



TRAFNIDIAETH CYMRU  
TRANSPORT FOR WALES

# Asset Management and Innovation



Mae Trafnidiaeth Cymru yn eiddo i  
**Lywodraeth Cymru**  
Transport for Wales is owned by the  
**Welsh Government**

TfW is a Transport Authority, a transport developer and a transport operations deliverer.

In its role as the Transport Authority, it provides oversight of both TfWRL and AIW

ORR retains its (statutory) role as safety regulator

TfW is the asset steward responsible for long term asset management approach and also an informed client of AIW's services



## Transport for Wales (TfW) Transport Authority

Transport for Wales Rail  
Limited (TfWRL)

Train Operating Company  
(Wales & Borders)

Amey Infrastructure  
Wales (AIW)

Infrastructure Manager -  
Core Valleys Lines (CVL)

CVL Network  
transferred to TfW  
in March 2020

Investment of c. £1bn  
in infrastructure and  
£800m in new  
Rolling stock

South Wales Metro  
will be an integrated  
network of bus, rail  
and active travel



## **Approach to infrastructure asset management**

- Development of a high-quality, multi-modal and connected transport system that underpins the WG Transport Strategy
- Efficient and effective delivery by adopting 'right size' standards, and best-practice asset management in line with ISO55001
- Optimise the use of technology including remote condition monitoring across asset types, to improve network reliability and the passenger experience
- Continually improve asset knowledge and enable informed decision making
- Implement a deliverable and robust Climate Change adaptation plan
- Understand the impact of change on existing assets



## **Asset Management Challenges and Opportunities**

- Operation of a high intensity Metro network
- An asset portfolio of mixed age and condition
- Challenging geography – urban and rural environment
- Changes in Technology
- Demonstrate value for money and efficient use of public funds
- Multimodal and integrated transport network
- Impact of Climate Change and increased storm events
- Decarbonisation



# Innovation Strategy



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## **Innovation Approach**

- TfW are looking for industry leading innovative approaches to addressing challenges – asset management and other areas.
- Open to all aspects of innovation, both continuous improvement and radical change
- Working with our partners – Innovate UK, RIA, RSSB, NR, Amey Group, Keolis etc

## **Evaluation and Support**

- Creation of a TfW Innovation Board
- Build a supplier relationship management system including a supply chain collaboration platform; submit or post innovative ideas and solutions
- Work with supply chain on understanding challenges and developing solutions
- Signpost and support on innovation funding





# Innovation Lab

## 2022/23 Challenge and Opportunity Statements

- Customer Support
- Achieving Net Zero
- Revenue and Social
- Future of Transport

Visit [www.TFWLabs.wales](http://www.TFWLabs.wales)  
For more information.



## TFW Lab Most Recent Cohort

**RoboK** build efficient AI-based computer vision solutions to democratise safety in transportation. They have been specifically looking at challenges around level crossing safety on our network and were the winners of cohort 3. We are now moving into the proof of concept phase with RoboK to test their solution on our network. On the 16<sup>th</sup> December a solar powered camera was installed at Ty Glass level crossing to collect data for 25 days which will then be analysed using their AI based sensing technology. The first stage of this proof of concept should be completed by February.



Best-in-class AI-based 3D Sensing