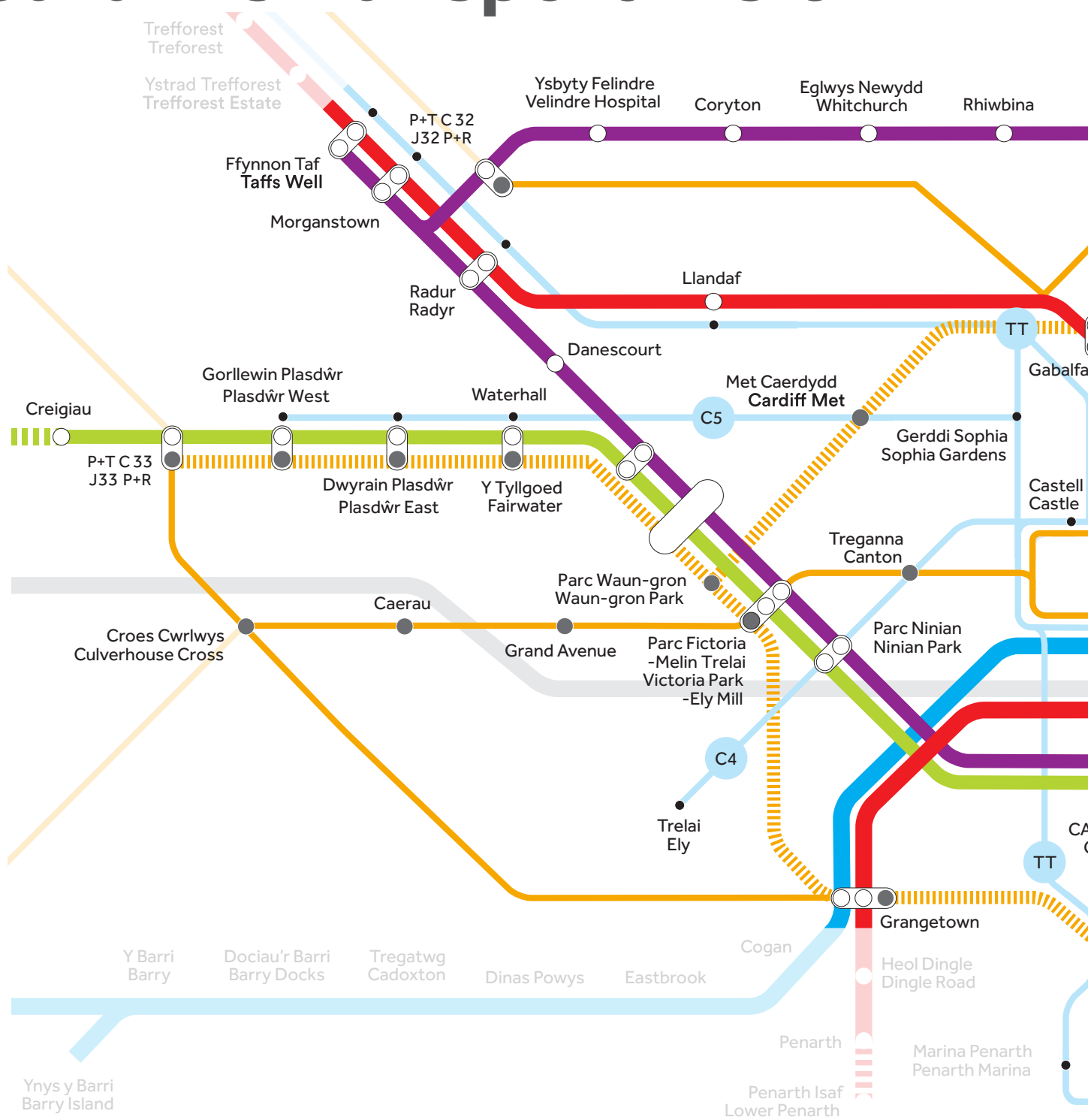


60%

of **Green Paper** responses supported **improved regional park and ride connections**

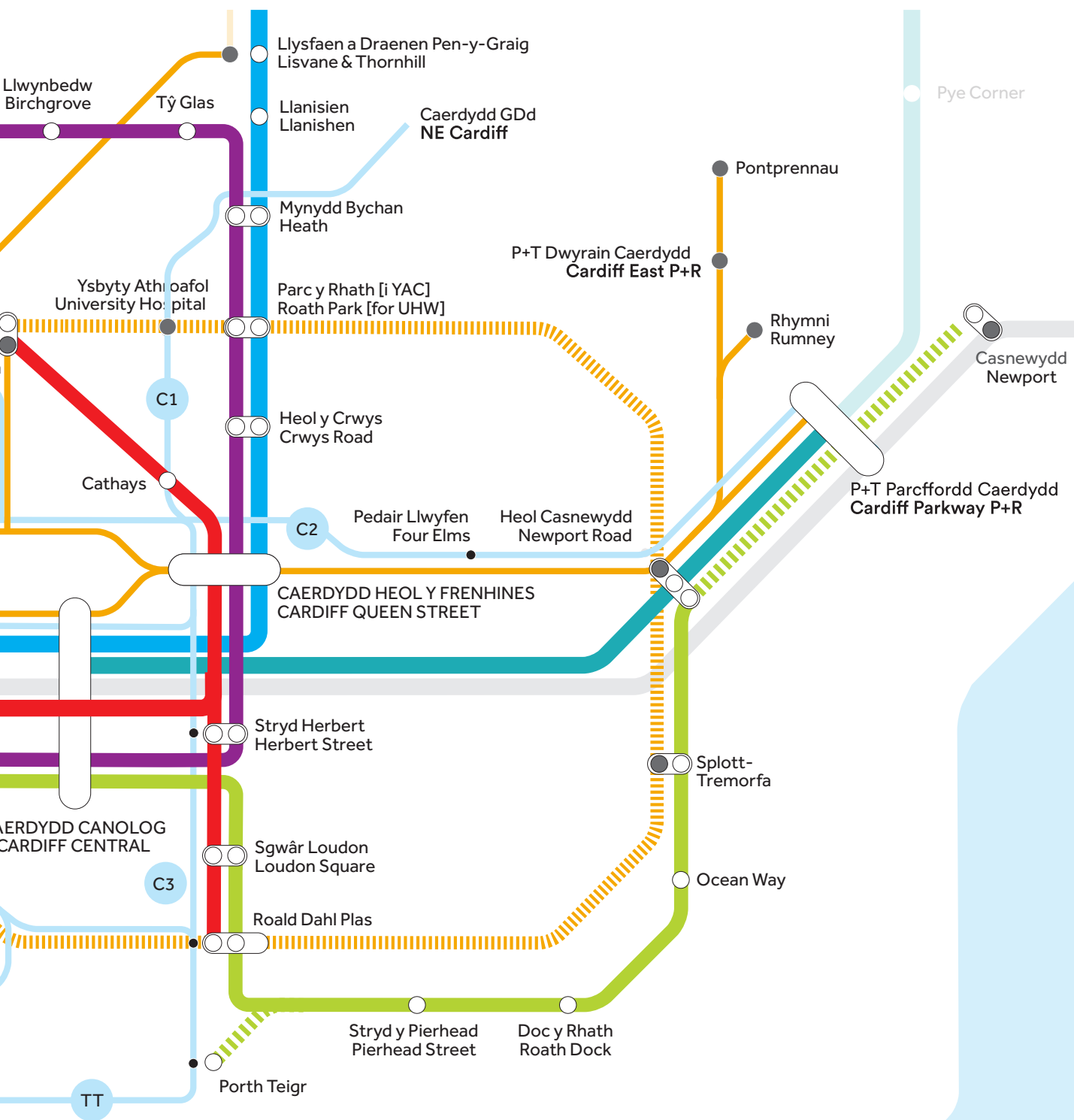


Cardiff's Transport Vision



- Cardiff Circle
- Cardiff Crossrail
- Cardiff Crossrail (future extensions)
- Core Valleys Line
- Core Valleys Line (future extensions)
- Rhymney & Vale
- Ebbw Vale
- Mainline & cross country services
- Bus Rapid Transit - Circle
- Bus Rapid Transit - Radial routes

- Cycleway
- Rail station
- Rail and/or Bus Rapid Transit interchange
- Bus Rapid Transit stop
- Multi-modal interchange
- C1
- Cycleway route number
- Cycleway location



Our proposals for developing the South Wales Metro network in Cardiff: more detailed work is needed but this map shows how different routes and modes could link together across the city and into the region



Proposals for the new Cardiff Central Interchange



Proposals for Wood Street



3.

Active Travel and streets for people



Walking and cycling are by far the cleanest, healthiest and cheapest ways of moving about the city. Indeed for many shorter journeys they can be the quickest as well.

Combined with frequent and reliable public transport longer journeys can be made easy too. We realise that not every journey can be made by active travel, but we want to make it the best option for a greater number of people. The health benefits are also too important to ignore. Not only does active travel make our streets, neighbourhoods and public spaces safer, cleaner and quieter, but it also takes congestion off our roads.

We know, though, that our city's cycling infrastructure is too often fragmented and that people don't always feel safe riding a bike in Cardiff. Only 34% of people think cycling safety in Cardiff is good, and only 23% think the safety of children's cycling is good (Bike Life 2017). This is why we are investing £10m of the Council's own capital budget to match grants from Welsh Government up to 2022 into a network of segregated Cycleways across the city. We are on course to deliver six major, strategic Cycleways by 2022. These will provide safe access to the city centre for cyclists along major commuting corridors.

We have also launched our on-street Bike scheme – NextBikes - which is the most successful bike-sharing scheme outside London.

To help people take up active travel, through the Public Services Board we are also supporting the Healthy Travel Charter. Organisations signed up to the Charter commit to support and encourage their staff and visitors to use healthy modes of travel, for example, by giving staff access to cycle parking and other facilities, offering discounts on public transport and supporting agile working. A number of key public sector organisations have signed up to the Charter, with work underway to offer the Charter to businesses and other organisations.

This is just the start. We have spoken about our ambition to become one of the best cycling cities in the UK. We now need to plan how we achieve this.

Cardiff is
leading the way on
**20mph
in Wales**
- we will rollout
20mph limits
across the city

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We are investing **£10m** into a network of segregated **Cycleways across the city** and are on course to deliver **5 major, strategic Cycleways by 2022**

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To increase active travel and improve local air quality we will:



1 Build the highest quality, safe and fully-segregated cycle network across the city by 2026, with Primary Cycleways which will extend out from the city centre to the Bay and residential areas, together with a supporting network of feeder routes;

2 Complete a cycle loop around the city centre which will connect each of the six Cycleways with each other;

3 Expand the Nextbike hire service to at least 2,000 bikes across the city, developing regional links and making membership accessible to more people;

4 Rolling out a 'streets for health' initiative across the city, to enable all streets to be reclaimed as public spaces and become healthy, green, safe, child friendly, to encourage walking and cycling, with high-quality pedestrian crossings, biodiversity, planting and sustainable urban drainage systems (SUDS) and provide improved access for everyone, particularly those with restricted mobility;

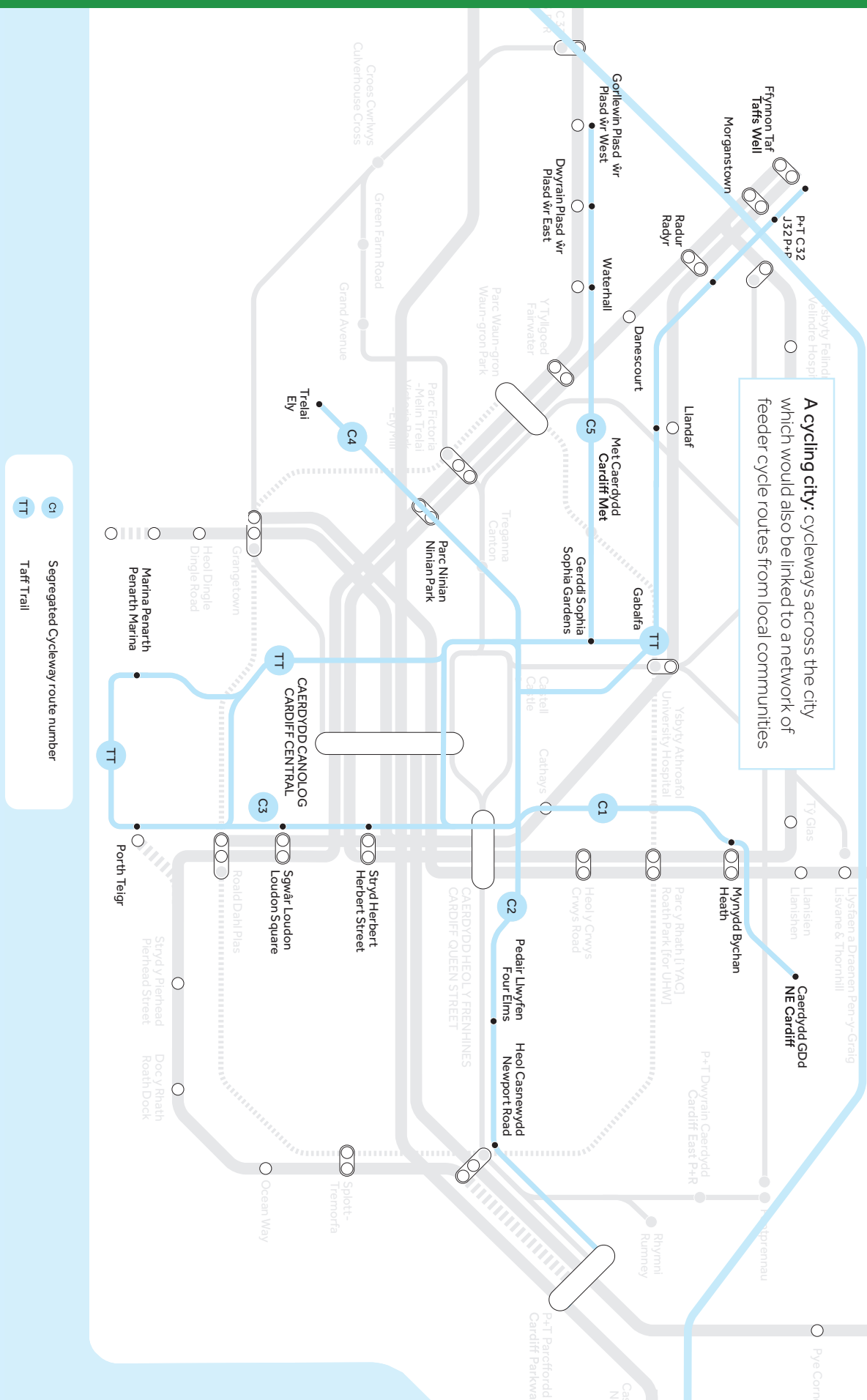
5 Develop Active Travel Plans and accessible walking and cycling routes for all schools by working with children, teachers, parents and governors to promote walking, scooting and cycling to and from schools;

6 Make Cardiff's speed limit 20mph by default.

87%

of Green Paper responses supported a comprehensive network of **fully segregated cycleways** with a primary cycle route network





| Cycleway proposals for Castle Street



| New crossing on Taff Mead Embankment



4. The Future of the Car

We know that, for many people, cars are an important part of daily life. It is clear that we have to reduce the number of cars moving around the city, but we have to make those journeys which have to be made by car as efficient and sustainable as possible. Reducing car use and creating safe community spaces is not only good for the environment and for journey times, it will also make our streets better places to live and safer for our children.

New technology offers opportunities to replace our older, more polluting cars with cleaner vehicles, powered by electricity or hydrogen, for example. It is important that the city supports this transition. Although cleaner cars will help to reduce the impact on our air quality and environment, they do pollute and we will still need to seriously address congestion on our roads.

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We will still need to
**seriously address
congestion** on our
roads

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Already the transport infrastructure is under pressure. Our road network has not been designed to accommodate the volume of traffic it serves every day and, given the growth of the city and number of people commuting in from outside Cardiff action is urgently needed to address this.

Technology has also brought on-demand taxi services to the market as well as lift-sharing services. Self-driving cars (autonomous vehicles) may soon be viable and could help fill in the gaps in the transport network, but all these will still add to congestion. 'Mobility as a Service' offers a shift away from paying to own and use your car, towards buying travel as a service, as we've seen happen with movie and music streaming services.



To support the move towards cleaner vehicles and manage traffic on our road network, we will:

1 Introduce a comprehensive approach to parking across the whole city, including addressing unmanaged street parking in areas where local residents are regularly inconvenienced and tackling pavement parking;

2 Reduce the need to own private cars and the associated **costs** - including insurance, petrol, car tax and road repairs- by working with car club operators to provide city-wide, easy, 24-hours-a-day access to car club vehicles;

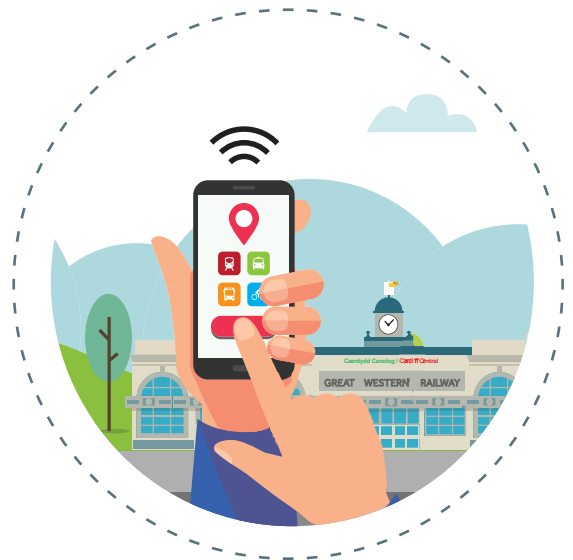
3 Encourage the uptake of electric vehicles by significantly increasing the number of publically-available electric vehicle charging points by 2025, and making all Council Fleet Cars and LGVs zero emission capable by 2025, and HGVs zero emission capable as soon as possible;

4 Support businesses and local communities by creating **better accessibility in South East Cardiff**, for example by completing the Eastern Bay Link road and connections with Llanrumney;

5 Introduce a complete **SMART technology approach to manage traffic in Cardiff**, including the use of real time travel information to monitor and respond to transport, traffic and parking data through SMART corridors;

6 Work with the taxi industry to achieve overall improved **standards, services and fleet**, with a phased but ambitious approach to allow drivers to convert to more sustainable vehicles.

72%
of Green Paper
responses support
zero carbon bus fleets
(e.g. electric buses)



A Capital City that works for Wales: supporting the wider region

Rapid bus links and new Metro lines/stations across the South East Wales region could change the way people travel.

We are already working with our regional partners, Welsh Government and Transport for Wales to make sure that the right transport infrastructure is in place to provide real choices for people travelling into Cardiff from the wider region. We want to support the delivery of 'Metro Plus' projects which will improve access to public transport for all areas in the region, making public transport journeys into Cardiff the easiest and quickest way to travel. Communities are going to benefit from, for example, new/expanded park and rides in Pentrebach and Pyle, a Transport Interchange Hub in Porth and a multimodal interchange at Barry Docks. An EV charging infrastructure network will be rolled out to support the use of low-emission vehicles.

We will also support work to identify and deliver park and ride sites and services for the main transport corridors from the wider region into Cardiff and for the regional rollout of the nextbike scheme. Projects are already being developed on key corridors.

Regional express bus project

We are proposing to implement a new express, direct bus service connecting main regional towns and areas – including Maerdy, Blackwood and Pontypridd – to Cardiff by 2024. These will be regular, affordable bus services on modern buses with USB and Wi-Fi. Changing between different modes and services would be easy at transport hubs and interchanges.

North West Corridor

We want to better connect the communities of Llantrisant, Talbot Green and Cardiff. This may include Bus Rapid Transit and tram-train. Work has already started to deliver a new transport interchange incorporating park and ride at J33 of the M4 that will give people transport choices at this key corridor gateway. Interchange opportunities for J34 are also being explored, together with the possibility of a new road link which would support the delivery of bus priority measures.

Northern Corridor

A SMART Corridor uses extensive real-time data to

intelligently manage the movement of traffic, public transport, pedestrians and cyclists into the city. It will also influence travel behaviour by helping people to make better informed travel decisions, supporting mode shift. This would help to:

- Better manage strategic corridors to control queuing and mitigate the impacts of reallocating road space to sustainable modes of travel;
- Improve air quality;
- Provide real-time travel information to encourage sustainable travel;
- Prioritise walking, cycling and public transport.

A pilot scheme is being developed for a major section of the A470 corridor between Coryton and Gabalfa and is expected to be introduced in 2020. If successful, the same principles could be rolled out and applied to other corridors.

North and South East Corridors

Options are being explored to improve transport links – walking and cycling routes, public transport and highway improvements – in the South East of the city which will benefit some of our least connected communities. Bus rapid transit could also improve links between Cardiff and Newport.

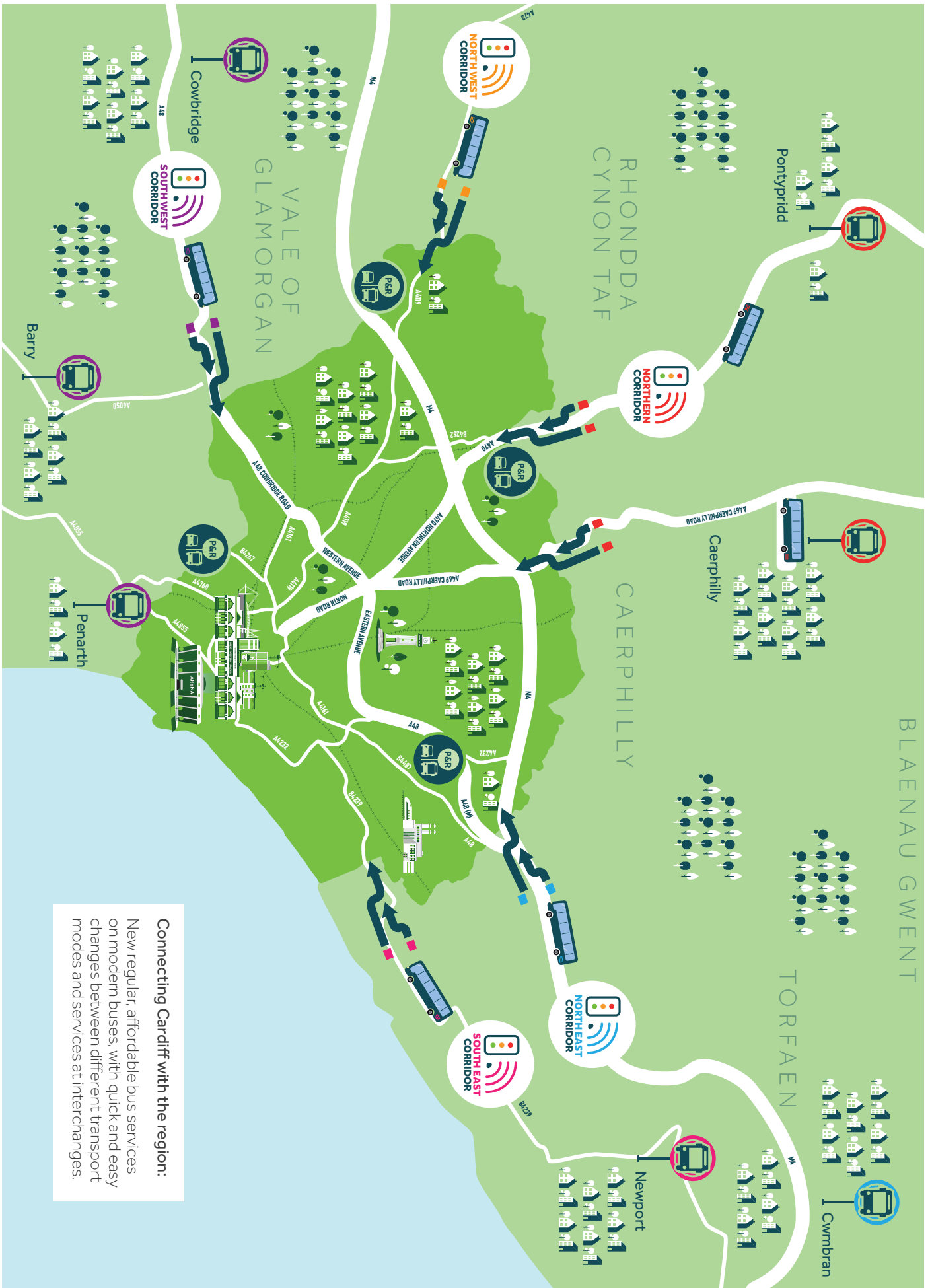
The plans will support growth as well as boosting the regional economy by:

- Providing new transport capacity and reducing journey times;
- Improving connectivity across the region to give better access to a wider range of jobs;
- Supporting the growth of business clusters in the larger cities;
- Improving well-being and access to opportunities.

South-West Corridor

The Penarth Cardiff corridor is critical for access from the Vale of Glamorgan but suffers from high levels of congestion and unreliable transport services. A number of options for improving active and sustainable travel provision are being developed and reviewed, including a pilot electric bicycle scheme, interchange facilities at Cogan Station, a Penarth Headland Link for active travel and a Cardiff Barrage bus link to deliver quicker and more reliable bus services which will help encourage modal shift.

Connecting Cardiff and the region



Delivery timeline and Funding

This White Paper outlines the ambitious plans, which are required to make Cardiff the green, fair and prosperous city that we all want it to be.

We estimate that transforming Cardiff's transport system will cost between **£1-2billion**. To tackle climate change and the levels of inequality in our city we need a low carbon travel system which breaks our reliance on cars and connects all of our communities with jobs, opportunities and services. This is vital for the success of Cardiff as a city and for the national economy of Wales.

Making these plans a reality will require a partnership with every level of Government – most importantly with the Welsh Government and Transport for Wales. It will require collaborative working with our neighbouring authorities, with partners across the public and private sectors, and civic and community groups.

Paying for these schemes will require a shift in the way transport in Cardiff is funded. We propose to consider all possible delivery options and will work with Welsh Government to develop a comprehensive investment plan to bring forward this vision and make it a reality. As part of a robust decision making process we will consider a wide range of possible charging mechanisms which will include some form of Road User charging. Any revenues raised from such a scheme would be spent directly on public transport.

This could take many different forms but one example could entail a scheme whereby all vehicles driving into Cardiff would pay a low fee (e.g. £2/day) for crossing into a charging area. Exemptions for emergency vehicles, motorcycles, registered blue badge holders people with disabilities could form part of any scheme¹¹. Our preferred option would include an exemption for Cardiff residents from any charge.

In line with best practice this proposal will be tested alongside other delivery options that we will consider in our initial assessments, such as a Workplace Parking Levy, Low Emission or Clean Air Zones. Such schemes are becoming more widespread across the UK with many UK Cities – including Birmingham, Leicester, Bristol and Leeds - considering or implementing such schemes. No scheme will be taken forward unless we are satisfied that such a scheme will work for our residents and the City.

We fully understand and want to make clear that several key public transport projects and initiatives would need to be in place before any charging mechanism could be introduced. The timeline opposite shows the projects we believe would need to be up and running, and our aspirations for what the delivery for these projects would look like.

“

Our preferred option would include an exemption for Cardiff residents from any charge

”



**Improvement to
public transport
across the region**

2020

2021

2022

2023

2024

Transport for Wales to introduce extra train capacity on key Valley lines

New/Improved Park and Ride at J32/A470, J33 and Cardiff East

New bus stations at Waungron and University Hospital of Wales

Completion of Metro Plus Phase 1 projects e.g. Porth Interchange and Pontypool and New Inn/Pyle Park and Rides

Segregated cycle network first phase (six routes) completed

Cardiff Central Bus Station to be completed

Transport for Wales to introduce further train capacity on key Valley lines

Metro station opened at Crwys Road

Cardiff Parkway station opened at St Mellons

Regional express bus scheme implemented

Crossrail phase 1 - a new tram-train service from Radyr to Cardiff Bay, via the City Line and a new link south of Central and across Callaghan Square

Metro stations opened at Roath Park and Loudoun Square

Introduction of charging mechanism

2025

2028

Transport for Wales to introduce additional services (Sundays and evenings)

Full Cycle network completed

Metro station opened at Gabalfa

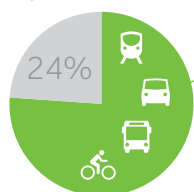
Cardiff Circle tram-train line to be opened

Cardiff Crossrail tram-train line to be opened

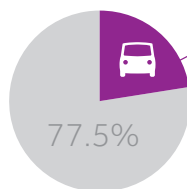
Metro stations opened at Victoria Park, Newport Road, Velindre and Splott



Our city is growing and to **tackle climate change**, together we need to...



Make **76%** of all journeys by sustainable travel modes by **2030**



Make **22.5%** reduction in the number of car journeys by 2030 (from 2018)



2018



2030



Double the numbers travelling by bus by 2030 (from 2018)



2018



2030



Doubling the numbers cycling by 2030 (from 2018)

Emissions from transport are one of the biggest contributors to climate change. To tackle climate change and reduce Cardiff's carbon emissions, we all need to take action to change our travel behaviour.



Can you help by...



COMMUTERS: ☒

- ☐ Catching the bus/train at least once a week
- ☐ Cycling to work at least once a week
- ☐ Car sharing with a colleague
- ☐ Cutting business travel by having online meetings and working flexibly whenever possible

I/we will.....



FAMILIES: ☒

- ☐ Walking or cycling for short local journeys
- ☐ Catching the bus/train for longer journeys
- ☐ Joining Cardiff's car club to save money on owning a car
- ☐ Using a car club to cut the number of cars in the household

I/we will.....



SCHOOL JOURNEYS: ☒

- ☐ Walking, scooting or cycling to school at least once a week
- ☐ Parking further away from the school and walking for part of the journey
- ☐ Car sharing with friends to school
- ☐ Talking to my school about how we can support healthier and active journeys to school

I/we will.....



BUSINESSES: ☒

- ☐ Helping your employees to travel actively by setting up a Cycle to Work scheme
- ☐ Signing the Healthy Travel Charter
- ☐ Supporting online meetings to cut business travel
- ☐ Joining Cardiff's car club to use for business travel

I/we will.....



CAR DRIVERS: ☒

- ☐ Walking or cycling for short local journeys
- ☐ Car sharing whenever possible
- ☐ Switching to a low emission or electric car
- ☐ Drive at 20mph where people live

I/we will.....



STUDENTS: ☒

- ☐ Walking or cycling for short journeys
- ☐ Catching the bus/train for longer journeys
- ☐ Joining Cardiff's car club instead of bringing your own car to Cardiff
- ☐ Car sharing with flatmates/friends for longer journeys

I/we will.....



This document is available in Welsh /
Mae'r ddogfen hon ar gael yn Gymraeg

