

SWANSEA BAY & WEST WALES METRO

UPDATE TO CJC TRANSPORT SUB COMMITTEE
10TH JULY 2023





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RAIL PROGRAMME



Options Segmentation

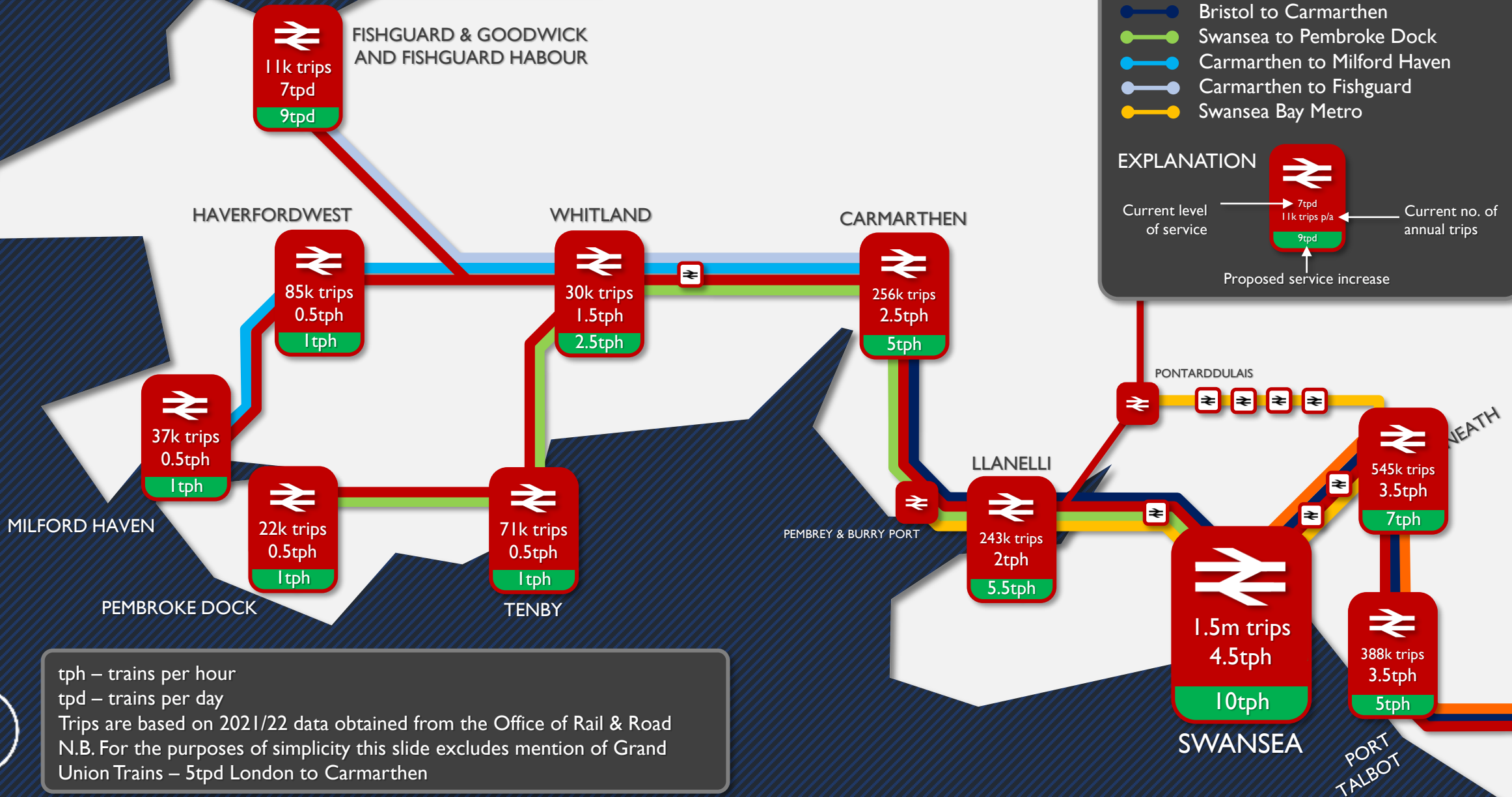
-  - South Wales Main Line
-  - West Wales Services
-  - Swansea Bay Area Metro
-  - Interchange



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RAIL PRIORITIES FOR WEST WALES

Summary of Route Options & Frequency






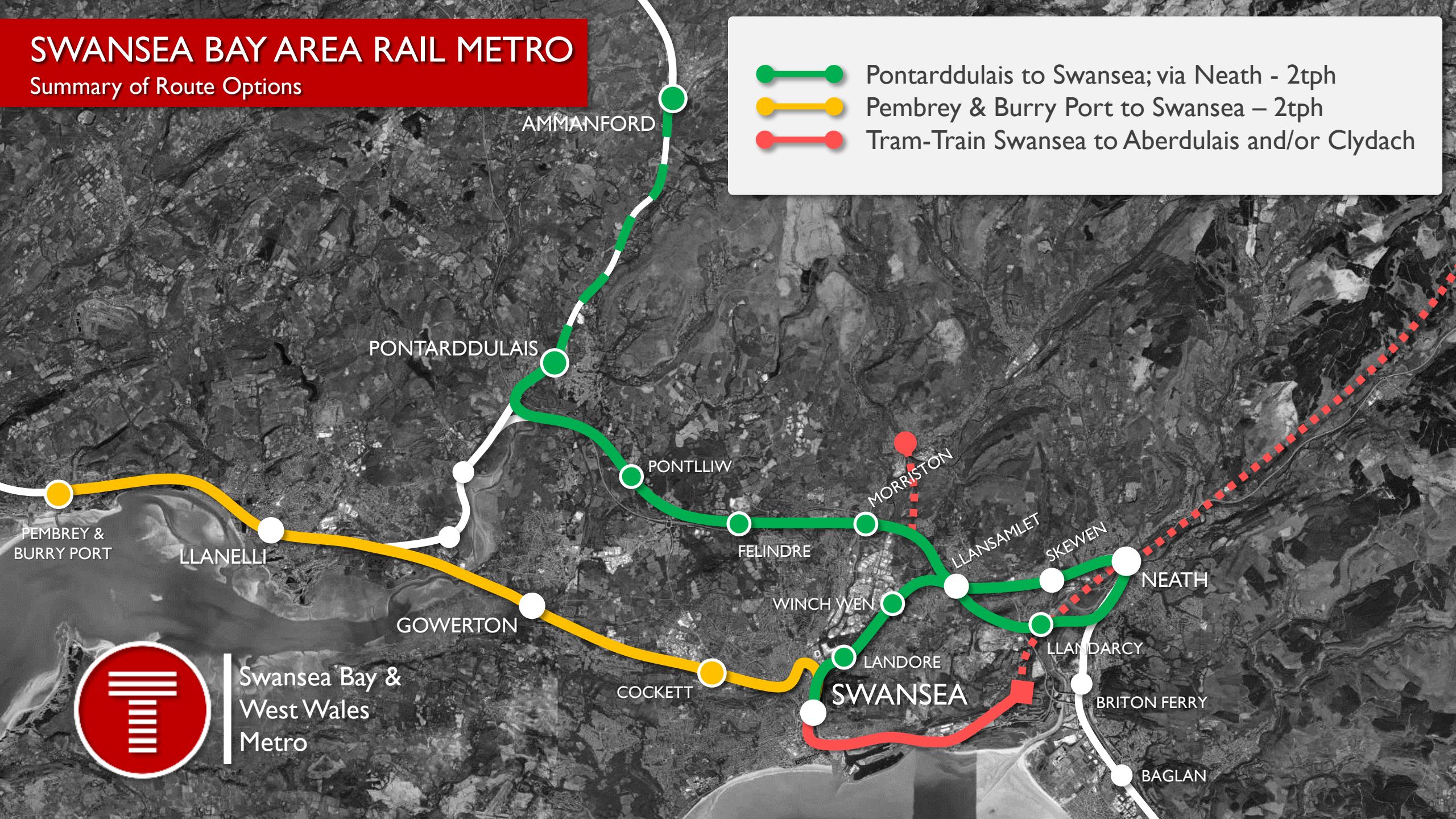
tph – trains per hour
 tpd – trains per day
 Trips are based on 2021/22 data obtained from the Office of Rail & Road
 N.B. For the purposes of simplicity this slide excludes mention of Grand Union Trains – 5tpd London to Carmarthen



SWANSEA BAY AREA RAIL METRO

Summary of Route Options

-  Pontarddulais to Swansea; via Neath - 2tph
-  Pembrey & Burry Port to Swansea – 2tph
-  Tram-Train Swansea to Aberdulais and/or Clydach

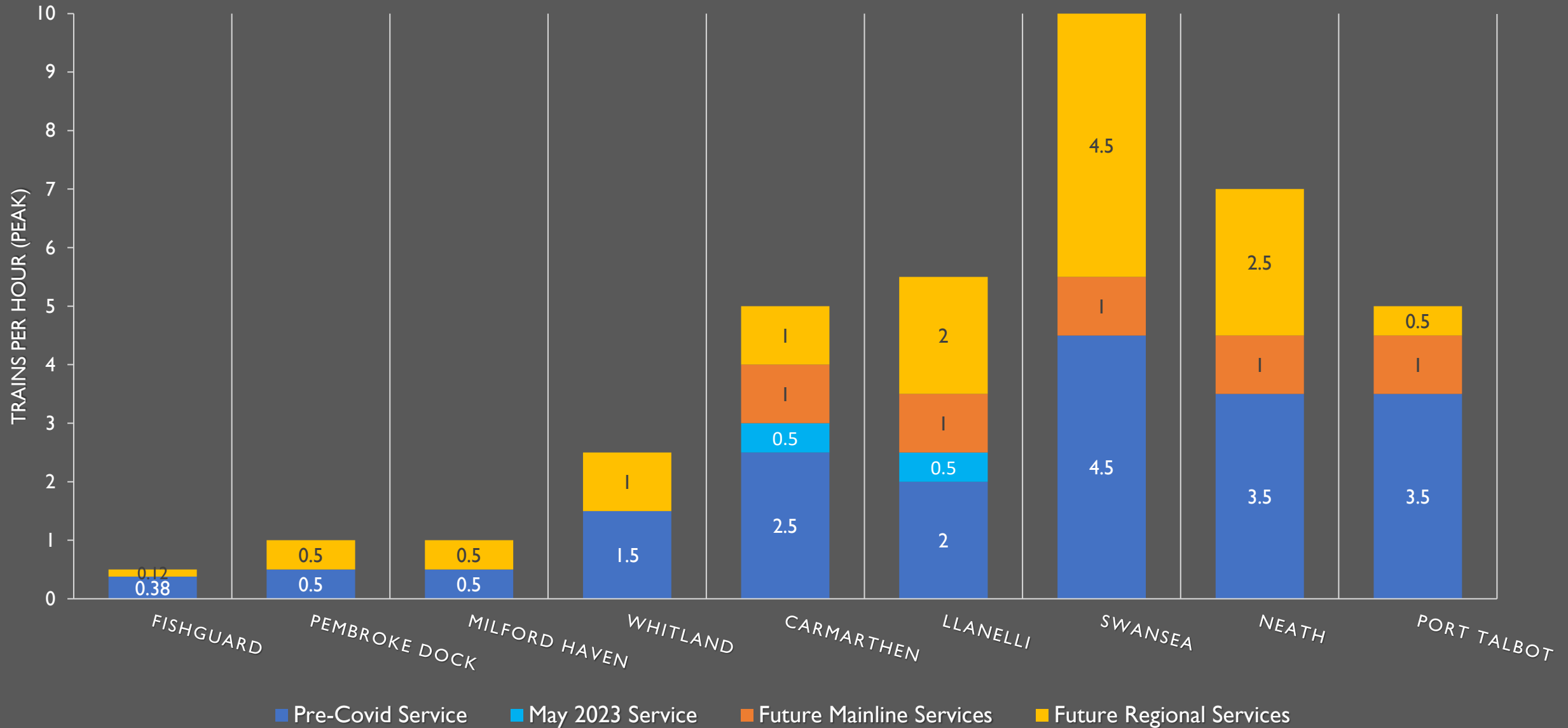


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CURRENT & PROJECTED RAIL SERVICE FREQUENCY – SOUTH WEST WALES



Rail Investment Priorities for South West Wales

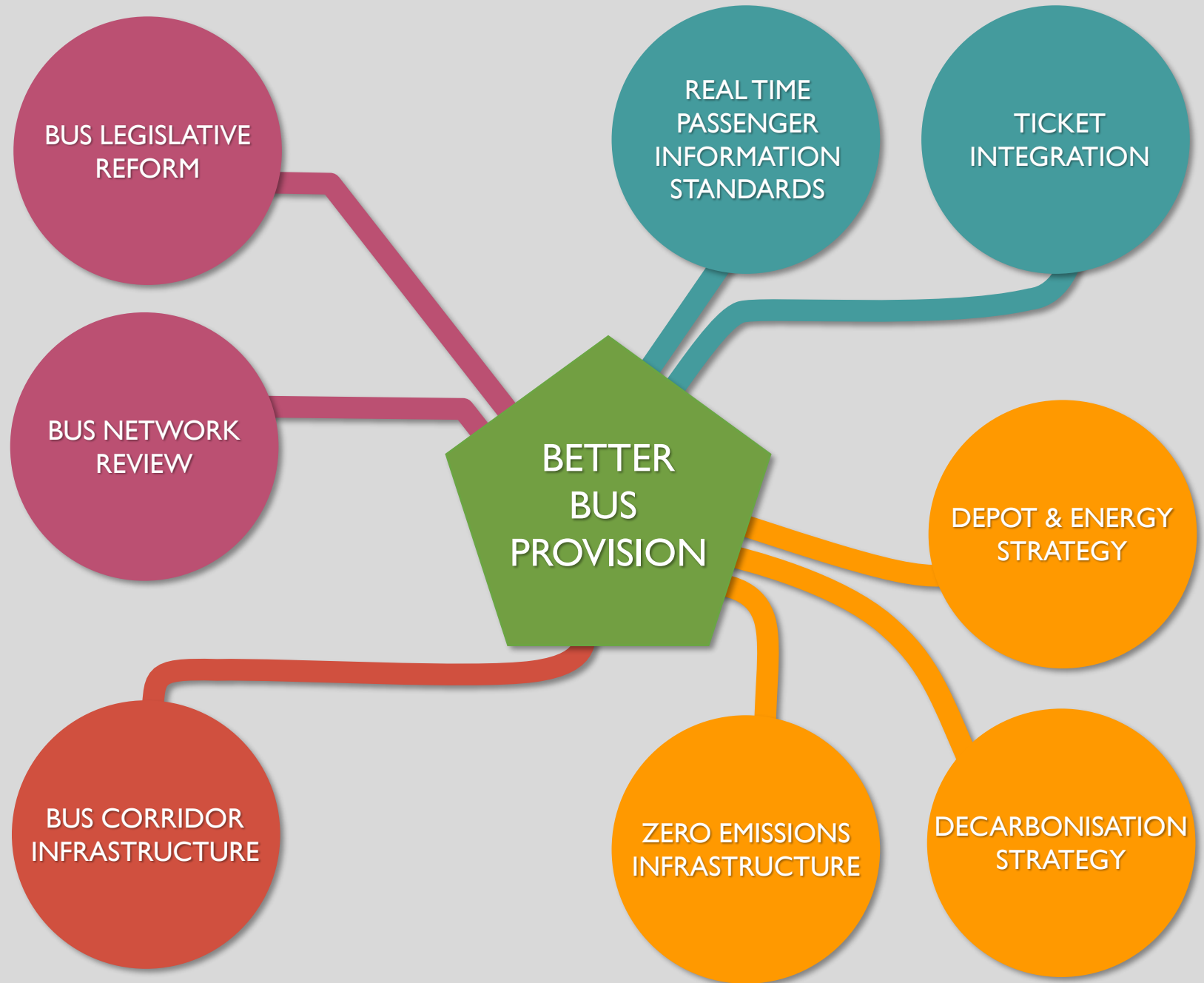
<i>South Wales Mainline</i>	Infrastructure	Services	Delivery timescale
West Wales to Bristol TM (Direct)		✓	2- 3 years
Mainline Capacity & Speed Improvements	✓		5-10 years
Cardiff to Swansea Electrification	✓		5-10 years
<i>Swansea Bay Area Metro</i>	Infrastructure	Services	Delivery timescale
12. Swansea – Pontarddulais; via Neath	✓	✓	5-7 years
13. Swansea – Pembrey & Burry Port	✓	✓	5-7 years
Electrification: Swansea District Line and SWML to Pembrey & Burry Port	✓		5-7 years
18. Swansea – Swansea Docks – Neath Riverside	✓	✓	7-10 years
19. Swansea – Llandarcy – Clydach	✓	✓	7-10 years
<i>West Wales Rail Frequency</i>	Infrastructure	Services	Delivery timescale
9a. Swansea – Pembroke Dock (Uplift to hourly, limited stop)		✓	2-3 years
Cardiff/Carmarthen to Haverford West Milford Haven (Uplift to hourly)		✓	2-3 years
Carmarthen – Fishguard (Uplift to 2 hourly)		✓	2-3 years
St Clears Station	✓		2-3 years



BUS PROGRAMME



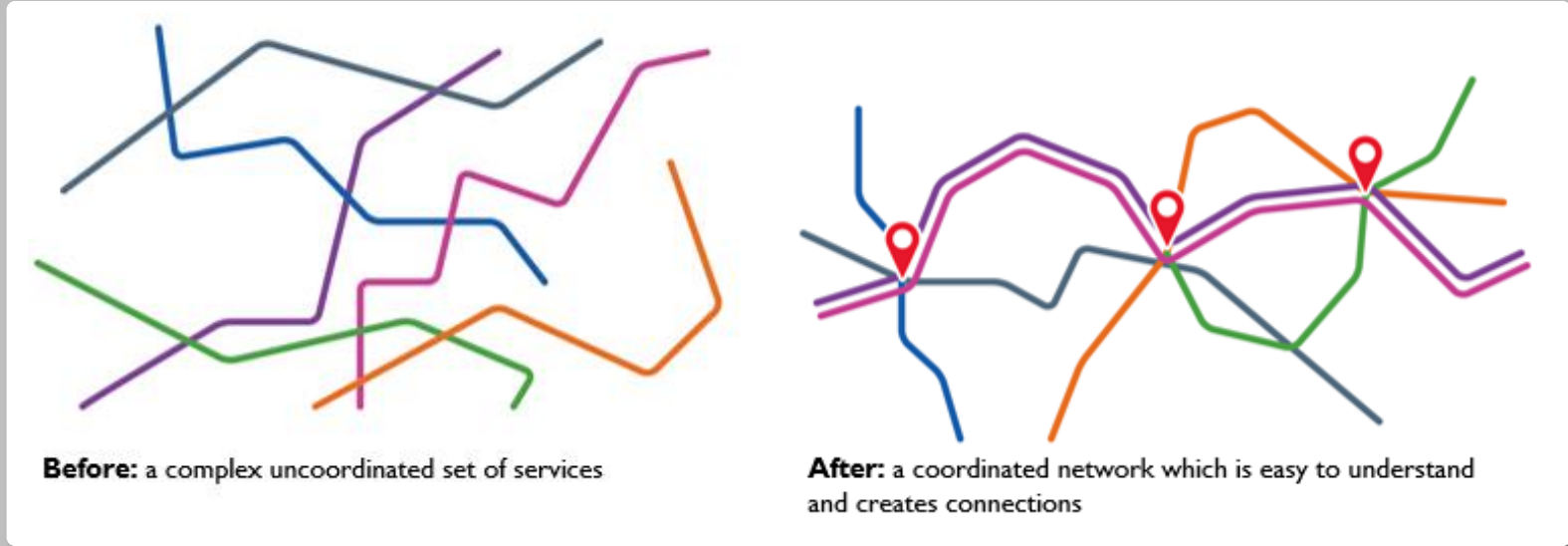
Bus Programme Interdependencies



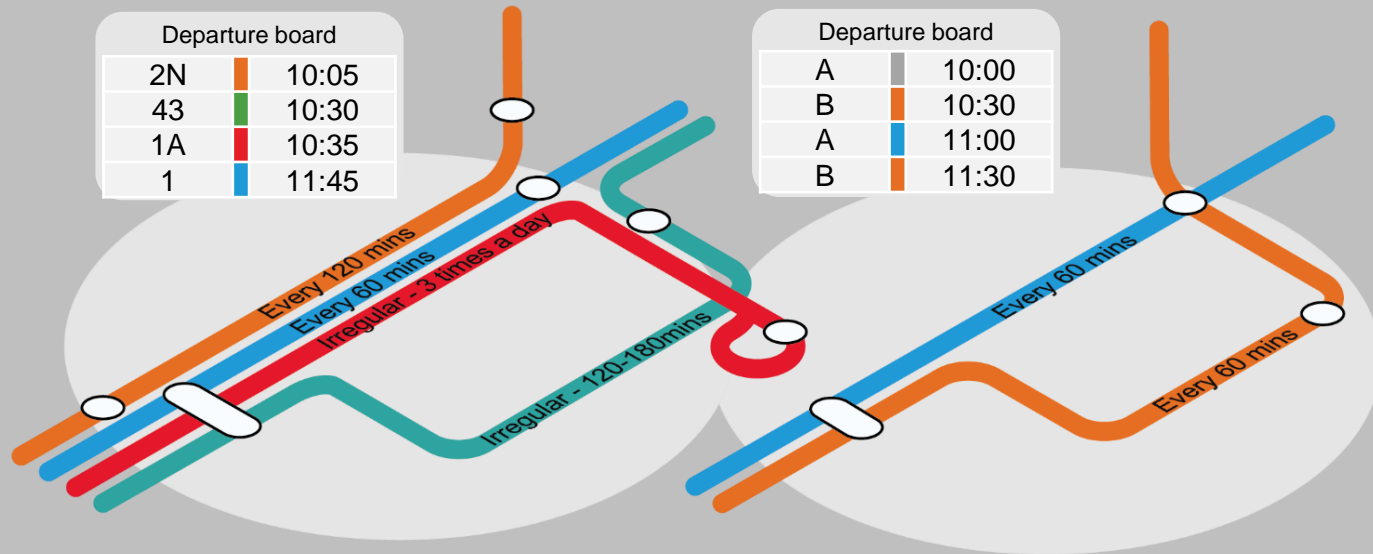
Bus Network Review

Overview

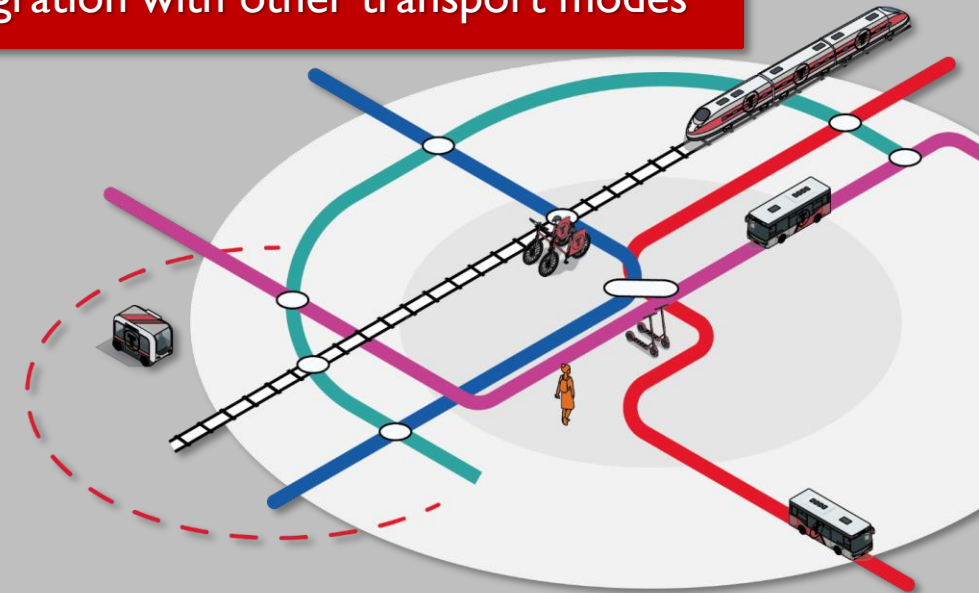
Optimisation of the Bus Network



Reducing duplication to improve service efficiency



Integration with other transport modes



PLANNING BUS SERVICES TO CREATE A JOINED UP AND COORDINATED NETWORK

TfW wants to maximise passenger choice by providing a joined-up bus network – and the key principles are set out below



1. Plan a single unified network

Services planned and arranged to give a unified network which is intuitive, easy to understand, and coordinated.



2. Establish a core network, connecting key destinations

The core network should form a permanent backbone of an integrated local or regional network.



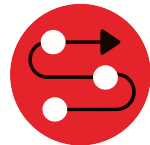
3. Secondary local and feeder services around the core

Secondary local and feeder services should be formed around the core network, with lower frequency and/or demand responsive services.



4. Service directness for core bus lines

The core bus services should be arranged as a series of straight-line services with minimal diversion.



5. Consistent service line route

Bus services should operate the same route at all times of day (with some limited alternatives in early/late periods), which improves understanding of the network and reduces operational complexity.



5. Coordination of services on common corridors

Services on common corridors should be rationalized to provide regular headways to maximise system efficiency and ease of understanding.



7. Integration and co-ordination of services with convenient transfer and waiting times

Bus services should be coordinated to create an integrated network to maximise connections between services and improve the range of destinations.



8. Clock face departures

Departure times for services at consistent time past each hour (e.g. 00 and 30 minutes past every hour) improves passenger understanding of bus services..



9. Consistent operating hours

Consistent operating hours across a network improves understanding of the network for passengers and provides certainty of transfer opportunities.

Bus Decarbonisation

Overview

BUS CORRIDOR & DECARBONISATION STUDY AREAS

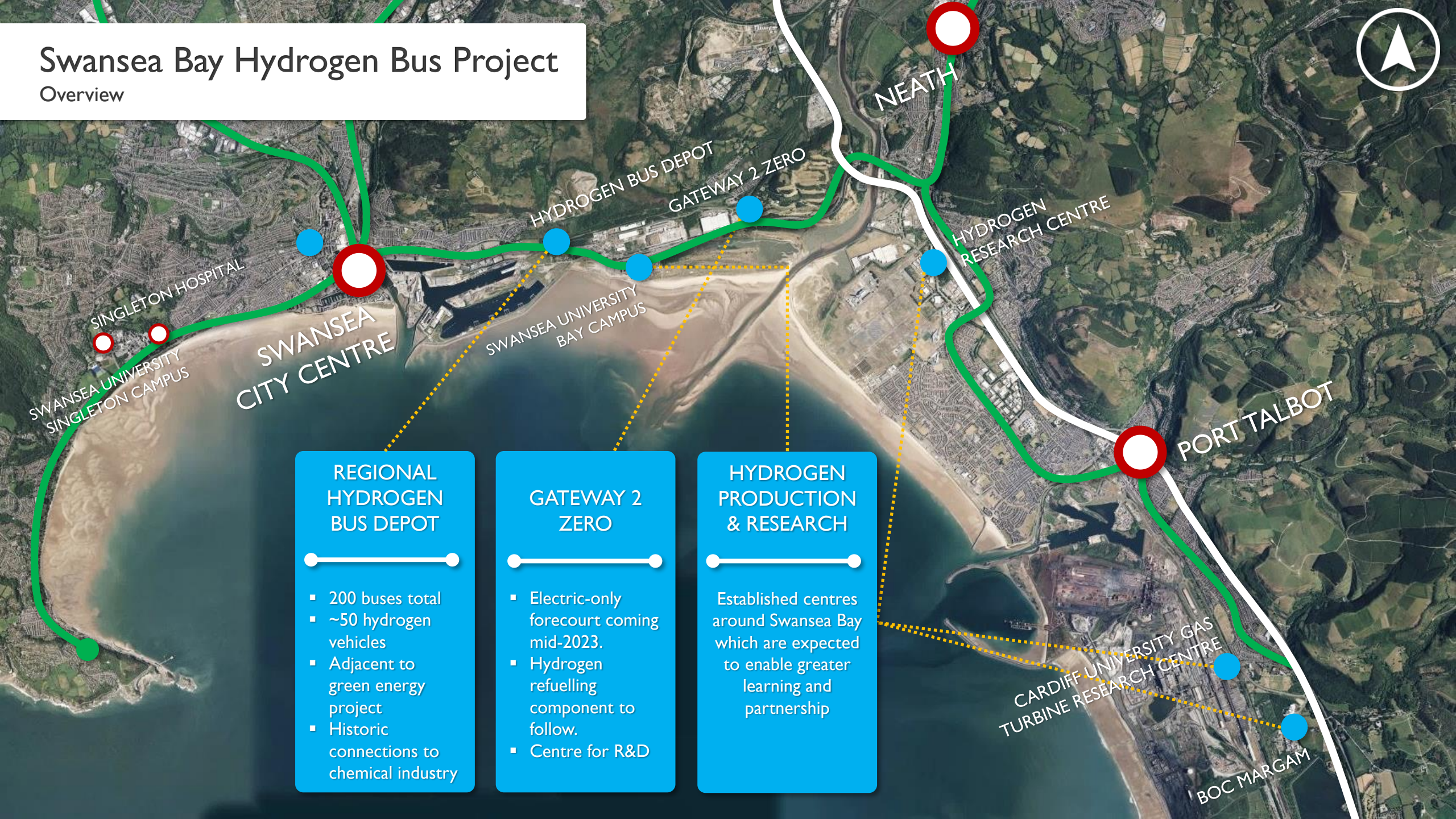
-  Fuel Cell Electric Vehicle (FCEV)
-  Battery Electric Vehicle (BEV)



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Swansea Bay Hydrogen Bus Project

Overview



REGIONAL HYDROGEN BUS DEPOT



- 200 buses total
- ~50 hydrogen vehicles
- Adjacent to green energy project
- Historic connections to chemical industry

GATEWAY 2 ZERO



- Electric-only forecourt coming mid-2023.
- Hydrogen refuelling component to follow.
- Centre for R&D

HYDROGEN PRODUCTION & RESEARCH



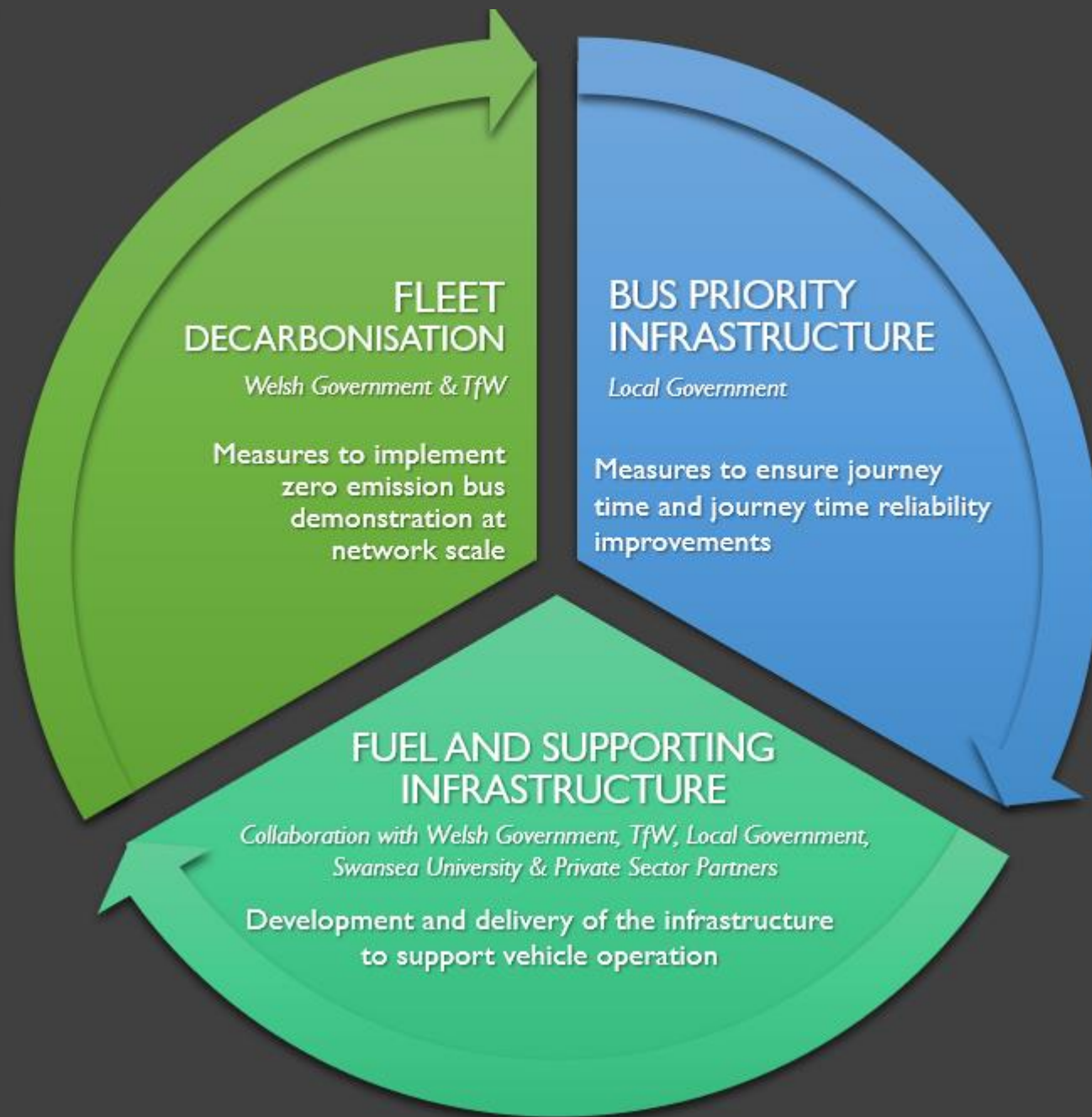
- Established centres around Swansea Bay which are expected to enable greater learning and partnership

Significant Challenges



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Proposed Project Structure



REGIONAL TRANSPORT PLAN





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