



Metro

Mark Barry

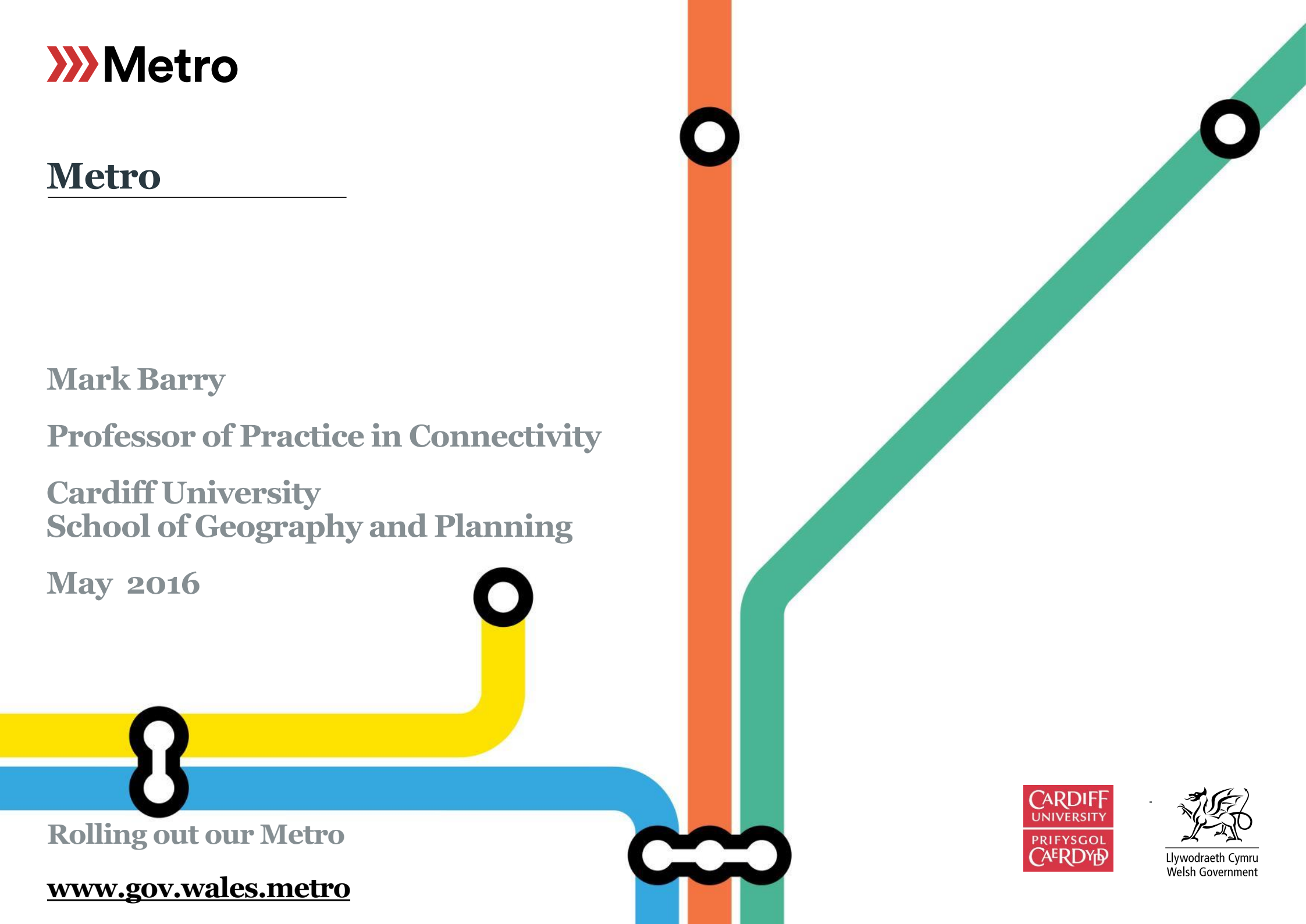
Professor of Practice in Connectivity

Cardiff University
School of Geography and Planning

May 2016

Rolling out our Metro

www.gov.wales.metro

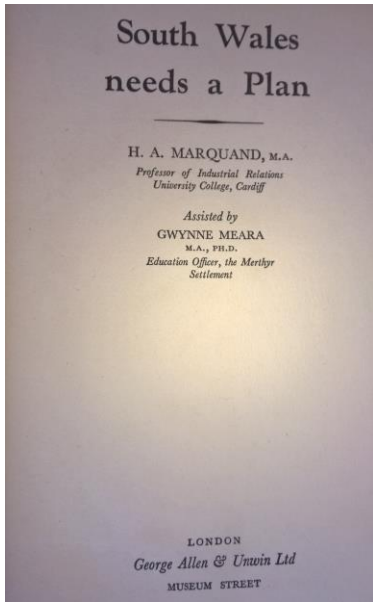


Llywodraeth Cymru
Welsh Government

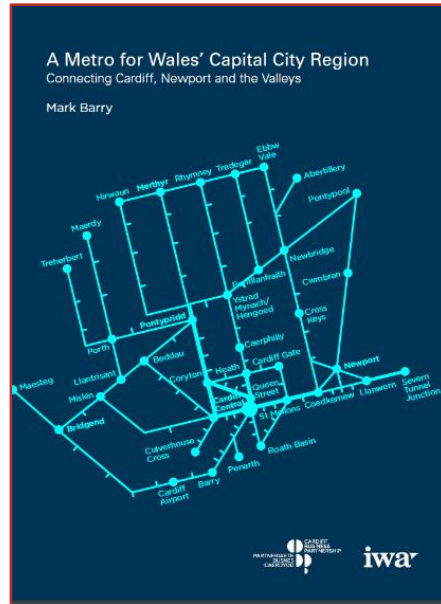
Contents

- Strategic Context
- Vision & Plan
- What's Happening Now & Timetable
- Wider Challenges and Opportunities

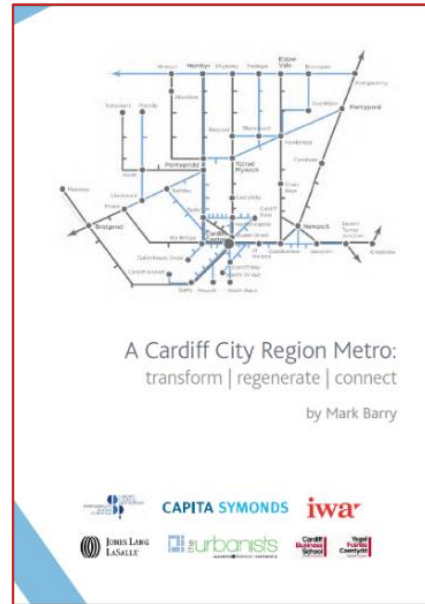
Metro, its been a long journey...



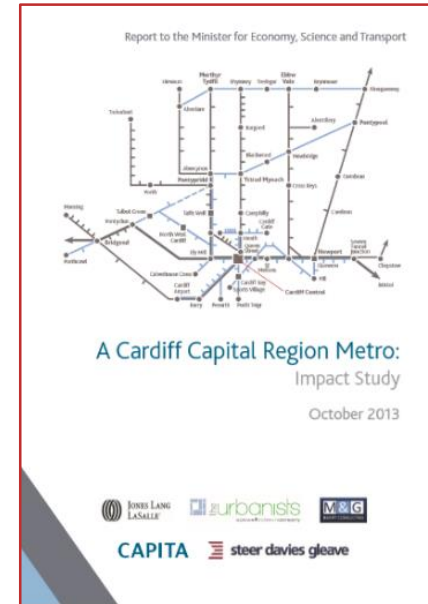
1936....



2011



2013



2013



2015.....

....but stuff is now happening!

Why Metro...

- > Connecting more people, to more places
- > Enabling development & regeneration.
- > Modal shift & lower CO₂.

*To address issues of economic inactivity,
deprivation and poverty*

*And deliver a sustainable, economically
dynamic city region of 1.6 M people.*

Metro Strategic Context



Why Metro?

To grow the regional economy...

> GVA/capita ~80% UK average

From 55/60% in HoV ; to ~100% in Cardiff/Vale (but low vs other UK cities)

> 1.5M pop; expect 1.6M by mid 2020s

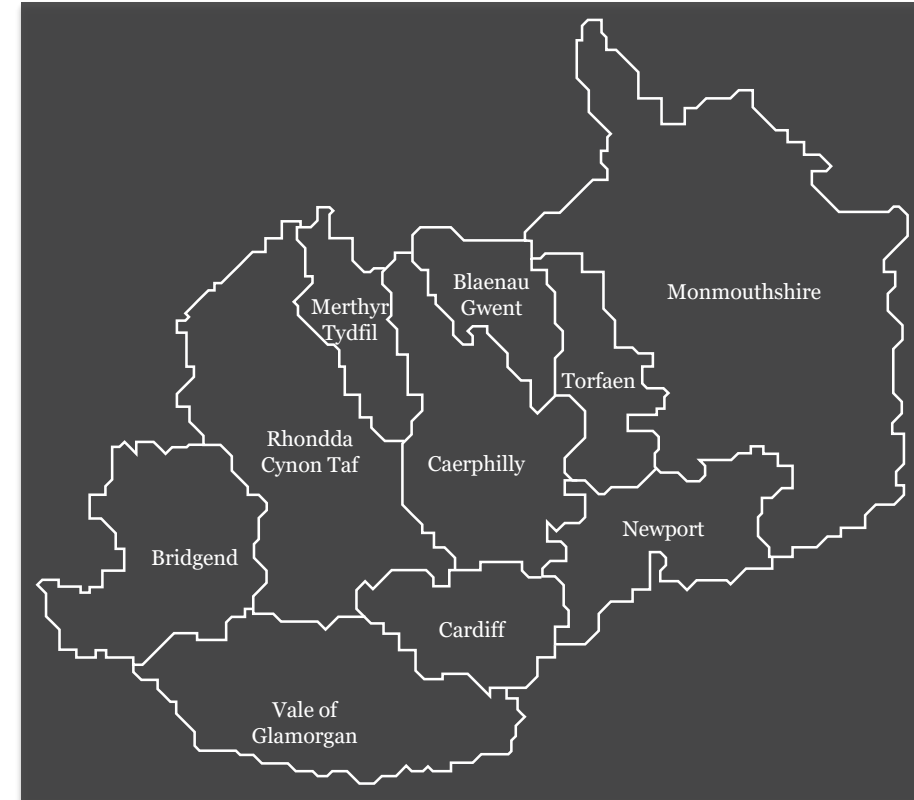
Cardiff one of fastest growing cities in UK – 350k today & expected to exceed 400k by 2026

> Workplace Employment

Up in Cardiff from 180k to 210k but not enough high value jobs

> Commuting

Inward commuting to Cardiff up to >80k but low vs other UK cities; little growth elsewhere in the region



The Region needs to deliver economic benefits through:

More accessible and higher value jobs in Cardiff AND

More jobs across the region in places the private sector will support...

Enhanced connectivity is fundamental

Wider Evidence Base

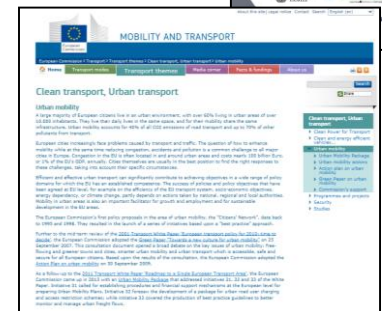
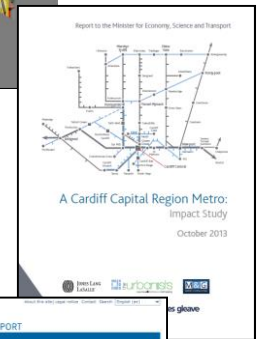
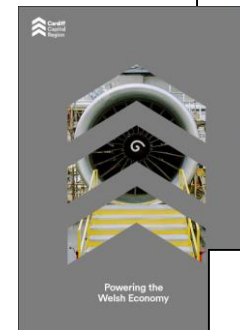
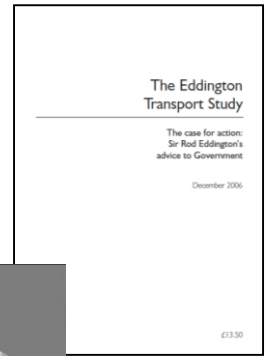
Connectivity drives economic activity

- > Lack of capacity on the UK's primary urban transport networks is a major impediment to business investment and growth.

<http://webarchive.nationalarchives.gov.uk/20090104005813/http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/>

- > An integrated transport system aligned with land use planning could be a catalyst for economic change across the Region.
- > The Metro provides an opportunity to deliver economic benefits across the whole Cardiff Capital Region
- > EU has identified better, smarter and more integrated urban transport as key policy objective to address issues of congestion, pollution and to help economic growth and employment.

http://ec.europa.eu/transport/themes/urban/urban_mobility/index_en.htm



Cardiff Capital Region...



Hosting NATO, Ryder Cup

Major TV/Film production centre

Leading Financial and Professional services location

Celtic Manor & Convention Centre

GWML electrification 1:45 to London – aspire 90 mins, direct rail access to Heathrow from 2021

Cardiff University 5th rank UK HE for research

Unique physical geography

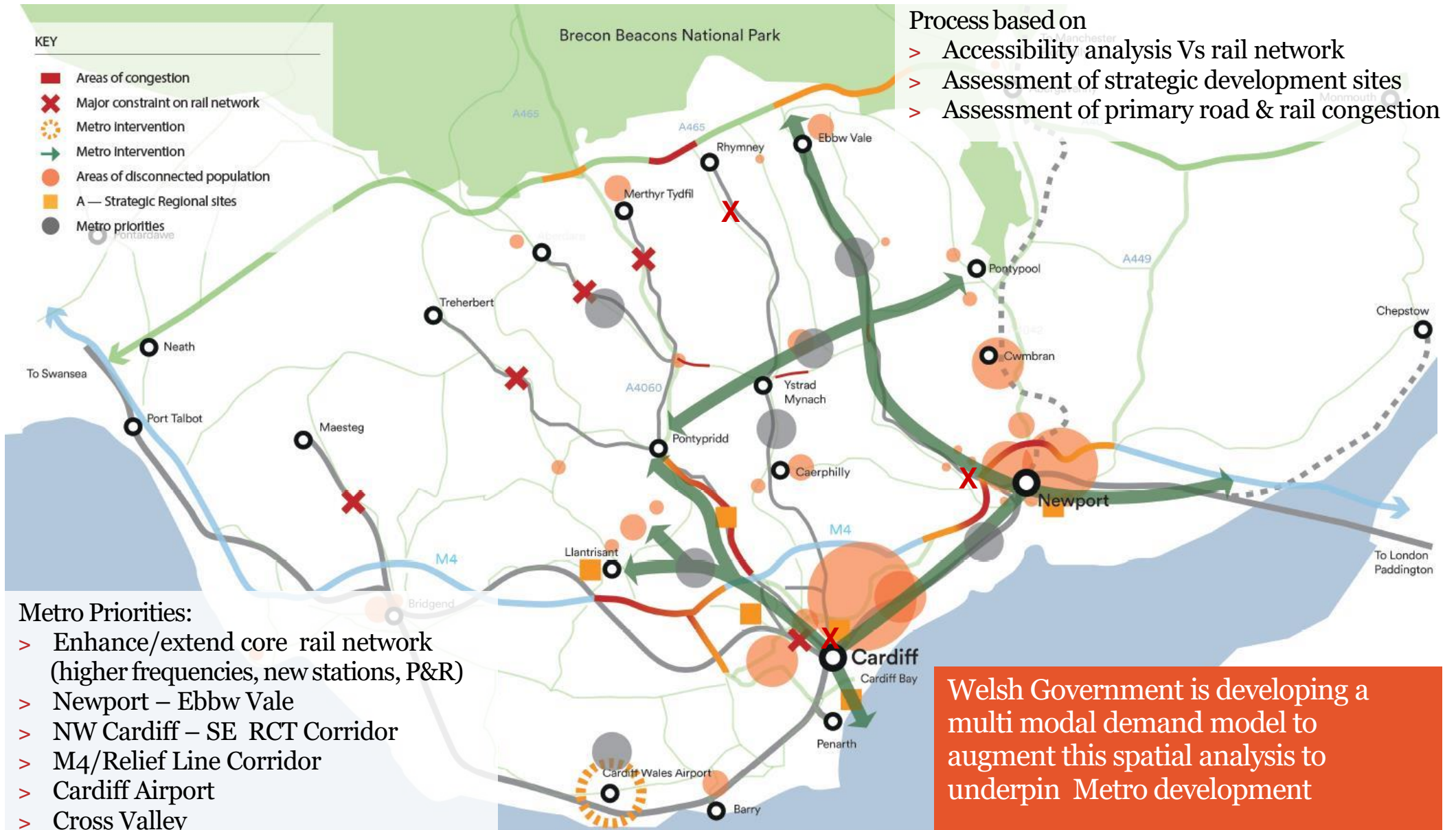
Strong Industrial heritage; crucible of Industrial revolution

Now a leading, diverse UK city region

Well placed to grow and develop; “Powering The Welsh Economy”
The Cardiff Capital Region Board, March 2015

We live in an amazing place...

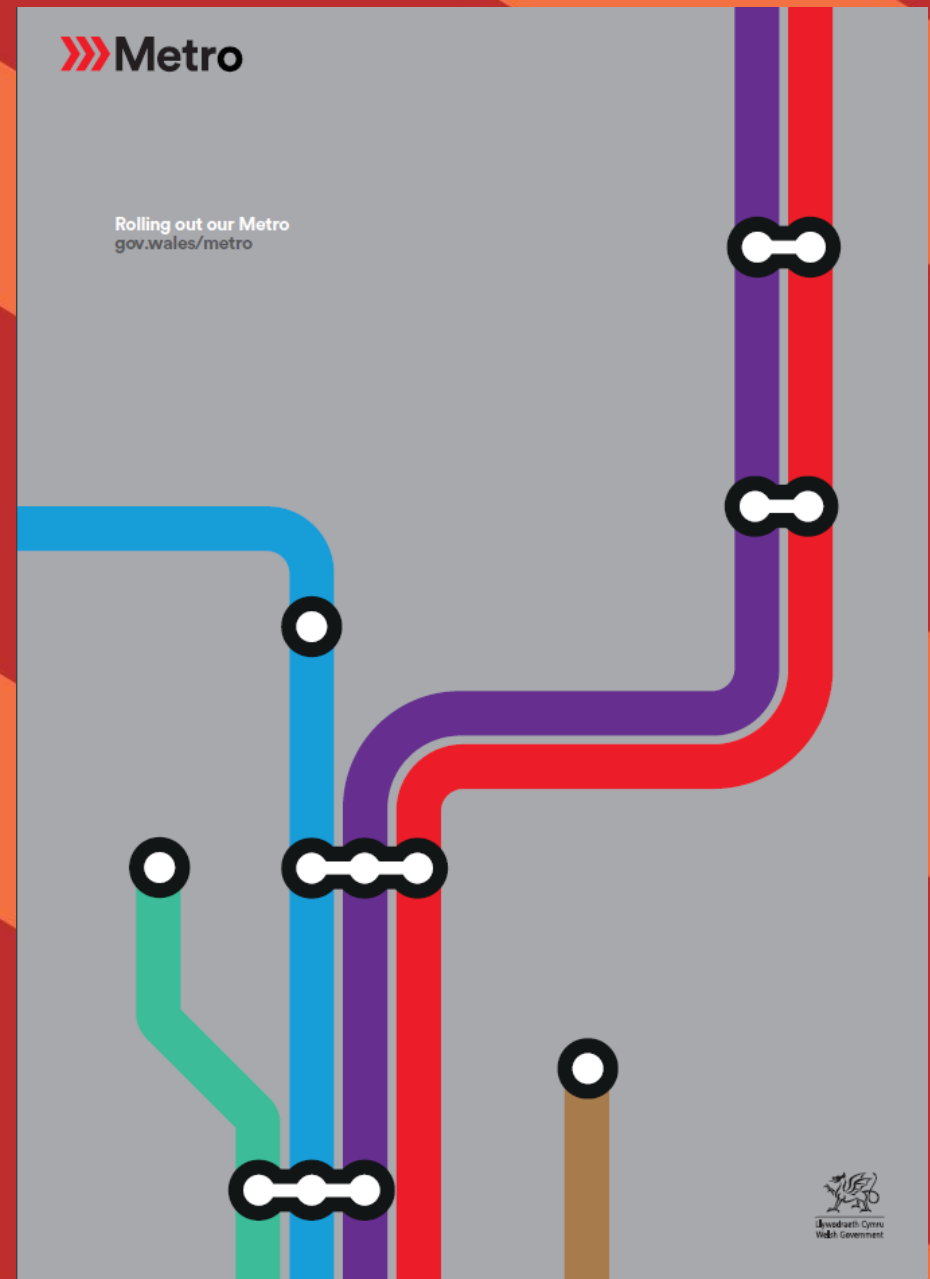
2013 Metro Impact Study Spatial Priorities



South Wales Metro Vision...

Announced by
The First Minister
November 30th 2015

www.gov.wales/metro



Ministerial Focus and Importance of Metro

The following excerpts are from statements made by the First Minister at the launch of Metro on November 30th 2015.



“The Metro project represents the future of public transport in South East Wales which will provide faster journey times and more frequent services covering a greater area. It is an ambitious project linking people and jobs across South Wales in a fast, efficient and environmentally positive way.”

“The Metro is far more than just a transport project. It will be a catalyst for transforming the economic and social prospects of South East Wales and the country as a whole.”

Metro Vision...

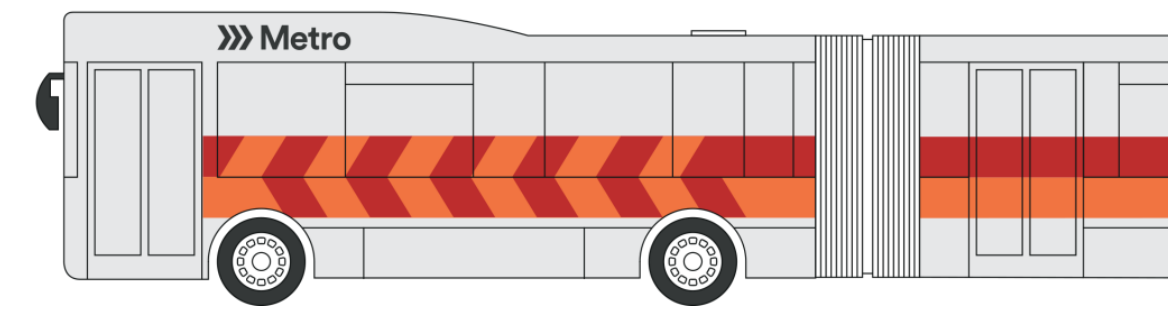
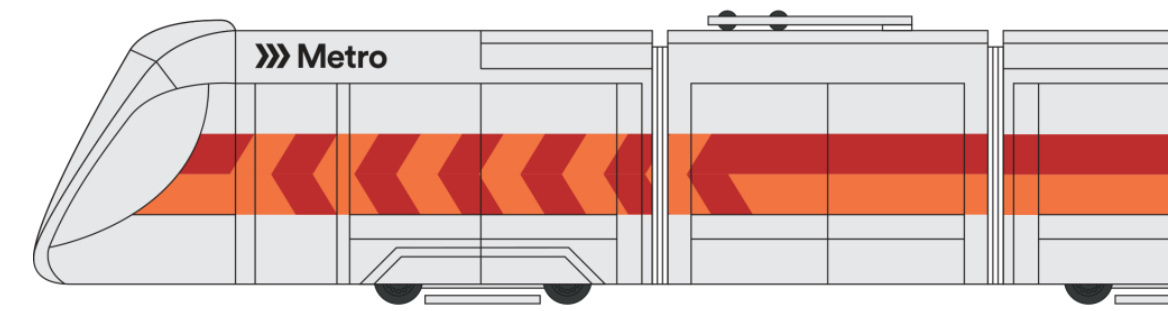
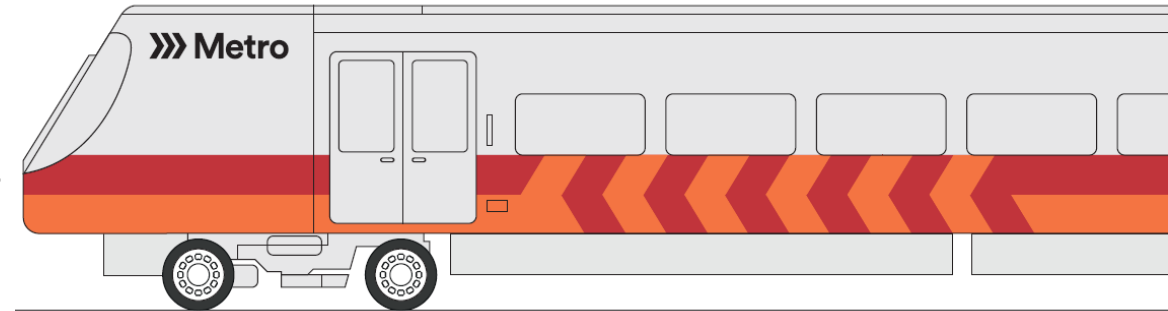


Key Features:

- > Faster & more frequent services
 - > Integrated
 - > Extendable
 - > Enabling development & regeneration
-

Metro could include one/all of:

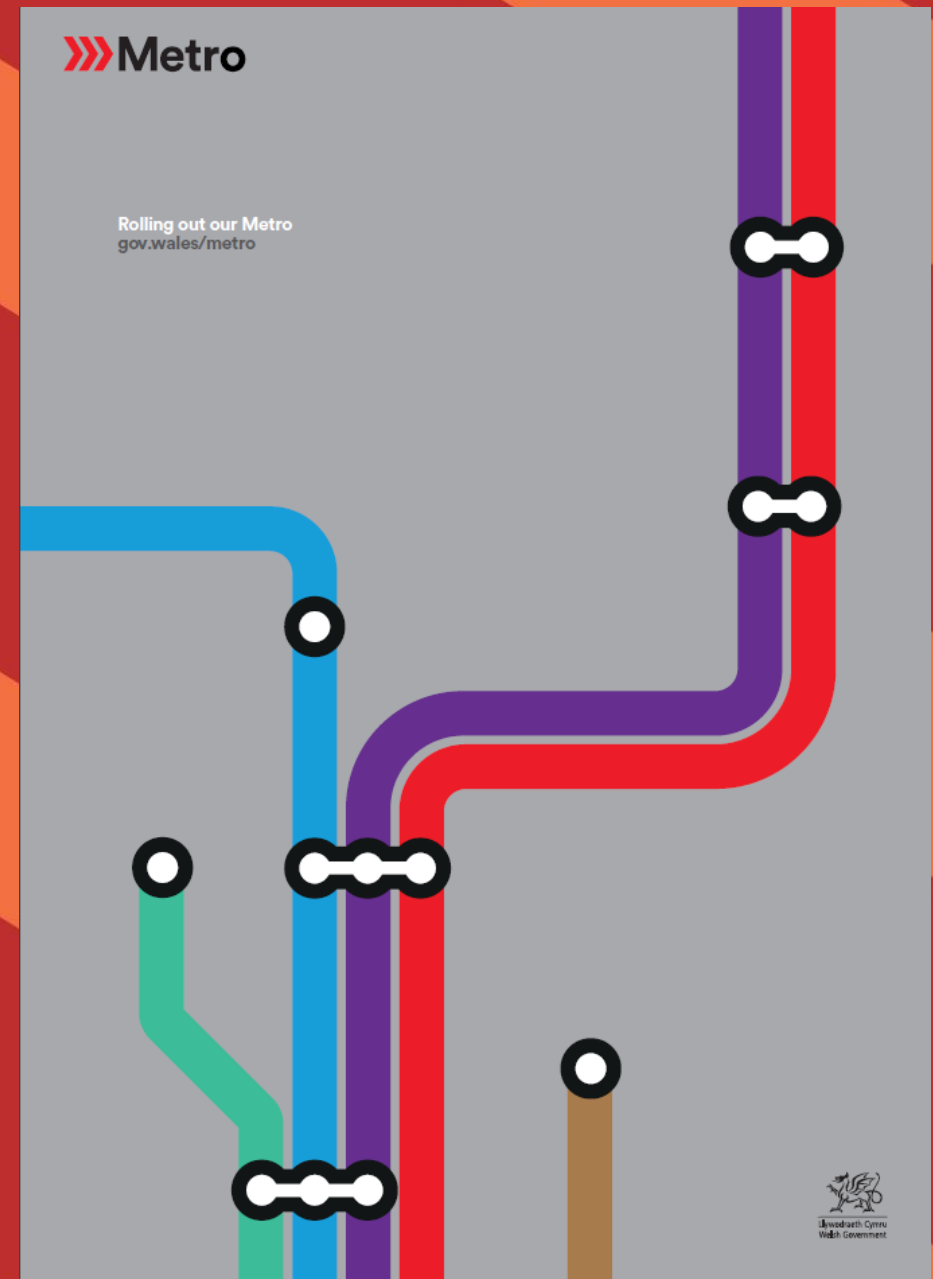
- > Heavy Rail
 - > Light Rail
 - > Bus Rapid Transit
-



South Wales Metro Vision...

What's the plan?

www.gov.wales/metro

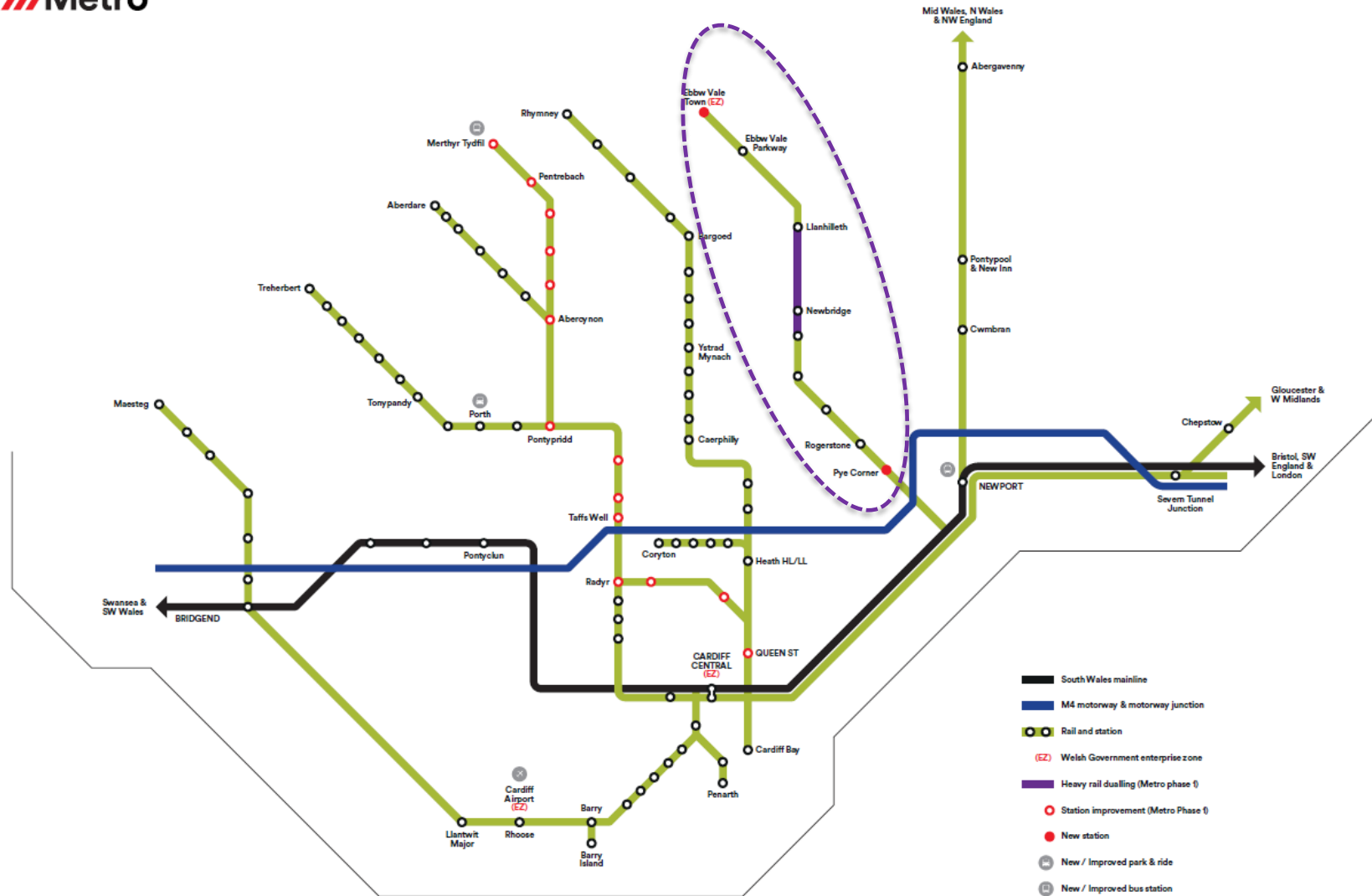


Metro

2016 Phase 1...

Improved access to employment for people living on Ebbw Valley line and in Ebbw Vale itself.

Over £70M of capital investment delivering major benefits to Blaenau Gwent and Ebbw Valley



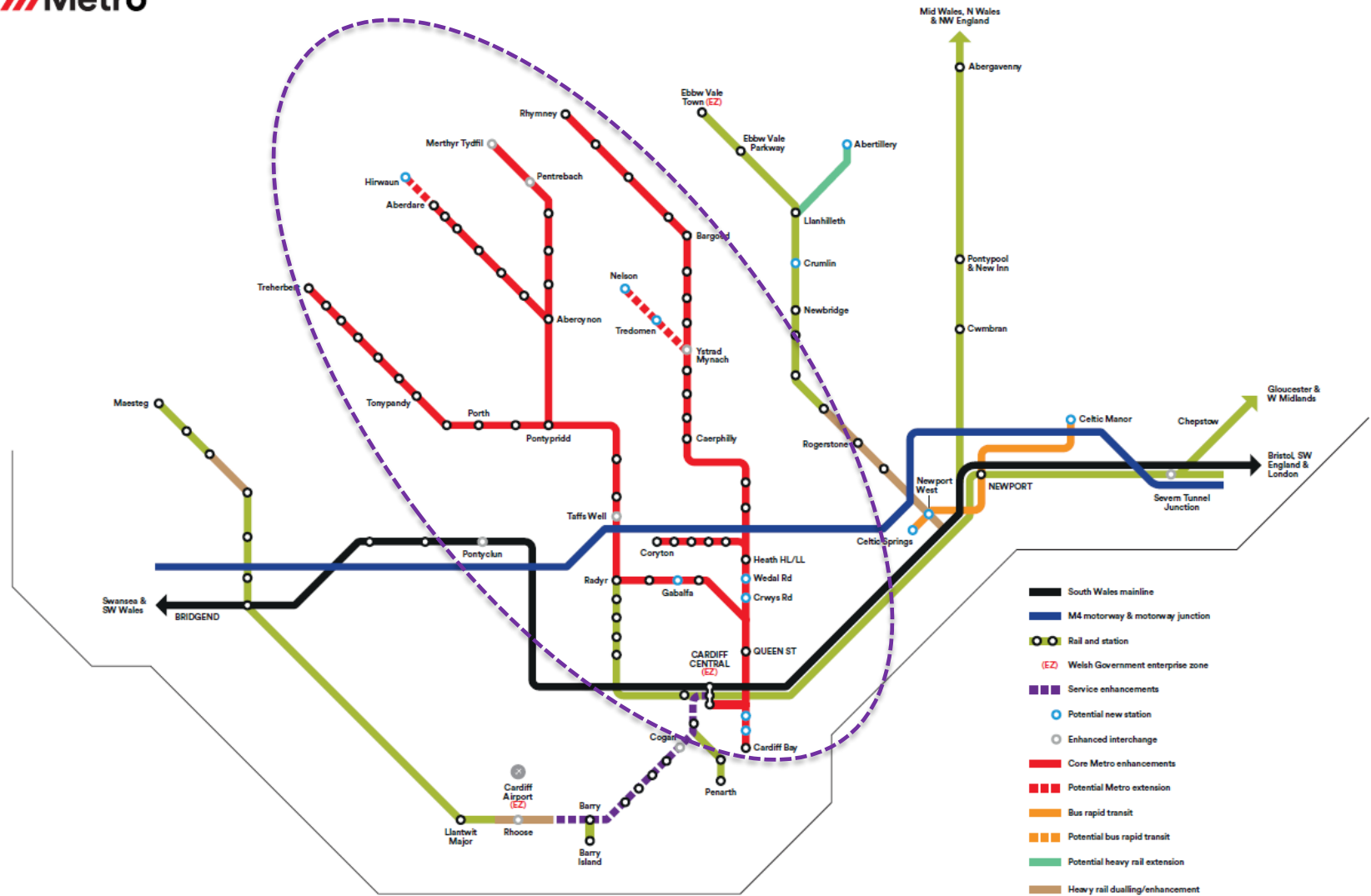
Major accessibility benefits to Blaenau Gwent & Ebbw Valley

Metro

2016 to 2023 Phase 2...

Major transformation of core network to deliver faster and more frequent services and establish the foundation of an extendable Metro network.

- > Delivers improved access to employment across the region and especially communities on core valley lines north of Cardiff in Merthyr, Caerphilly and RCT
- > Enhanced potential for transport related development and regeneration across the region
- > Modal shift to PT with corresponding reductions in CO2 emissions
- > Potential to add new stations & line conversions as part of this phase



Major accessibility benefits to Caerphilly, Merthyr & RCT

Journey Times/Frequency comparisons

Current Vs Potential Light Rail



LR more frequent & faster services drives 25-30 % more demand....

Metro

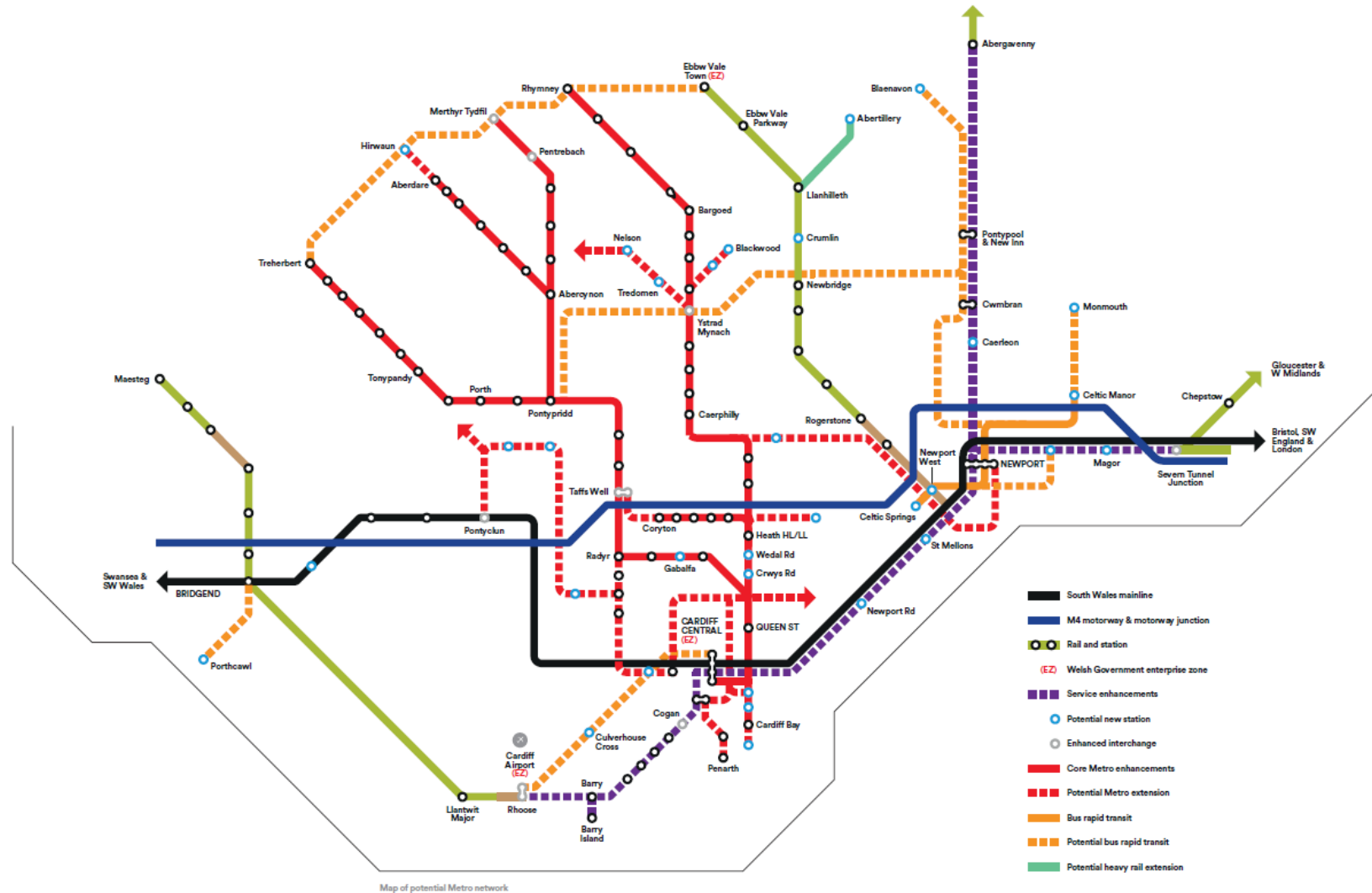
Future Phases...



Rail extensions and further bus integration measures extend reach of Metro network. Major benefits to places like Nelson, Hirwaun, Cardiff west, Cardiff east Newport, Cardiff Bay, Penarth and Barry

- > Further employment accessibility benefits
- > Opens up new sites and locations for development and regeneration
- > Further model shift to Public Transport

This will deliver a truly joined up regional network that will enable a wide range of benefits set out in the 2013 Impact Study.



Some of this with City Deal Funding....

What is happening now?



What's Happening Now?

- > Mobilising “Transport for Wales”
- > Finalising Competitive Dialogue based Procurement Strategy
- > Mode Agnostic/Output based process to stimulate innovation and deliver best value for tax payer – due to start July
- > Programme Business Case Development
- > Finalising details of transfer powers from DfT to WG
- > Supporting City Deal bid that could broaden scope of Metro

Timetable...



Metro Phase 2 Estimated Delivery Timetable

- > ODP Procurement through to late 2017/early 2018
- > Design 2018-2022
- > Implementation 2018-2024

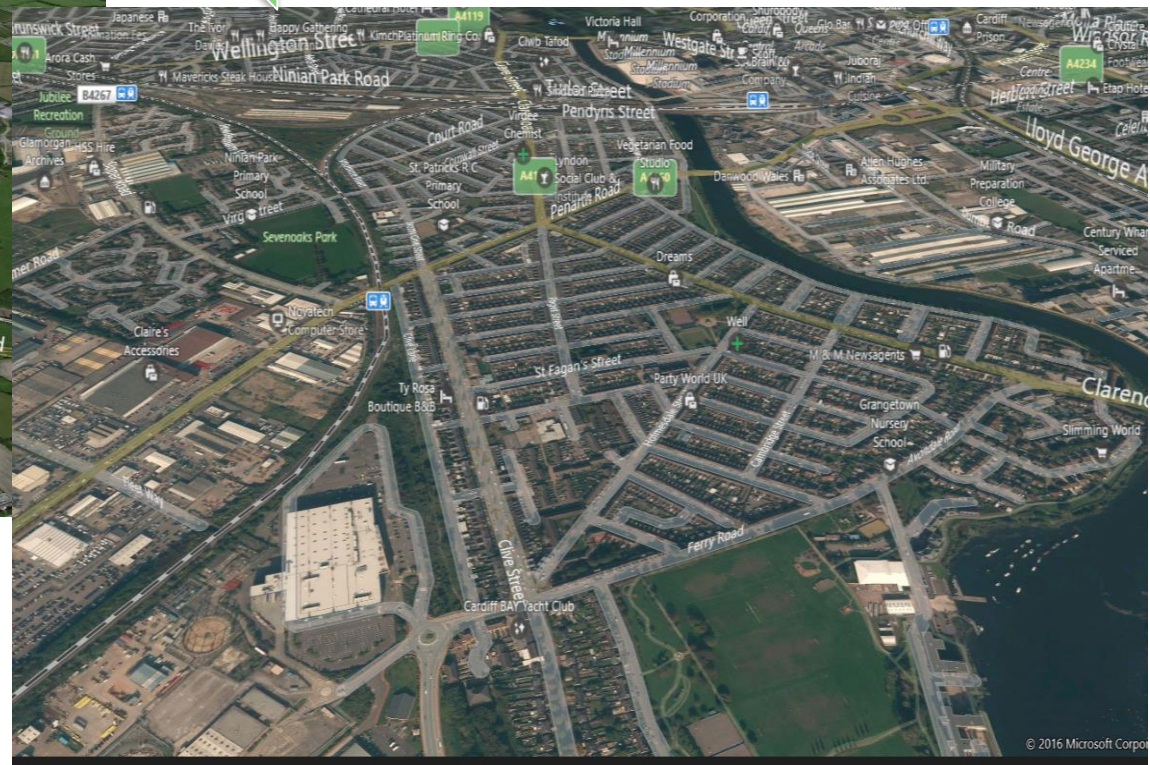
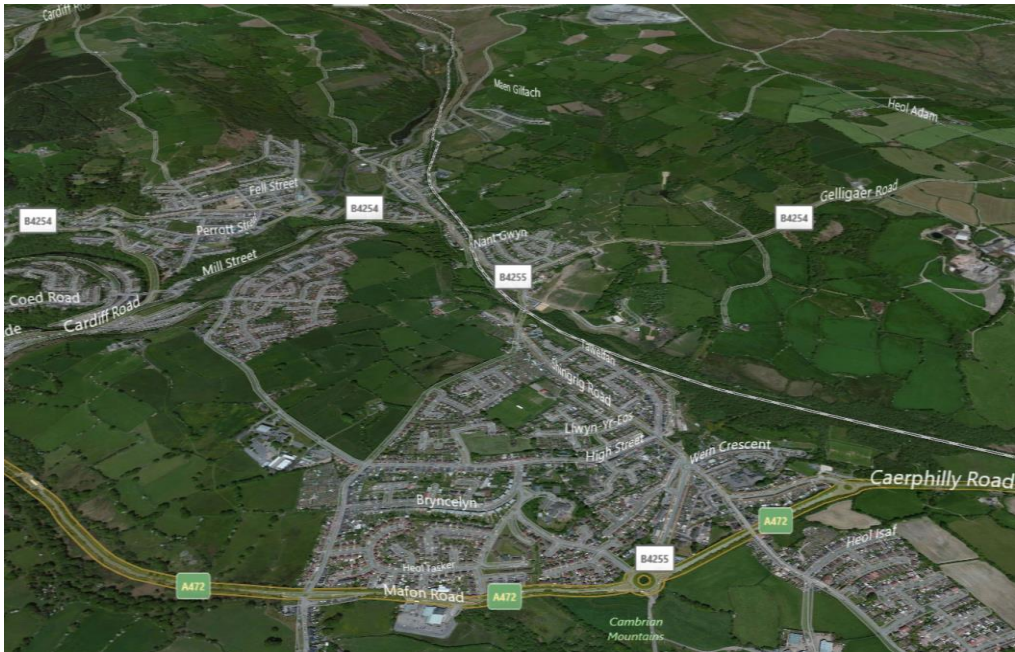
Final implementation plan will be developed by TfW with ODP in 2018/19.

Wider challenges...
and opportunities.

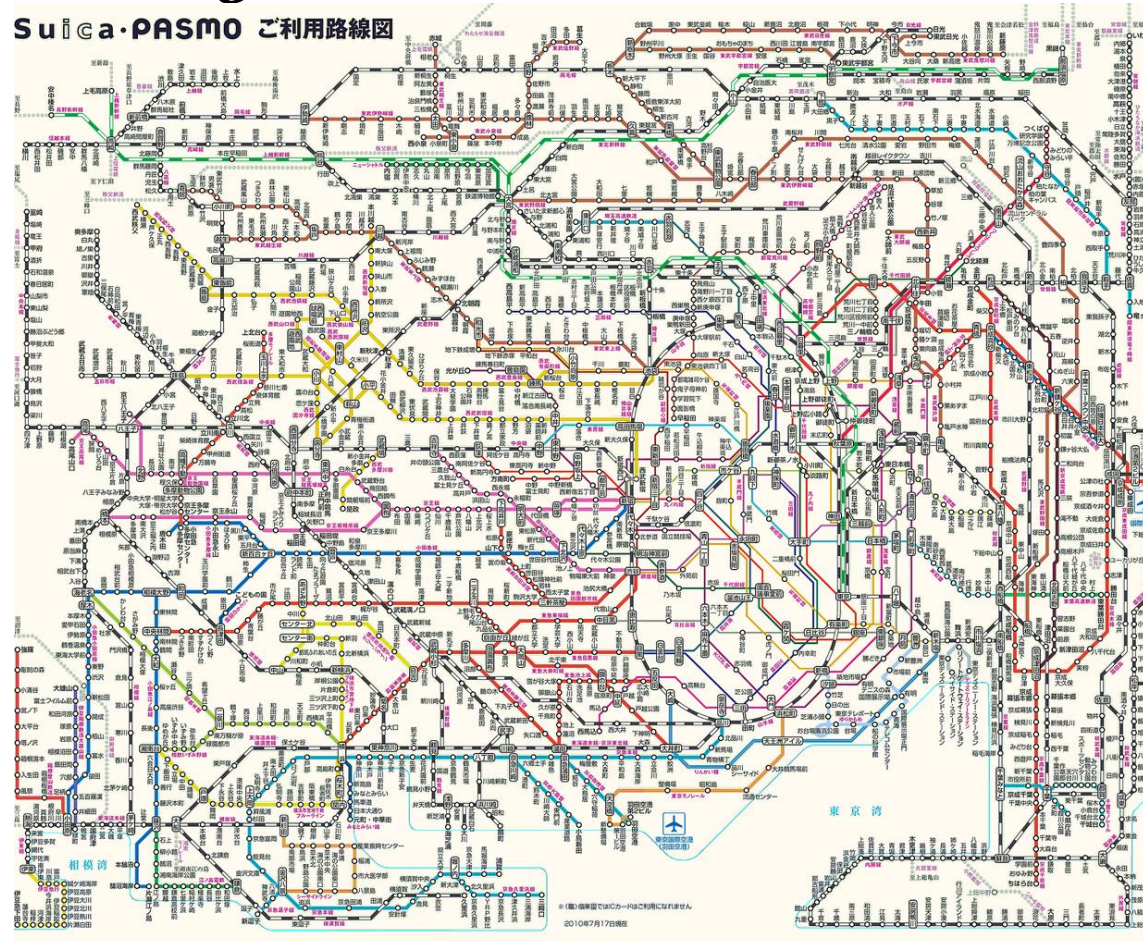


Metro: *A new sense of place...*

- > Where am I from ?
- > Where can I, or will I, go?
- > How does that impact the local/regional economy?



Metro: *Overcoming barriers to movement...*



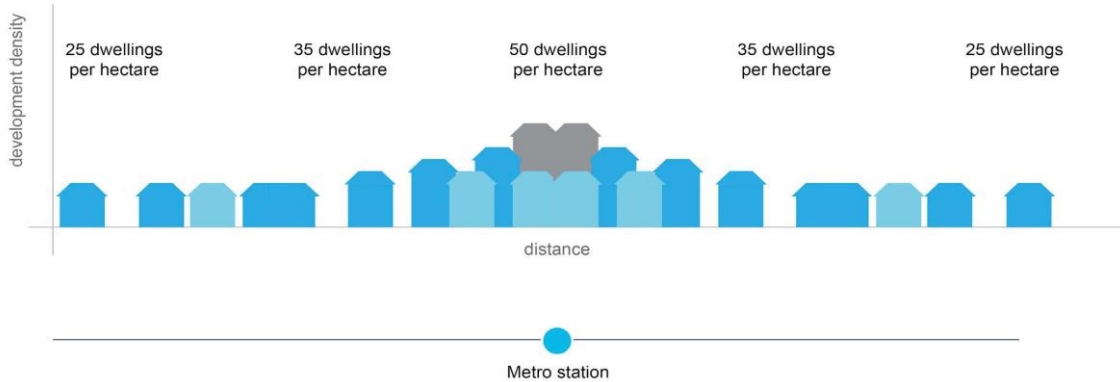
- > How does this work!
- > Why won't I use Metro, what will make me?
- > What are the social, cultural & economic barriers?

Metro: *Transport Integration*

- > Working with all operators in a de-regulated bus environment to present the passenger a “single” network

“When I buy a £3 ticket on bus and then use a train using the same ticket, who decides how much of the £3 I gave to the bus company should go to the train company, how, when...!”

Metro: *Better planning, design and integrated regional land use planning*



Increase development density around Metro stations/corridors

Placemaking/ masterplanning to ensure stations integrate with their communities; Exploit footfall and commercial opportunities



High quality simple design guidelines for Metro stations

Metro: A Stratified Economic Development Strategy...

Strategic locations most likely to engage private sector; each with its own regionally complementary proposition, perhaps:



- > Cardiff City Centre & Bay...
- > NW Cardiff to Talbot Green
- > Pontypridd/Treforest
- > Newport
- > Ebbw Vale
- > Bridgend
- > Merthyr



Metro: *Developing a “Strategic Development Plan”...*

- > Working “regionally” to develop a strategic transport & land use plan that maximises the economic impact of Metro...

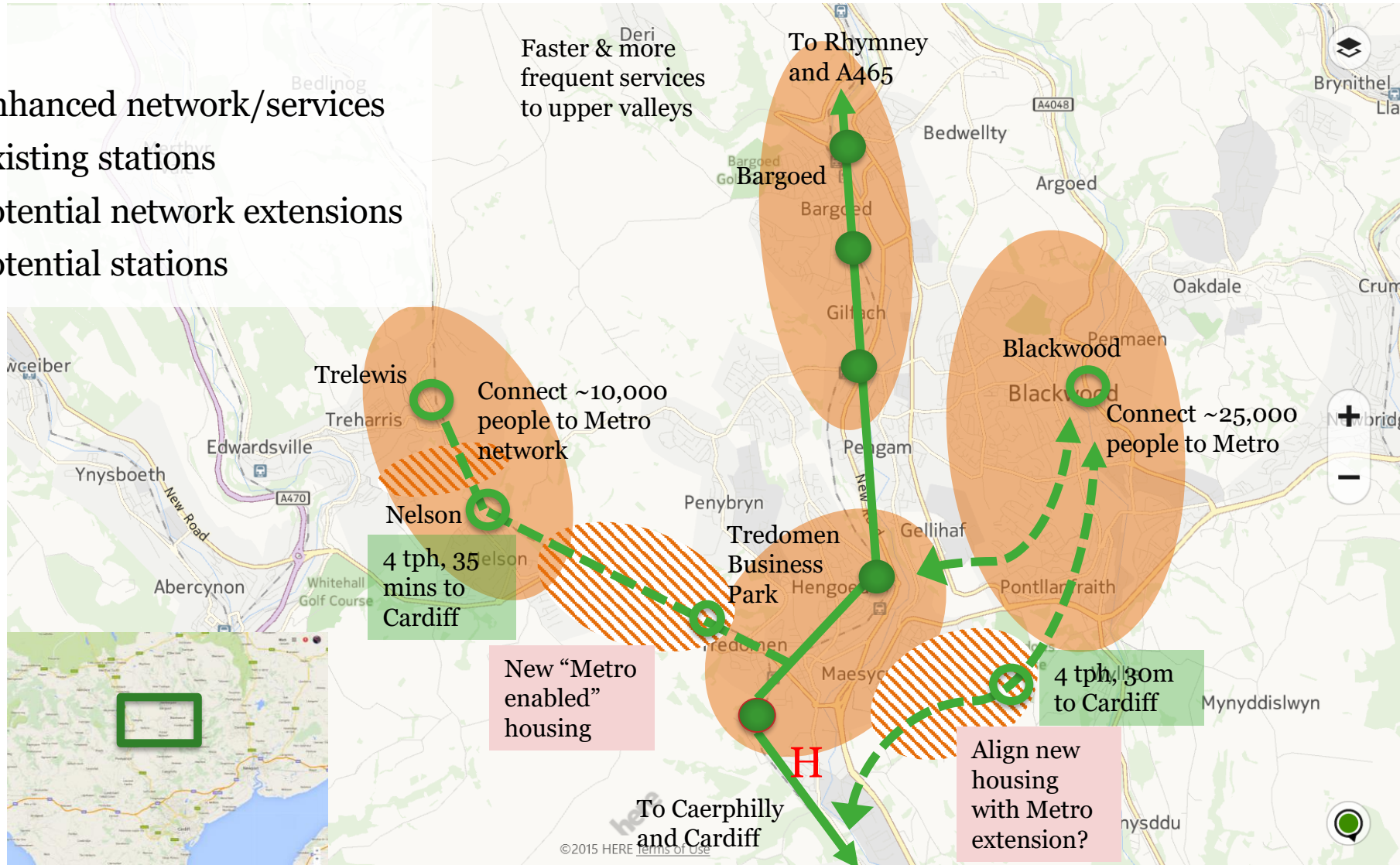
*Needs new thinking
...not just a statutory framework*

For example.....

Metro: Opportunities for Transit Oriented Development around Nelson-Ystrad Mynach-Maesycwmmmer?

Key:

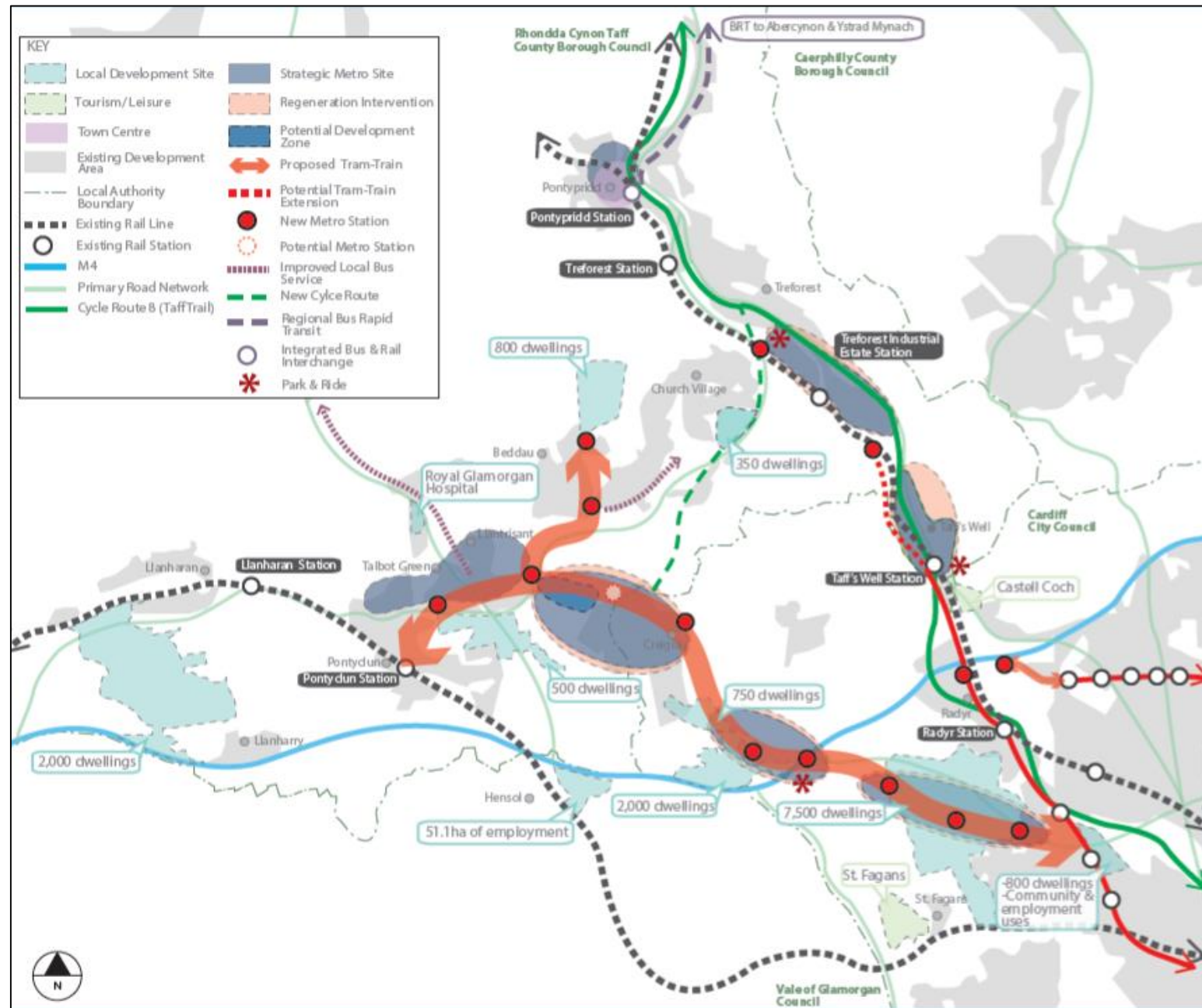
- Enhanced network/services
- Existing stations
- - - Potential network extensions
- Potential stations



Metro: *More Transit Oriented Development (TOD)!*

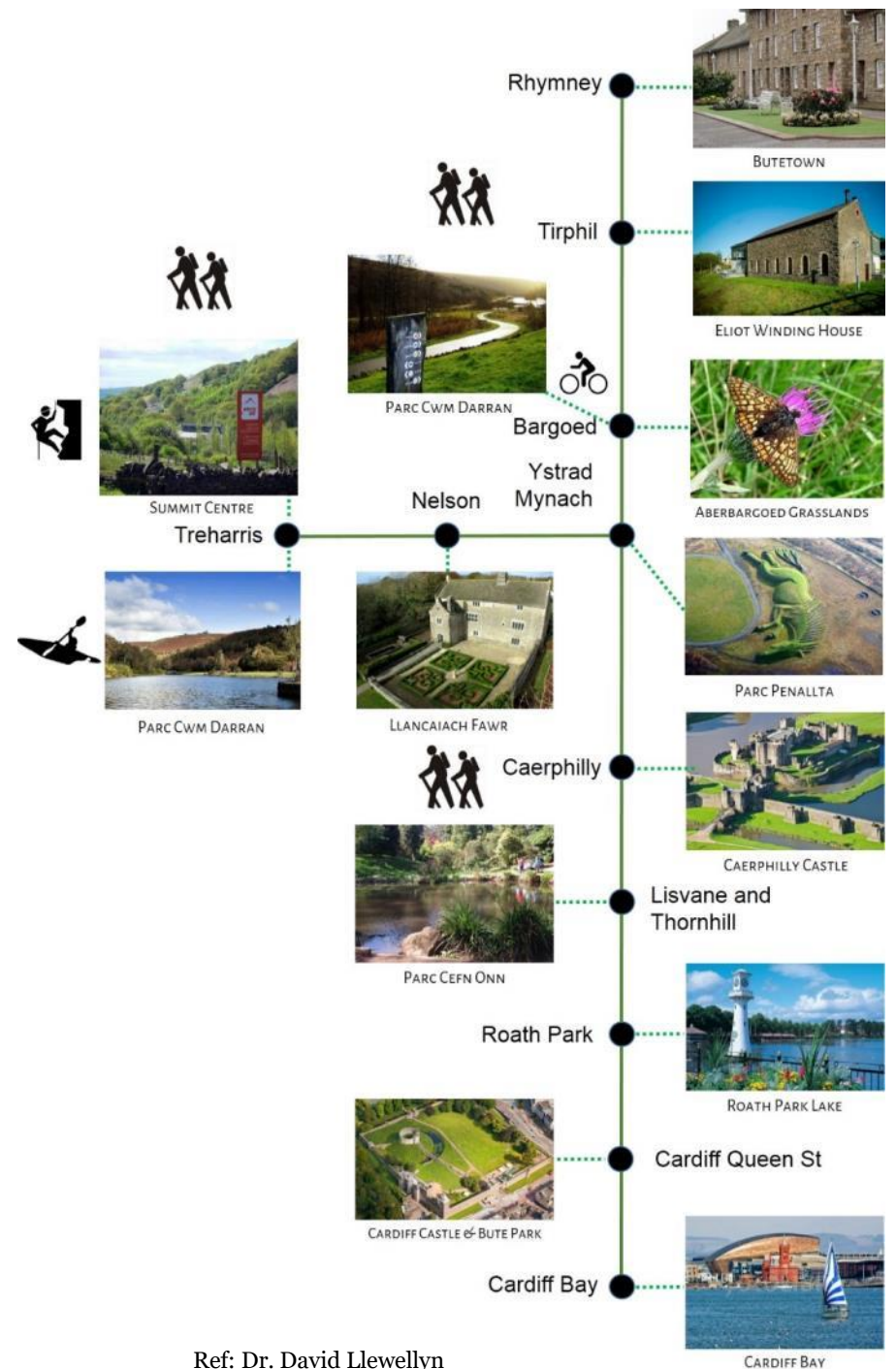
Potential New RT route from Cardiff to RCT

- > Development at Talbot Green
- > P&R at J33 to relieve M4 congestion
- > New housing in NW Cardiff and RCT
- > Enhanced access to Cardiff City Centre & Bay
- > Taffs Well to Treforest Corridor



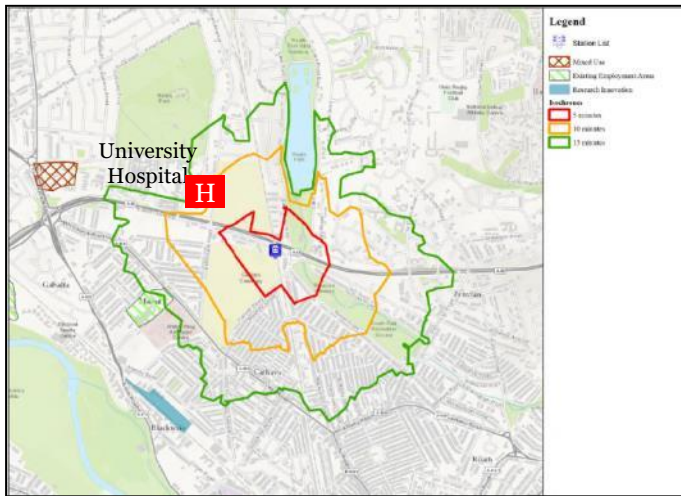
Metro: *What is the role of our green infrastructure?*

- > Green corridor that links major outdoor facilities from Rhymney to Cardiff Bay
- > Links to country parks, such as Parc Penallta, Parc Cwm Darran and Parc Taf Bargoed,
- > Links to major visitor attractions such as Cardiff Bay, Caerphilly Castle and Roath Park
- > Integrated with region cycle network
- > Drives demand from Cardiff into the Valleys



Ref: Dr. David Llewellyn

Metro: *Potential new LR stations to enhance employment access across the region*

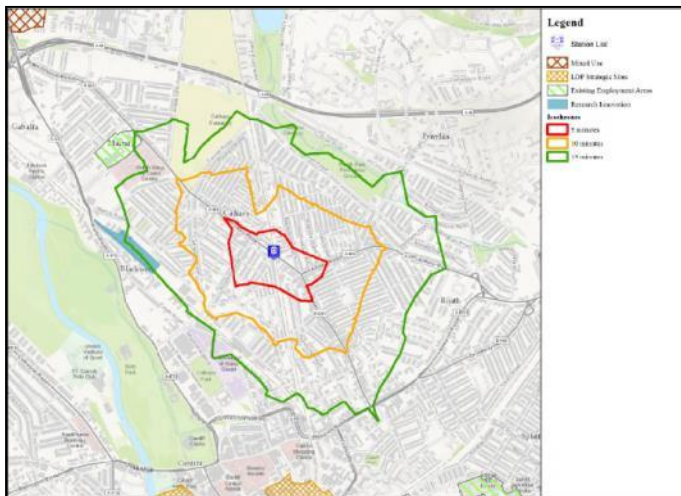


Wedal Road/
Roath Park

Gabalfa

*Access to
University
Hospital &
Roath Park*

*Major
population
centre &
Cardiff
Metropolitan
University*



Crwys Road

Butetown

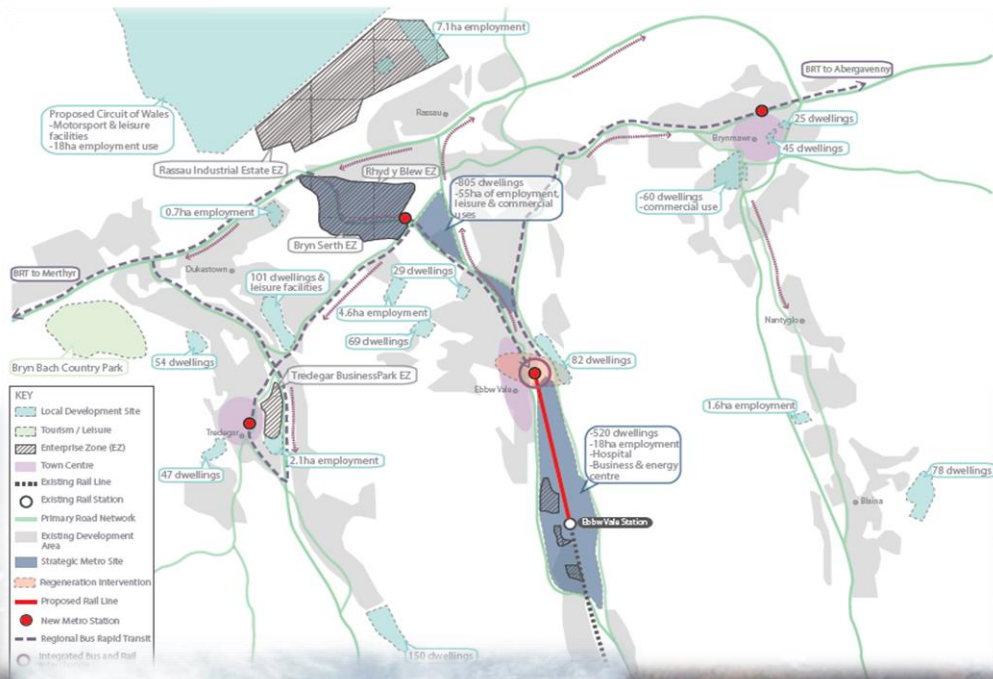
*Access to
ward in top
2% of UK's
most
densely
populated*

*Enhanced
access to
Cardiff City
Centre and
Butetown*



How do we approach “place making” around stations

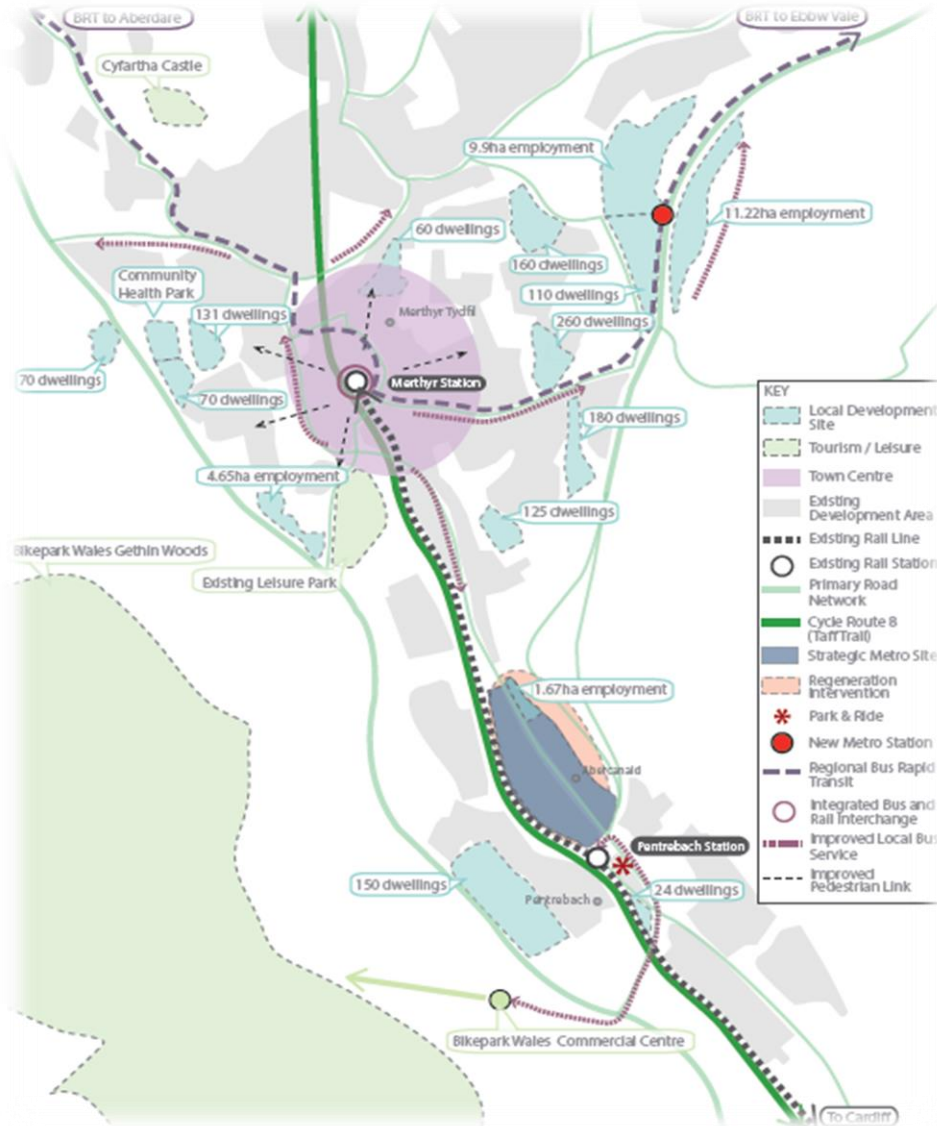
Metro: *Ebbw Vale Town Station, The Works, Tourism/Recreation*



This is happening now



Metro: Merthyr & Pentrebach, Interchanges, Accessible Housing, P&R, Tourism Gateway



Metro is not a new idea..!



...not a new idea, from, “South Wales Needs a Plan”, by H A Marquand published by George Allen & Unwin Ltd in 1936!

“ ... a more rapid movement of population up and down the valleys must be encouraged, so as to save the inhabitants of the northern towns from economic isolation. How that rapidity of movement can best be secured should be decided by an authority responsible for a co-ordinated transport service throughout the Region. No such authority exists.

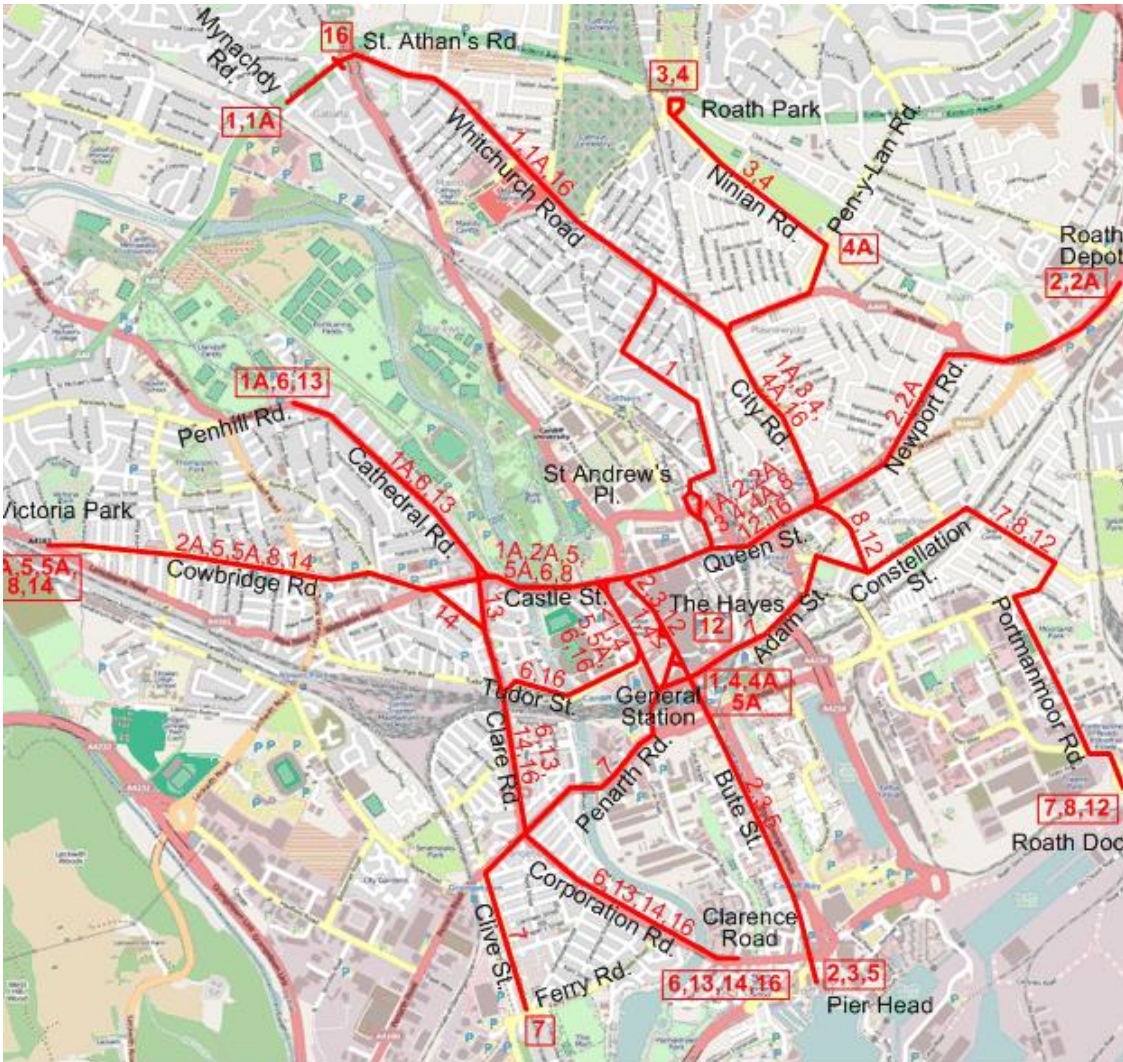
“... perhaps the Ministry of Transport could be asked to report whether it would be best to electrify the railways.”

“With rapid transport, it should be no more difficult for workers from Aberdare or Ebbw Vale to reach Cardiff or Newport than it is for clerks to travel to their daily work in the City of London from Wimbledon or Ealing”

...” political and social institutions have failed to adopt themselves with sufficient rapidity to the economic changes that have taken place. One small symptom of this is the maintenance of local government boundaries which have long lost their significance and of authorities which are inadequate to the larger tasks which need to be undertaken.”

Cardiff Tram Network 1929 and South Wales Rail Network 1910

Doh!

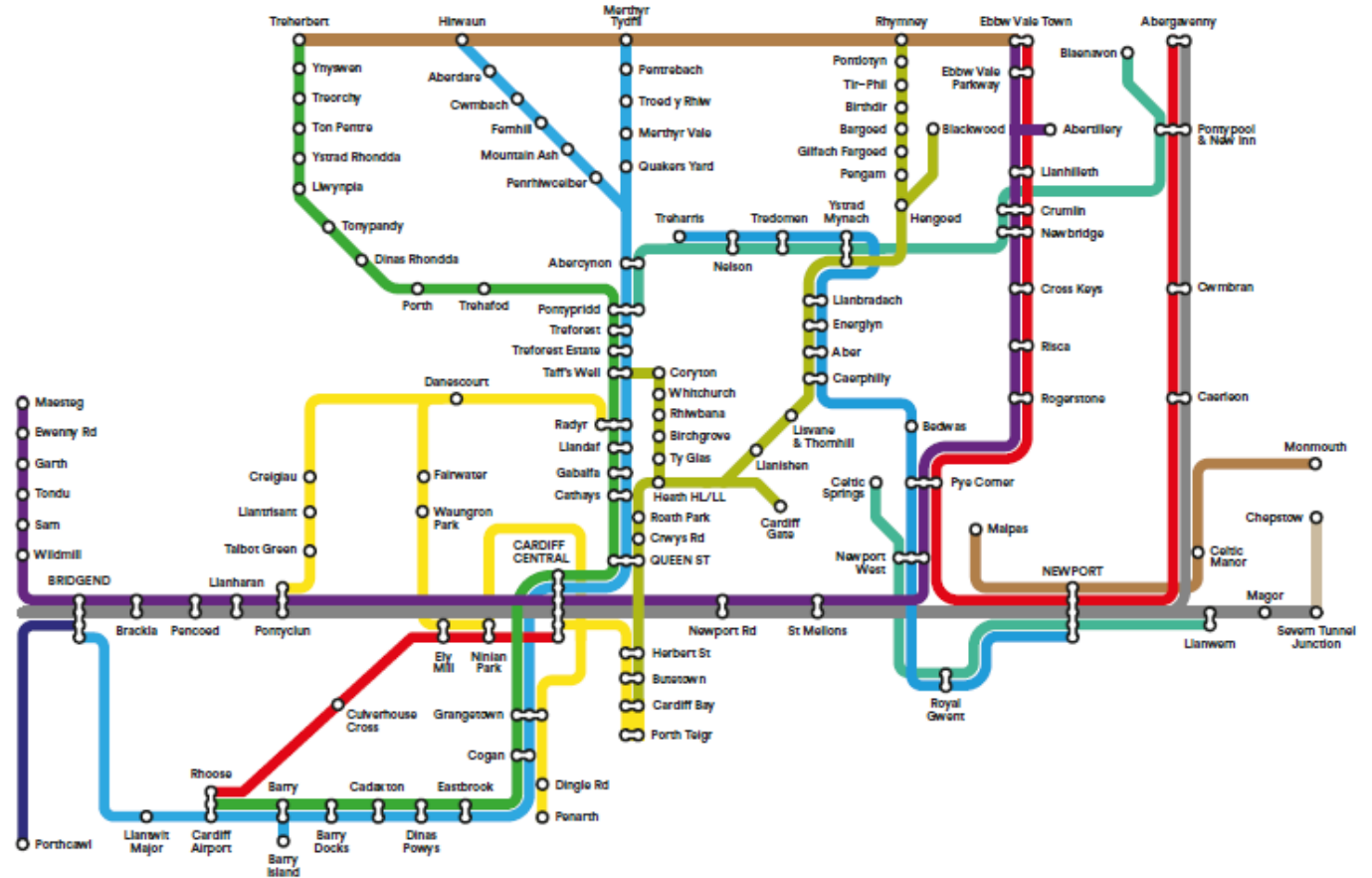


Metro is the future..!



Metro: opening day, 2023...





Mark Barry

Professor of Practice in Connectivity

Cardiff University, School of Geography and Planning

Glamorgan Building
 King Edward VII Avenue
 Cardiff
 Wales
 CF10 3WA

Mob: 07771 893292

Email: barrym9@cardiff.ac.uk