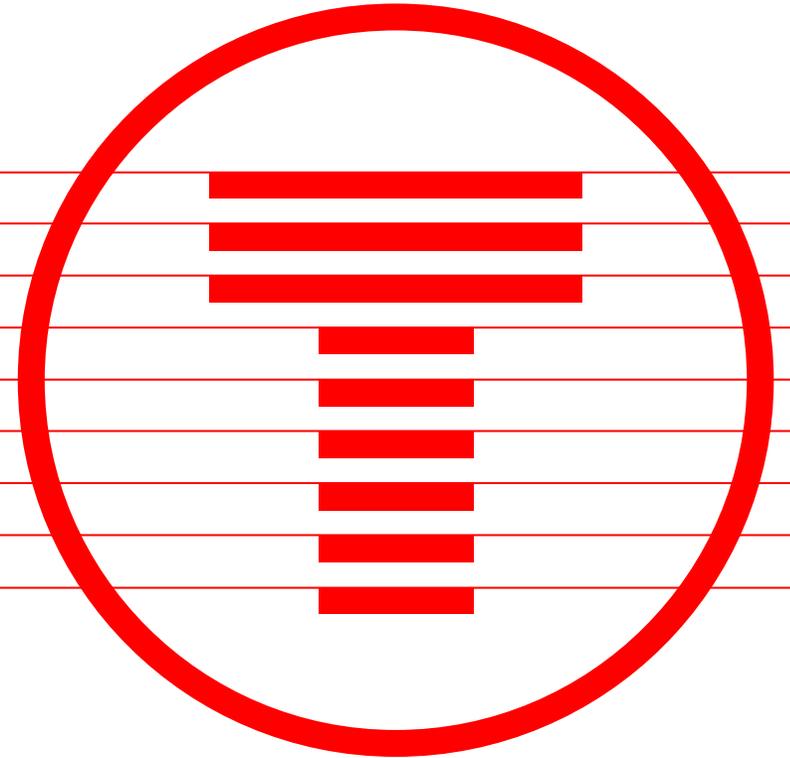


Wales and Borders



Presentation by Colin Lea at the Railfuture Ltd AGM in Cardiff on Saturday 18 May 2019

Copy of these slides available on www.railfuture.org.uk/conferences

Who is Keolisamey?



KEOLIS

Extensive transport networks in 16 countries

Rail in the UK, US, Netherlands and Germany

World's leading light rail operator

World's largest tram network in Melbourne



Extensive UK infrastructure management experience

Railways, roads, utilities, airports and transport hubs

Already employ 500 people in Wales

Contracts with Welsh Government, Dŵr Cymru, Isle of

Anglesey, Wrexham and Network Rail

Our structure



Llywodraeth Cymru
Welsh Government



TRAFNIDIAETH CYMRU
TRANSPORT FOR WALES



TRAFNIDIAETH CYMRU
TRANSPORT FOR WALES

Gwasanaethau Rheilffyrdd
Rail Services

Key statistics - Wales and Borders



- More than 950 services per weekday.
- 86,000 passenger journeys per day, 31.5m per year
- Manage 244 stations of which only 53 are staffed
- Over 2,200 staff
- Fleet of 132 trains
- Average age of rolling stock around 25 years



15 year contract

Main tasks

- Operate the Wales and Borders rail services
- Design and deliver the next phase of the South Wales Metro (£738m capital works)
- Manage and maintain the infrastructure in the core valleys

Key differences

- Vertical integration (track and train) being considered in UK rail industry (Williams review), but legally complex
- Contract letting powers devolved from DfT, procured by Transport for Wales (Welsh Govt)

4 bidders

- KeolisAmey, Arriva/Costain, Abellio/Carillion and MTR/BAM



Timelines

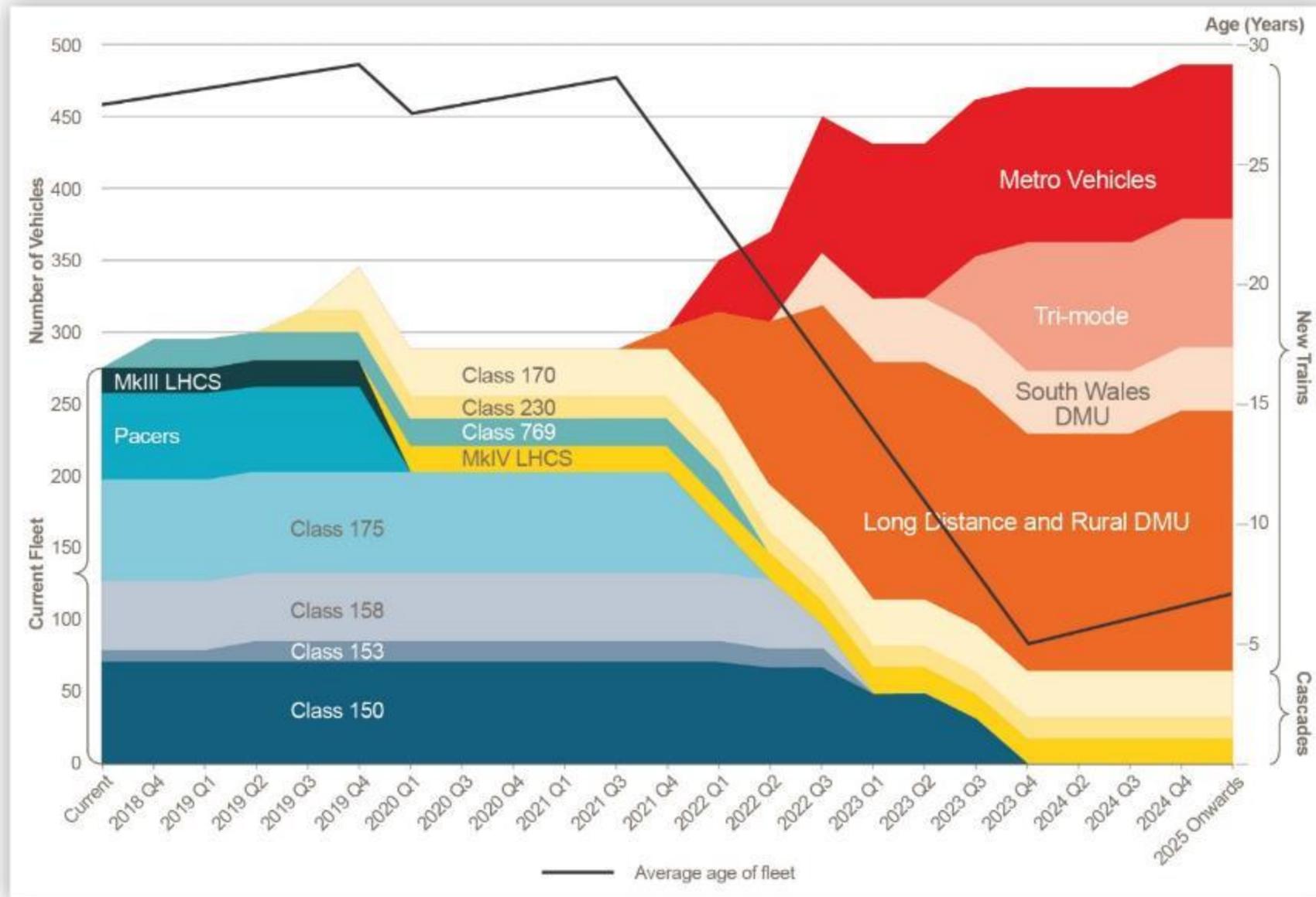


Pre-Qualification Questionnaire	July-Sept 2016
Bidders submit outline solutions (ISOS) - 4 bids	December 2016
Dialogue about requirements and solutions	Jan-Nov 2017
ITSFT(main bid period) - 3 bids	September 2017
Submission of Final Tenders	December 2017
Evaluation and Clarification - 2 bids	Jan-Mar 2018
Contractualisation - 1 leading bid, 1 backup	Mar-May 2018
Signature - 1 winner	4 June 2018

Every train replaced, 95% of journeys on brand new trains, >50% assembled in Wales



The fleet average age will drop from 25 years today, to 7 by 2023



Capacity increased by 65% plus a true 7-day service (22% increase in 2019 with more later)



Rolling stock we will introduce in Wales



New Fleet



36 x Metro Vehicle (CVL)



24 x Tri-mode (CVL) + 11 x DEMU



77 x DMU: Rural & Long Distance

Cascaded Fleet



12 x Cl.170/2: Suburban then Rural



5 x Cl.230: Rural & Suburban



3 rakes of MkIV coaches: Long distance

Plus temporary cascade of up to 9 x 769s and 5 x 153s

Wales & Cross Borders Service Changes



Wrexham – Bidston (Dec 2021): Increase from 1tph to 2tph, 1tph of which will be a limited stop

Chester – Liverpool Lime St. (Dec 2018): New route. 1tph calling at Liverpool South Parkway, Runcorn then all stations

Crewe/Liverpool Lime St. – Holyhead/Llandudno and Manchester Airport - Chester (Dec 2022): 1tph Manchester Airport – Bangor; 1tph Liverpool Lime St. – Llandudno (calling at Liverpool South Parkway, Runcorn then all stations); 1tph Crewe - Chester

Aberystwyth - Shrewsbury (Dec 2022): All trains will stop at Bow Street from 2020. strengthening of service to 1tph in all hours, at all stations. This is something long called for by stakeholders

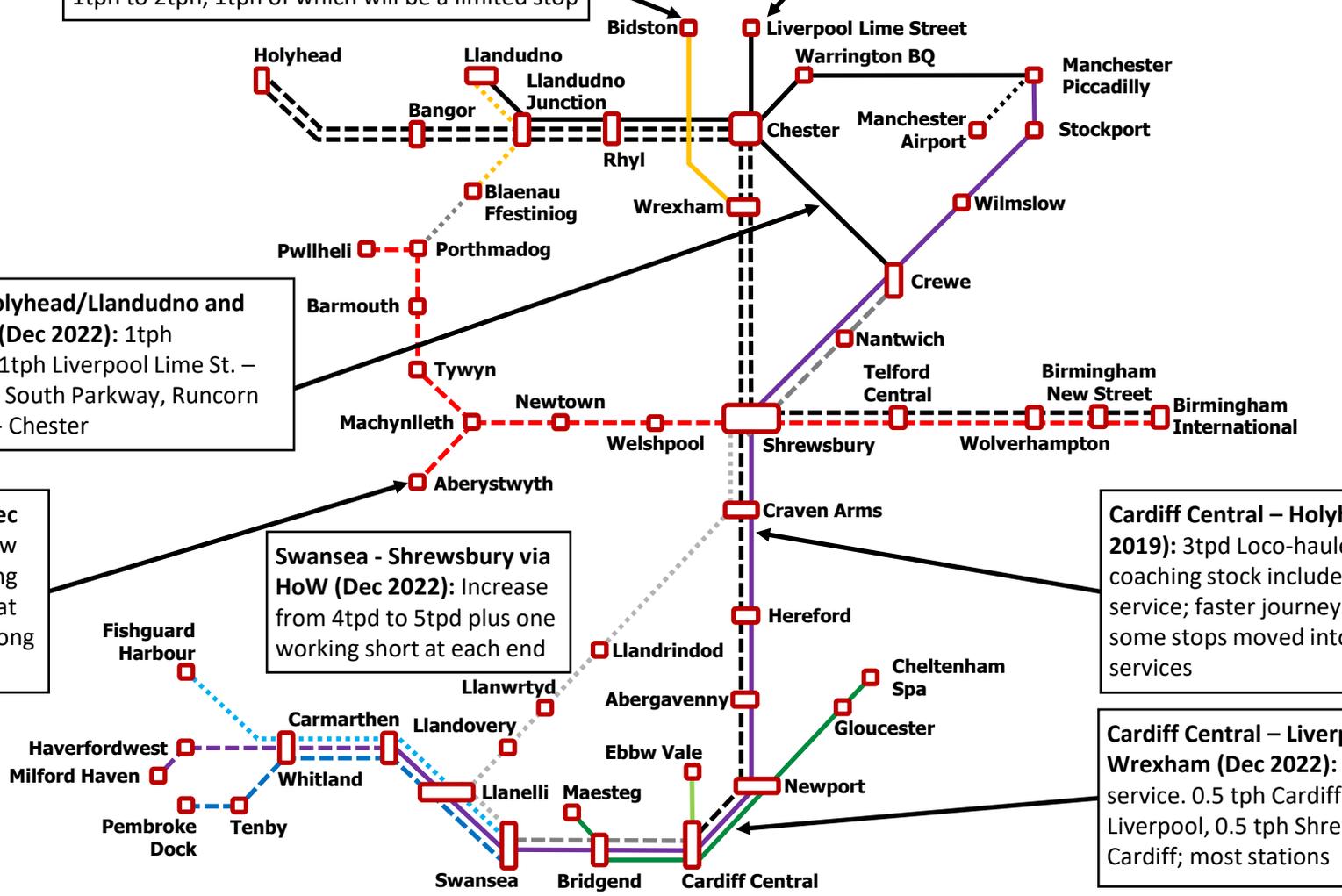
Swansea - Shrewsbury via HoW (Dec 2022): Increase from 4tpd to 5tpd plus one working short at each end

Cardiff Central – Holyhead (Dec 2019): 3tpd Loco-hauled coaching stock included in 0.5tph service; faster journeys with some stops moved into other services

Cardiff Central – Liverpool via Wrexham (Dec 2022): New service. 0.5 tph Cardiff – Liverpool, 0.5 tph Shrewsbury – Cardiff; most stations

General changes:

- Dec 2019: Earlier trains and more frequent services on Sundays
- May 2023: Further increase in Sunday journeys on WCB routes
- December 2024: 2tph on all CVL routes on Sundays



Station Improvements



We will invest **£194m** in improvements to all Rail Services stations, in addition to the CVL Transformation programme, including:

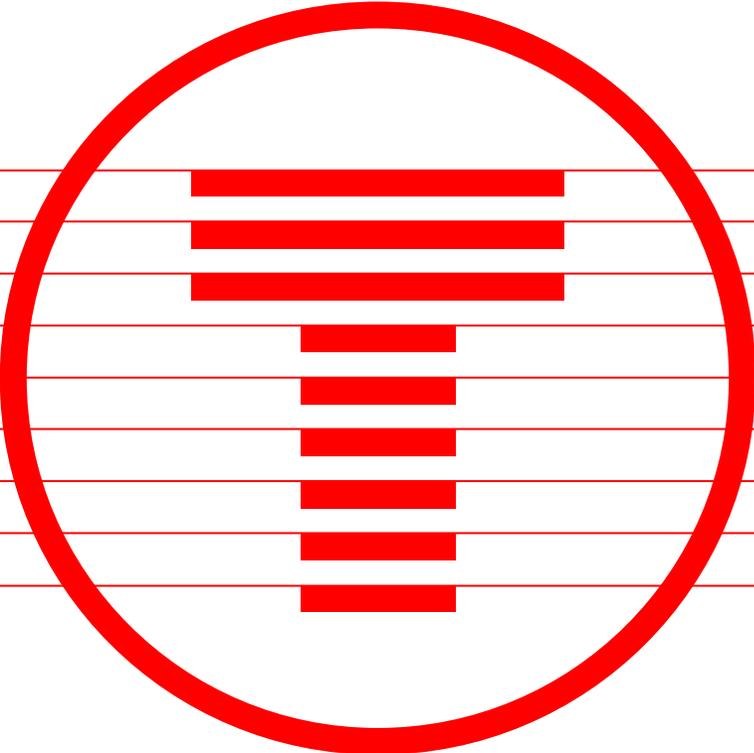
- Shelters, covered cycle storage, information screens and monitored CCTV at every station
- £15m ring fenced fund to improve accessibility
- 1,500 new parking spaces
- Community spaces at over 40 stations
- New ticket machines and smart ticketing
- Free Wi-Fi at all stations
- Secure Stations accreditation at every station only 5% (13 stations) have this currently.



£194,000,000

**INVESTMENT IN STATIONS
ACROSS WALES.**

South Wales Metro



Current Service Pattern (Valley Lines)

Weekday peak and off-peak service pattern

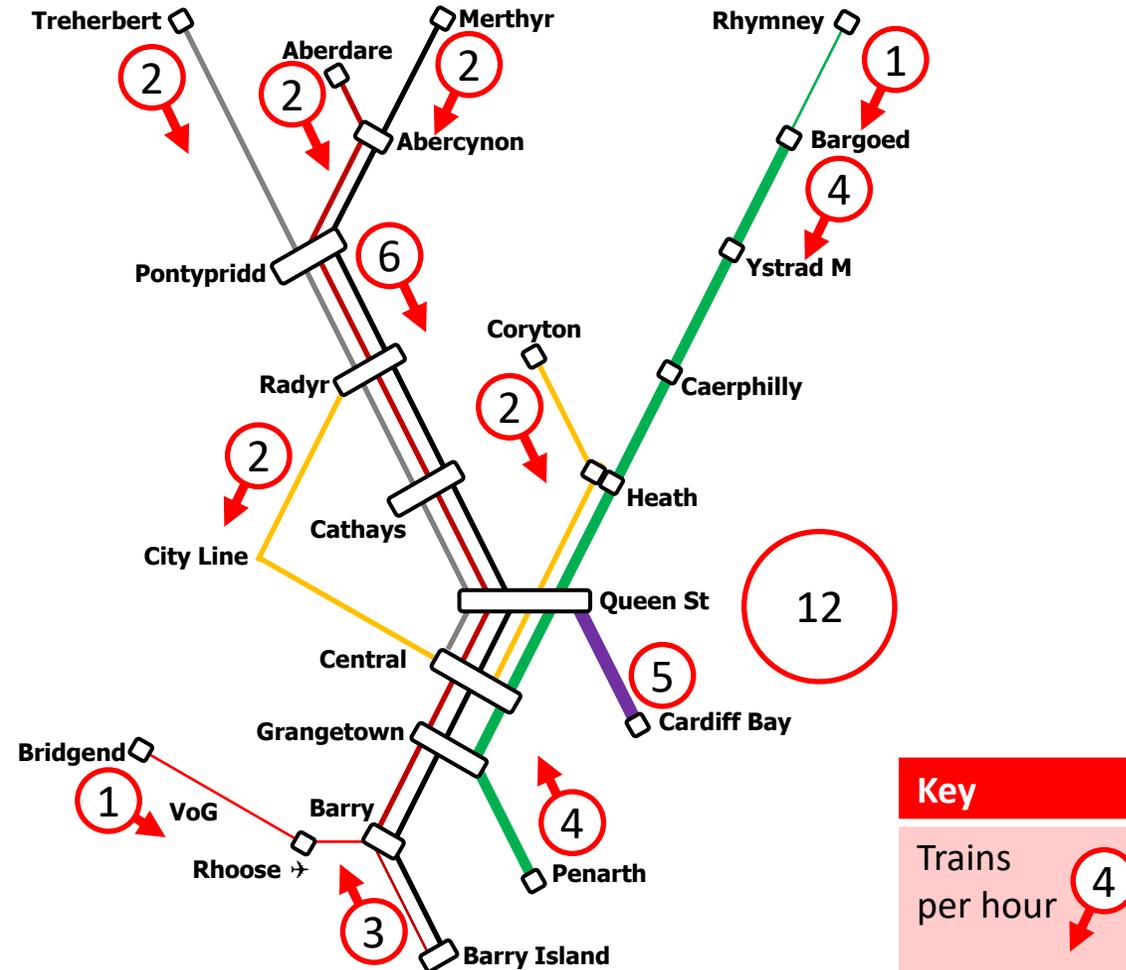


Key features

Trains to Bridgend originate at Merthyr but trains from Bridgend run to Aberdare

Some exceptions to the pattern to facilitate freight and peak strengthening of services

Services are linked across Cardiff – to minimise reversing moves at Central and Queen Street



December 2023 improvement on current timetable

Monday to Saturday all-day service pattern

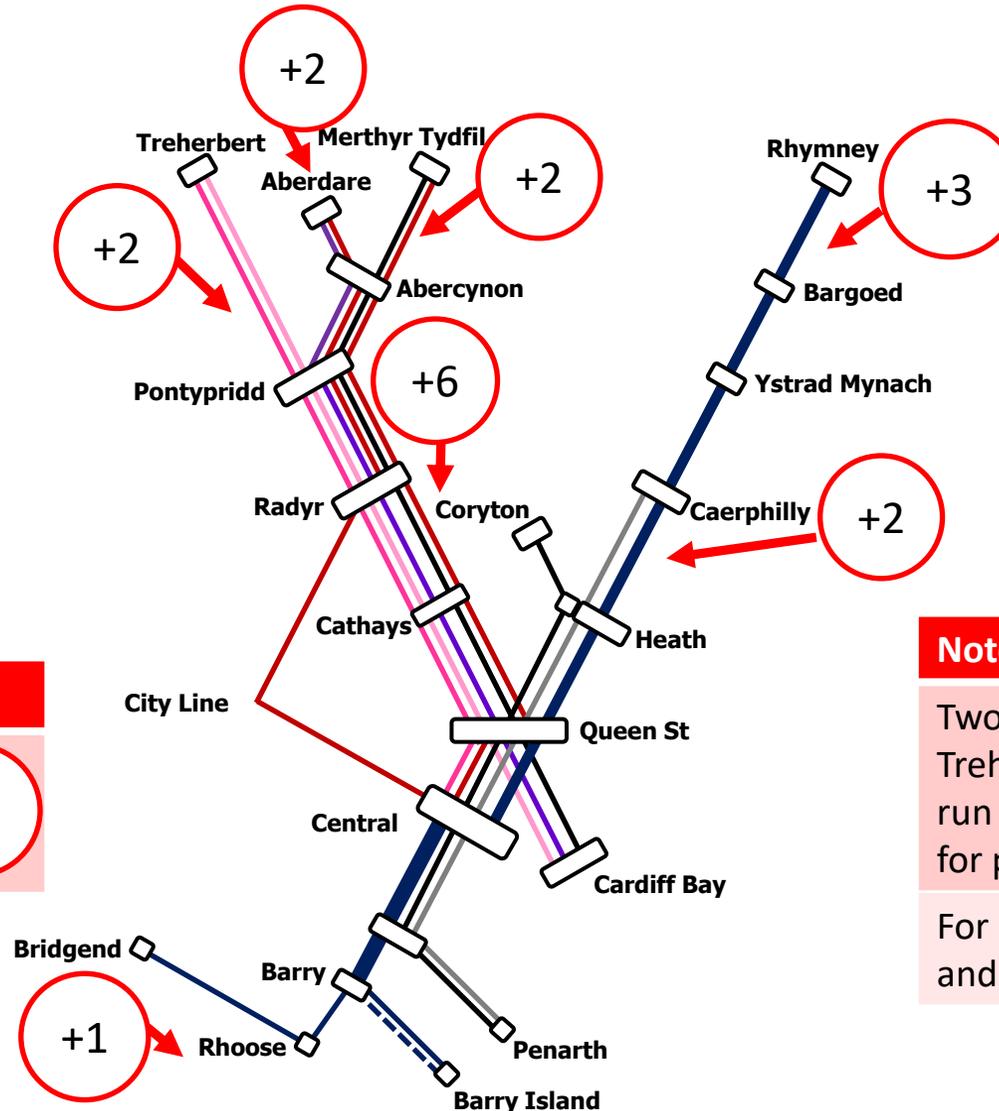


Customer Impacts

Doubling of frequency for Treherbert, Aberdare and Merthyr Tydfil

An additional 3tph running to and from Rhymney

An additional service every hour on the Vale of Glamorgan



Key

- = 2tph (MV)
- = 2tph (Tri)
- = 3tph (Tri)
- = 4tph (Tri)
- = 5tph (Tri)

Key

Increase in trains per hour

Notes

Two of four services per hour from Treherbert, Aberdare and Merthyr Tydfil will run directly to Cardiff Bay, removing the need for passengers on these lines to change trains

For Dec 2024, Bay line extended to Flourish and new station opened at Loudoun Square

What this means for passengers



Journey	2023 Increase in Trains per hour	% decrease in journey time	% change in peak capacity
Treherbert > Cardiff Queen St	+2 to 4	-19%	+113%
Aberdare > Cardiff Queen St	+2 to 4	-25%	+36%
Merthyr Tydfil > Cardiff Queen St	+2 to 4	-21%	+74%
Rhymney > Cardiff Central	+3 to 4	-21%	+37%

Level boarding – no step from platform to train throughout the SW metro.



New stations at Crwys Road, Gabalfa, Cardiff Bay, and Loudoun Square
Treforest Estate station relocated closer to Nantgarw

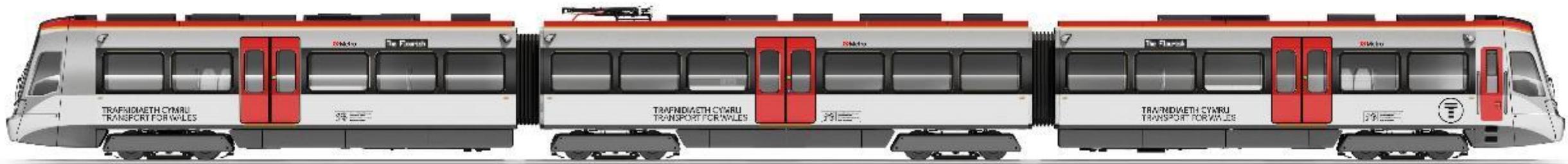


Proposal for the CVL Transformation



Overview of the Concept Design

- **Track** – 15 sites where track is re-doubled, 1 major junction remodelled, numerous line speed improvements, new on-street (tramway) section of line to relocated Cardiff Bay station.
- **Maintenance and Control** – new rolling stock maintenance depot and control centre (Taff's Well). Upgrades for “tram-train” mixed-mode operation.
- **Electrification** – ‘smart’ electrification to 25kV AC with permanently earthed sections around restricted structures, saving 55 interventions e.g. rebuilding bridges/no need for wire in Caerphilly tunnel





**Over 600 new jobs
directly created
plus 30 apprenticeships a
year**