Innovate UK

eit Urban Mobility

Co-funded by the European Union

Connected Futures: UK–EU Collaboration for Mobility Innovations

18 November 2025

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Welcome Remarks

EIT Urban Mobility

Sam Li

18 November 2025

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Agenda

9:00 – 9:30	**Doors Open: Registration and Networking**
9:30 – 9:45	Welcome Remarks by EIT Urban Mobility and Innovate UK
9:45 – 10:15	Welcome Keynote, Department of Transport
10:15 – 10:45	Innovate UK: Horizon Europe & EIT Opportunities
10:45 – 11:00	Coffee Break
11:00 – 11:45	EIT Urban Mobility Programmes

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Agenda

11:45 – 12:30	**Success Stories from EIT past projec**
12:30 – 13:30	Lunch
13:30 – 15:30	Break-out sessions (Auditorium / Café/Networking areas)
15:00 - 15:15	Coffee Break – during breakouts
15:30 – 16:00	Conclusion and Wrap-Up – main room Auditorium
16:00 - 17:00	Tour of TfGM OCC Control Rooms (pre-booked tour)


Manchester One

Future of Greater Manchester Bee Network

Sam Li

Senior Innovation Officer – Transport Strategy

BEE NETWORK

Transport for Greater Manchester

Introduction to Transport for Greater Manchester (TfGM)

- Formed in 2011.
- Owns the Metrolink light rail network.
- Recently brought the bus network back under local public control.

We're building the Bee Network…

- Bringing together bus, tram, active travel and ultimately rail.
- Consistent ticketing, information and a high-quality user experience.

The Bee Network will…

- Help create more jobs, businesses, homes, and opportunities.

Transport for Greater Manchester

BEE NETWORK

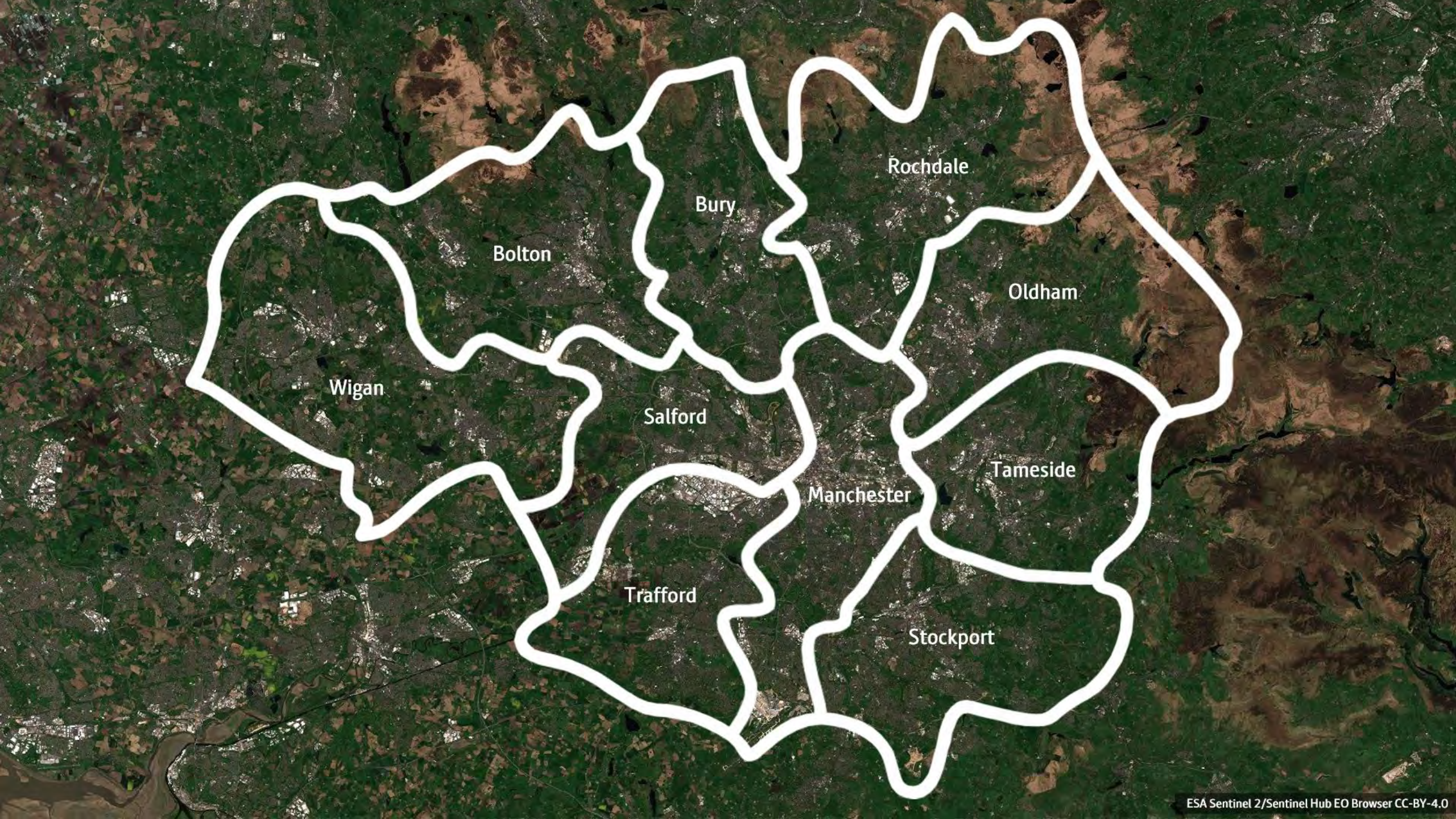
Greater Manchester & Broader Context

Greater Manchester is made up of 10 Local Authorities representing 3 million residents.

Since 2000, the Greater Manchester economy has grown in real terms by 50%, outpacing UK growth of 33% over the same period.

However,

- Around a quarter of GM residents live in the country's most deprived neighbourhoods.
- Over two million (70%) of GM residents cannot reach the regional centre in under 30 minutes.
- Car dependency in Greater Manchester is also growing.

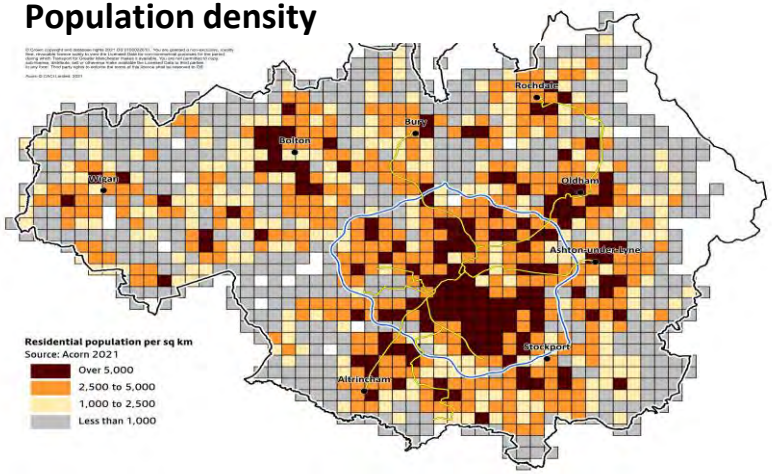


Greater Manchester is growing but still underperforming

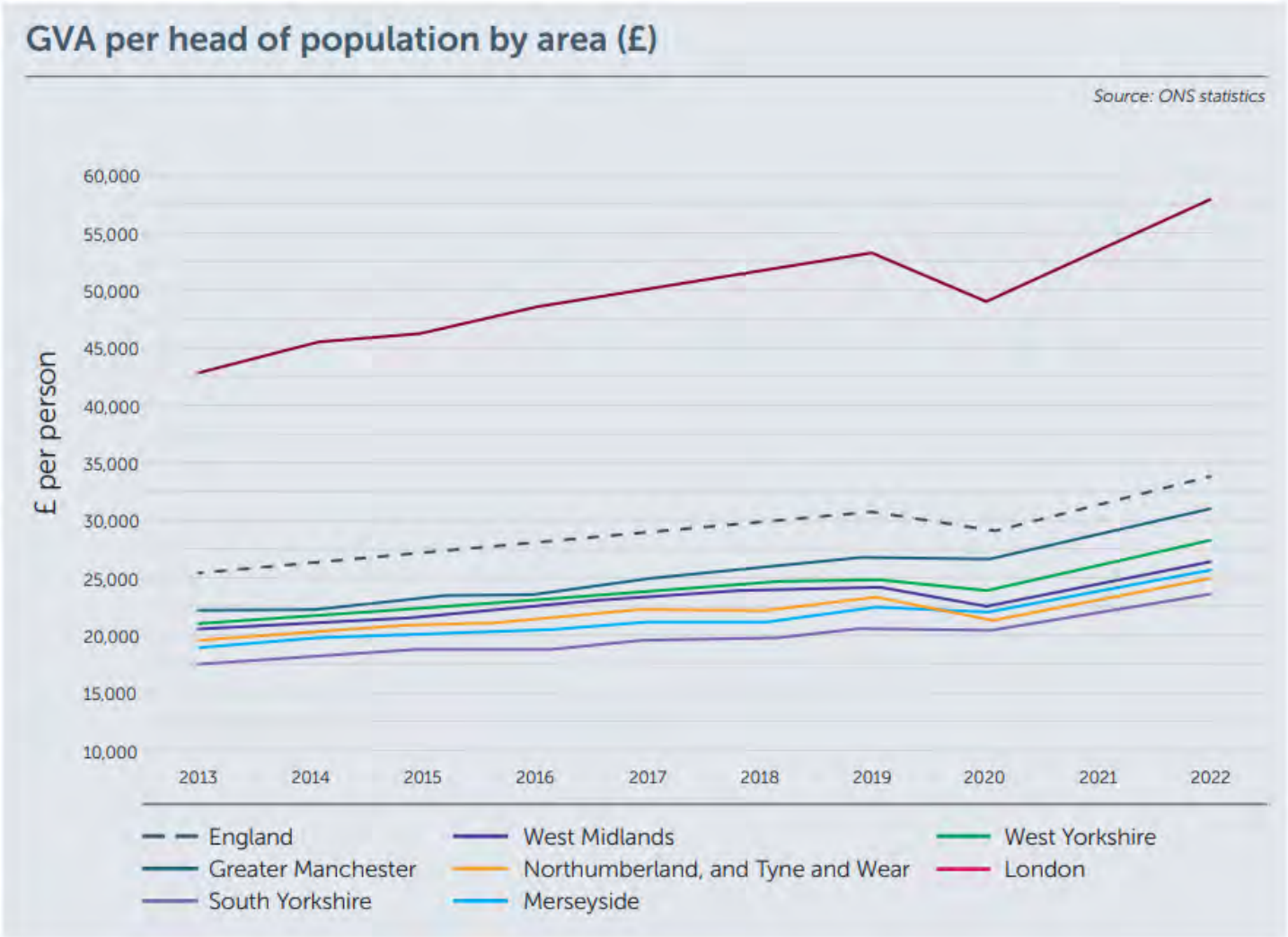
Our economy has grown faster than the UK economy for the past decade, while its growth rate of 2.8 per cent has surpassed London.

Yet, despite growth over the past two decades, Greater Manchester's productivity is still 35 per cent below that of London.

Population density



More people need to be able to live in our cities



Travel in GM

- Car is the main mode of travel. There are over **1.2 million private cars and vans** in GM: in the last 10 years this has increased by **17%.**

- There were **185 million car journeys in 2024** that would have taken less than 15 minutes to walk or 4 minutes to cycle.

- Public transport is used regularly by the same people. **77% of bus trips** being made by just **11% of GM residents.**

5.5 Million trips by GM residents on a typical day

60%
Car travel

Over ¾ of distance travelled

31%
Walking

4% of distance

6%
Public transport

15% of distance travelled

Journey Purpose in GM

Reasons for travel	% of all trips	Average mean trip distance (km):
Commuting or business	17%	10.8
Education	19%	2.4
Shopping	20%	3.0
Sport and entertainment	16%	5.4
Other (visiting friends, personal business, holidays etc.)	27%	7.0

Creating the Bee Network

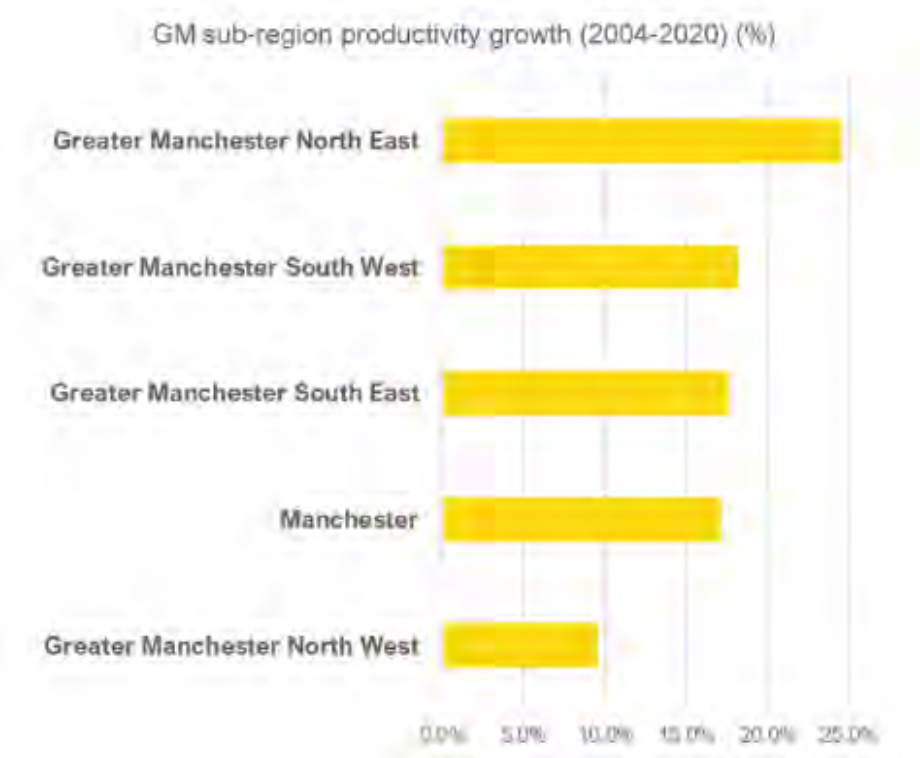
BEE NETWORK

Trams in Greater Manchester

- Opened in 1992
- Currently 8 lines, 99 stops and over 100km of track. 147 Alstom (Bombardier) M5000 trams
- Largest light rail network in the UK
- Over £2bn investment in the last 30 years
- Most recent expansion Trafford Park Line (TPL) opened in March 2020
- 45.7m passenger journeys in 2024. Marginally higher than 2019 (year before C19).
- Operated and maintained by KeolisAmey Metrolink (KAM) from 2017 to 2027

Impact of Metrolink

- The North East of GM, where Metrolink was expanded to as part of Phase 3, has seen the highest **growth in productivity** in GM from 2004 to 2020.
- **House prices** within ½ mile of Bury's tram stops quadrupled (400%) in price between 1995 and 2021. The average increase for the North West in the same period was 270%.
- The opening of the Phase 3 lines resulted in:
  - More than a 10% improvement in access to **job opportunities** by public transport for 18% of GM's population
  - More than a 10% improvement in **access to further education** by public transport for 19% of GM's population
  - More than a 10% improvement in **access to healthcare** by public transport for 20% of GM's population



Our Bus one year on we've:

Increased patronage 170 Million bus journeys made in the last year (FY24/25) - a 14% increase year on year across Tranches 1 and 2

Reduced average ticket costs by 15% with the £2 fare.

Improved reliability with services in the tranche one area now consistently above 80% punctuality (up from c.69% on the pre-franchised network).

Invested in growing the network with more frequent bus services, longer operating hours, better coverage and the launch of a 24hr bus pilot.

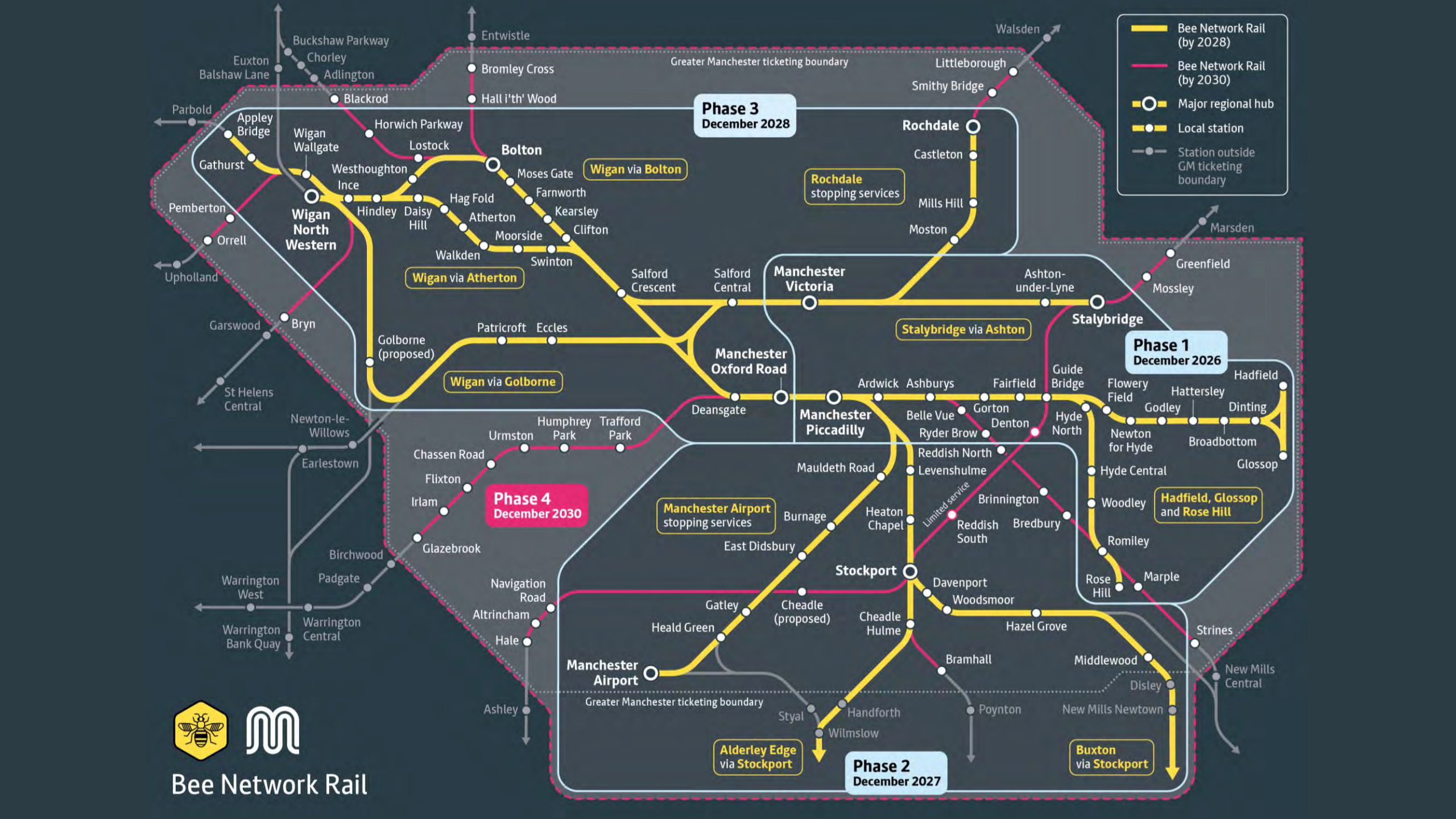
Modernised the bus fleet with more than half (55%) of the bee Network buses are new and 75% of the fleet is less than 5 years old. 17% of the fleet is electric.

Unlocked housing and development e.g. Stockport Interchange complete and looking to move forward with Bury.

Reduced the per-km cost of operating Bee Network buses by around a third compared to having to intervene in the private deregulated market.

Next Stop…Bee Network Rail

- One of the oldest railways in the world. Birthplace of the world's first passenger railway (which is still operational today!)
- 70-85% pre-COVID patronage and ongoing subsidy requirements
- 96 Stations, only 58% accessible, and no level boarding
- Varying service levels – From 9 tph, to just 1 train per week
- Mix of local, regional, intercity and freight. The West Coast Main Line is one of the busiest main lines in Europe
- The majority of services travel outside of the GM boundary including around two-thirds of passenger journeys
- Passenger services provided by 6 different operators (3 public, 3 private) – All to be nationalised under Great British Railways by central government
- Freight terminals close to the city centre
- A mix of Victorian, mid-century, and modern infrastructure


Bee Network Rail (by 2028)
Bee Network Rail (by 2030)
Major regional hub
Local station
Station outside GM ticketing boundary
Greater Manchester ticketing boundary
Phase 3 December 2028
Phase 1 December 2026
Phase 4 December 2030
Phase 2 December 2027
Wigan via Bolton
Wigan via Atherton
Wigan via Golborne
Rochdale stopping services
Stalybridge via Ashton
Manchester Airport stopping services
Hadfield, Glossop and Rose Hill
Alderley Edge via Stockport
Buxton via Stockport
Limited service
Buckshaw Parkway
Chorley
Euxton Balshaw Lane
Adlington
Blackrod
Entwistle
Bromley Cross
Hall i'th' Wood
Walsden
Littleborough
Smithy Bridge
Parbold
Appley Bridge
Wigan Wallgate
Gathurst
Horwich Parkway
Lostock
Bolton
Westhoughton
Ince
Moses Gate
Farnworth
Kearsley
Clifton
Hindley
Daisy Hill
Hag Fold
Atherton
Moorside
Walkden
Swinton
Wigan North Western
Pemberton
Orrell
Upholland
Rochdale
Castleton
Mills Hill
Moston
Marsden
Greenfield
Mossley
Salford Crescent
Salford Central
Manchester Victoria
Ashton-under-Lyne
Stalybridge
Garswood
Bryn
Golborne (proposed)
Patricroft
Eccles
Manchester Oxford Road
Deansgate
Manchester Piccadilly
Ardwick
Ashburys
Fairfield
Guide Bridge
Flowery Field
Hattersley
Hadfield
Godley
Dinting
Broadbottom
Glossop
Newton for Hyde
Hyde North
Belle Vue
Gorton
Denton
Ryder Brow
St Helens Central
Newton-le-Willows
Earlestown
Urmston
Humphrey Park
Trafford Park
Chassen Road
Flixton
Irlam
Glazebrook
Birchwood
Warrington West
Padgate
Warrington Bank Quay
Warrington Central
Navigation Road
Altrincham
Hale
Ashley
Mauldeth Road
Burnage
East Didsbury
Heaton Chapel
Levenshulme
Reddish North
Reddish South
Brinnington
Bredbury
Hyde Central
Woodley
Romiley
Rose Hill
Marple
Stockport
Davenport
Woodsmoor
Hazel Grove
Gatley
Heald Green
Cheadle (proposed)
Cheadle Hulme
Bramhall
Middlewood
Strines
New Mills Central
Disley
New Mills Newtown
Manchester Airport
Styal
Handforth
Wilmslow
Poynton
Greater Manchester ticketing boundary
Bee Network Rail

What will change

At each stage of the tranches, several key customer outcomes will be delivered along the corridors:

Fares and ticketing

- Tap & Go from Phase 1
- integrated fares by Phase 3

Stations and place

- Bee Network Branding at stations
- Enhancements to existing facilities, e.g., deep cleaning, CCTV upgrades

Service development

4 trains per hour on all corridors and additional late night services

Performance & reliability

Improved performance and reliability so GM has a railway it can trust

In parallel to the discrete tranches above, several additional customer outcomes will be delivered across the corridors at various stages between 2025 and 2028:

Fares and ticketing

Multi-modal fares and capping – with interim multi-modal ticketing solutions

Accessibility

Step change in the number of rail stations being made accessible. All stations accessible by phase 4.

Customer

Integration of Rail Retailing and Customer Services into the BN App that provides fully aligned CX

Homes & growth

Unlocking homes around our rail stations driving growth and connecting people to opportunities

Success Measures – what does success look like

Improved accessibility

with 70% (68 stations) of GM rail stations step free by 2029 – up from 58% today (56 stations). All stations accessible by phase 4.

Regeneration

around our stations will unlock up to 75,000 new homes

Overall customer satisfaction score increase from 80% to 86%

Driving cancellation rates down to 2%

Performance - 90% of services turn up on time

RAIL INTEGRATION INTO THE BEE NETWORK

Service enhancement

delivers c.10% increase in services on those lines

GM Rail

taking 7.5m km driven off the roads and 700 tonnes of CO_2 emissions cut

Boosting passenger numbers and driving growth

estimated 1.3 million extra journeys by train in Greater Manchester

Greater than 30% of customers using Tap & Go

Increase in multi-modal journeys by customers across the Bee Network

Transport for Greater Manchester

ANDY BURNHAM
MAYOR OF GREATER MANCHESTER

A thriving city region where everyone can live a good life.

Bolton	Salford
Bury	Stockport
Manchester	Tameside
Oldham	Trafford
Rochdale	Wigan

together we are

GREATER MANCHESTER

Growing our economy

Greater Manchester's trajectory as the fastest growing economy in the UK has been boosted by the growth of new industries, innovation and spin-outs from our universities, the resilience of our manufacturers, and the city region's status as an international hub for business and financial services.

A ten-year pipeline of specific projects in growth locations will continue to advance new industry and help spread prosperity across the city region.

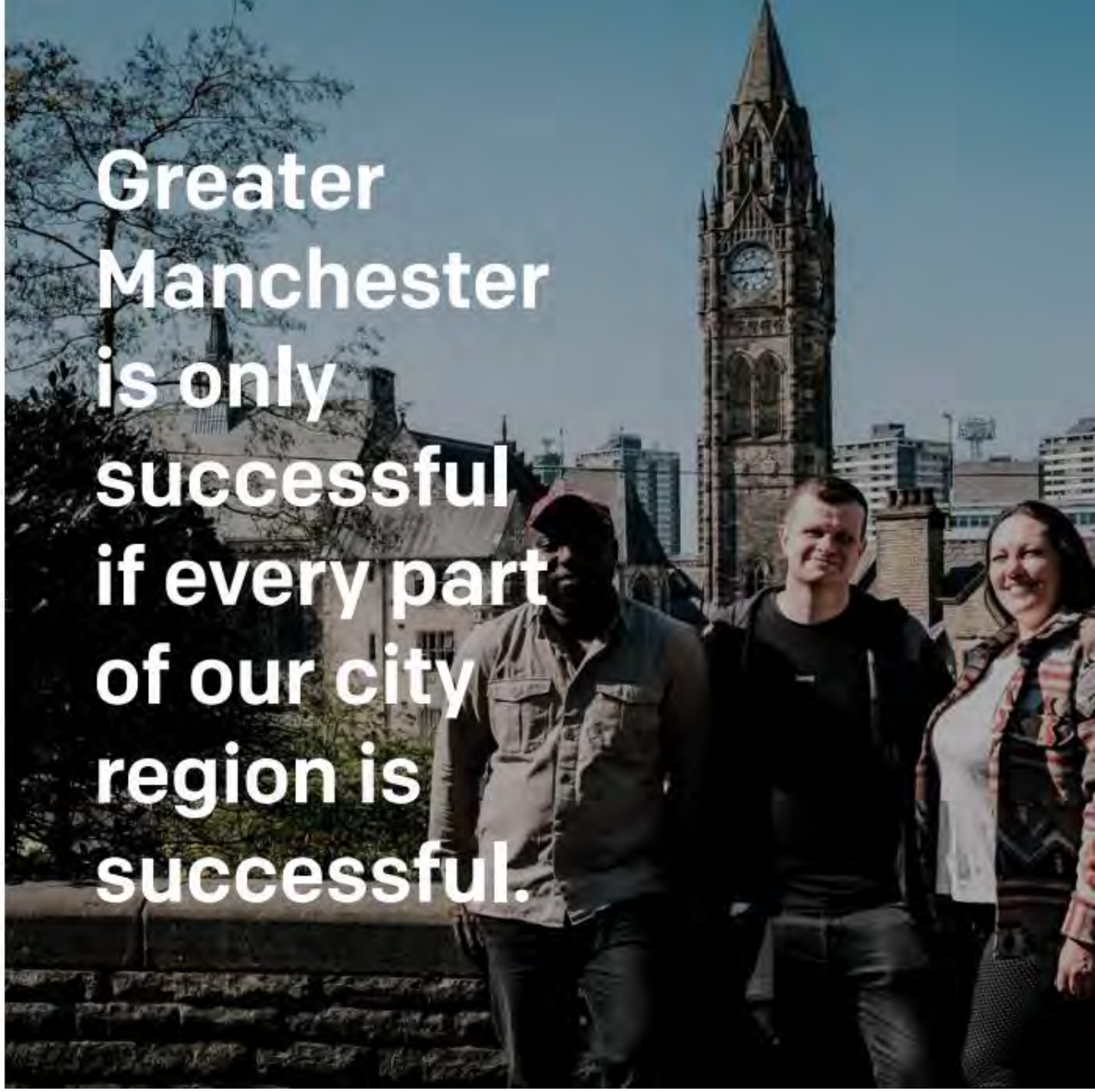
And we'll work with businesses to ensure they have the right support to flourish – from fixing skills gaps to funding to drive innovation and productivity.

Making sure people can live well

At the same time, we will invest in people, creating the right conditions for everyone to live happier, healthier lives and access the opportunities that come from growth, providing support where it's needed.

We'll do this in a way that increases community wealth, shifting power and resources to trusted social, civic and community organisations.

They will work as equal partners alongside our public sector with dedicated funding and an investment strategy that recognises the foundational benefits of social, civic and community organisations that provide everyday support and foster hope, connection and resilience.



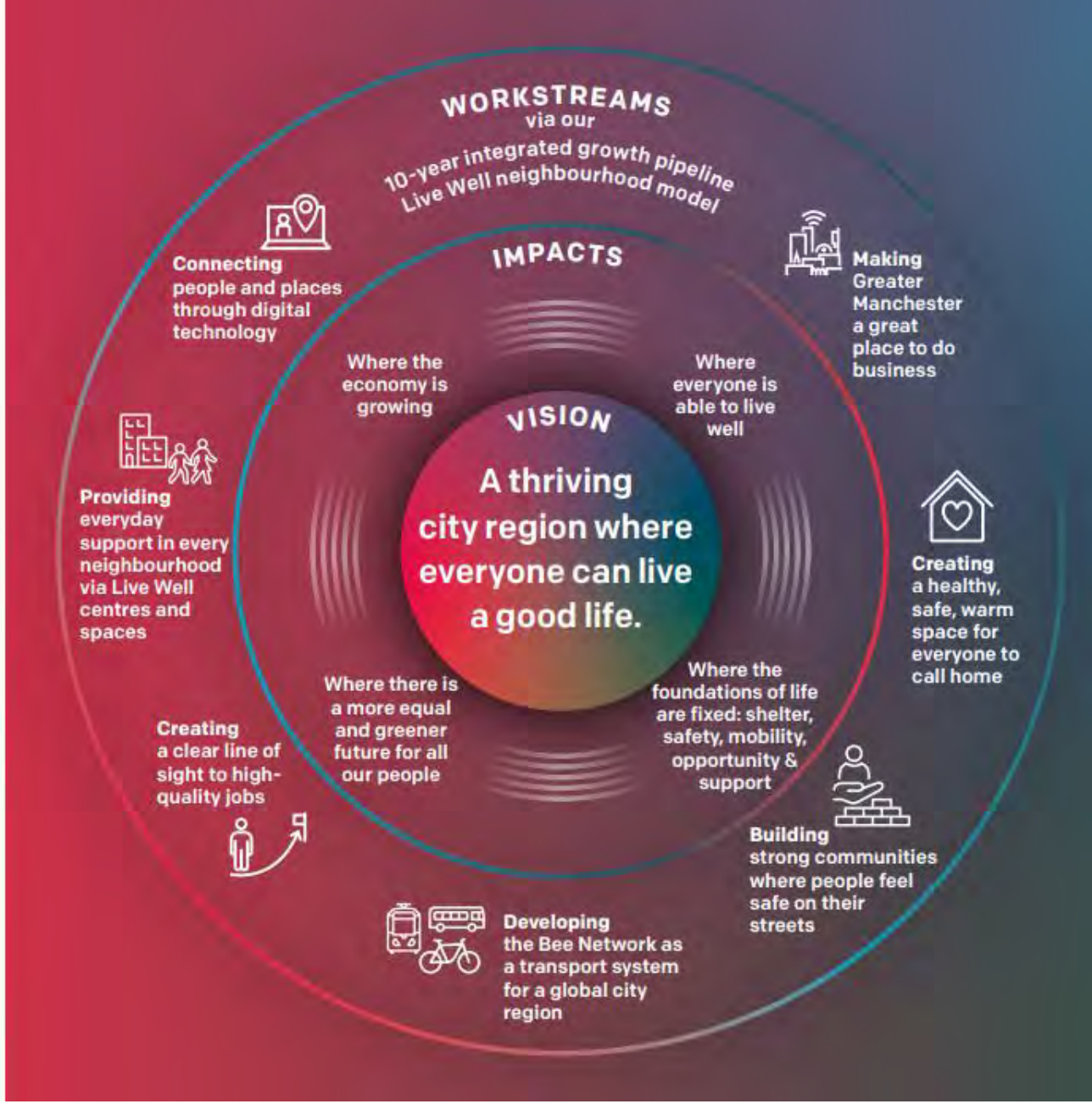
Our plans for growth and our people are underpinned by seven workstreams which are designed to fix the foundations of life: shelter, safety, mobility, opportunity and support. Each and every one will be delivered in a way that ensures a greener, more equal future for all.

That means people thriving in nature-rich environments resilient to climate change, with businesses making progress to Net Zero production. It means people feeling included, valued and with the power to participate in decisions about their community.

We will treat people as names not numbers, with effective public services taking a preventative approach.

To create a thriving city region where everyone can live a good life, we will focus on:

- Healthy homes for all
- Safe and strong communities
- A transport system for a global city region
- A clear line of sight to high-quality jobs
- Everyday support in every neighbourhood
- A great place to do business
- Digitally connected places and people




“This is a place full of opportunities to grow and build a community together.”
together we are
GREATER MANCHESTER


Thank you
Get in touch
Sam.li@tfgm.com

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Welcome Keynote

Department for Transport

Darren Capes

18 November 2025

Department for Transport

Connected Services

Developing a set of deliverable connected vehicle services

Darren Capes FIHE FIET

Head of Road Infrastructure Technology

Department for Transport

What are Connected Services?

Many of today's vehicles on UK roads are already connected in some form

Connected Vehicles

means any type or age of vehicle or person in a vehicle that can generate, transmit and receive and process data. The connection (traditionally wireless) can be with other road users and vehicles, with infrastructure, mobile phones, vehicle manufacturers, data providers, insurers and services like mapping and satnav companies*

Connected Services

refers to digital applications aimed at all users (from Road Authorities to road users) that achieves a particular outcome (e.g. increased safety and reduced emissions). These are technology agnostic and may utilise one or more delivery mechanisms e.g. I2V, V2I, C-ITS, V2X, 5G-SA

Users and recipients of Connected Services

want to use their preferred digital channels to receive high-quality information relative to their needs. Similarly, Road Authorities are increasingly keen to leverage infrastructure and vehicle data to achieve their policy goals. Connected Services will likely be delivered by the private sector, with potential for government to act as an enabler and accelerator for innovation.

*Royal Automotive Club Foundation Definition – Driven by Data, Revisited 2023

Drawn from the 'Unlocking the potential of Connected Services in the UK' outline business case briefing pack, WSP for DfT, 2025

Connected Vehicle Services (CVS) Framework

Provides a framework for considering the range of likely services that we will see on our road network and in vehicles over the next ten to fifteen years, that align with the benefits of connected services previously outlined.

The CVS Framework provide a tool for thinking about services, the impacts they have on the road and communications networks and the scale and breadth of interventions that may be required by government to realise them.

It allows services to be ordered into groups that can be delivered now, as quick-wins through to those that will require significant policy development, finding or legislative change.

It also provides a mechanism for considering policy leadership in delivering services by separating services that provide data into vehicles, from those that consume data from vehicles and those that will require more complex two-way data processing.

Wider objectives, ensuring services deliver benefits

Deliver on the governments 'greener transport' agenda, supporting services that reduce vehicle emissions

Support services that improve road safety for all, behavioral practices, and future transport solutions

Generate financial benefits for public sector organisations, enhancing operational and service quality

Boost private sector competitiveness, and foster a market that's attractive to invest in, innovate in, and develop products for

Support services that increase public transport usage and service reliability and encourage modal shift

Drawn from the 'Unlocking the potential of Connected Services in the UK' outline business case briefing pack, WSP for DfT, 2025

The Three Connected Infrastructure / Vehicle STREAMS

STREAM ONE

(Infrastructure to Vehicle)

"Connected services provide the opportunity for migrating rules and directions that govern road use from the roadside into the vehicle"

STREAM TWO

(Vehicle to Infrastructure)

"Connected services provide opportunities for using vehicle derived data to better understand the state of the network"

STREAM THREE

(two-way connectivity)

"Connected services can automate management of vehicles and payment for services"

The Three Connected Infrastructure / Vehicle Streams...

STREAM ONE

(Infrastructure to Vehicle)

This supports intelligence in the vehicle;

Description of the road.

- **Road geometry, signs and regulations.**

Strategic Information.

- **Roadworks, closures, diversions and significant disruption.**
- **Other sources of height and width restriction information.**

Tactical Information.

- **GLOSA, incident alert, blue light awareness, VRU location.**

STREAM TWO

(Vehicle to Infrastructure)

This supports better network management;

Physical attributes.

- **Road surface condition, environmental conditions.**

Situational awareness.

- **Travel times, congestion, queuing, vehicle behavior, eCall and collisions.**

Understanding the network.

- **Support for digital twins, regional planning and modelling, PT priority**

STREAM THREE

(two-way connectivity)

This supports automated management and payment;

Managing activity.

- **Kerbside management, access restrictions, blue badge, ULEZ access**

Paying for services.

- **Parking, road tolling, congestion charging, future road pricing, EV charging.**
- **Single accounts for payments and transactions.**

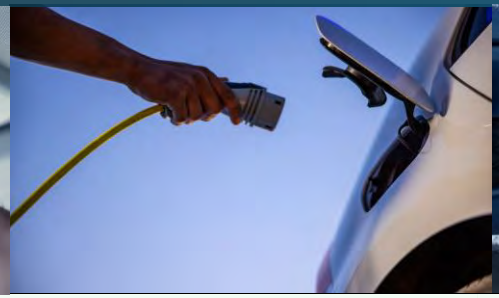
Services already being delivered on UK roads align with the three Streams.

Services being delivered today

Satellite navigation

Optimised Traffic and Transit Data Services

Safety related traffic information



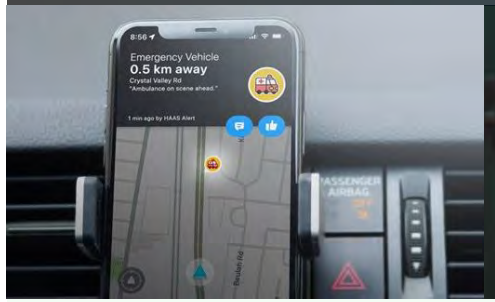
EV charging

Enhanced Maintenance

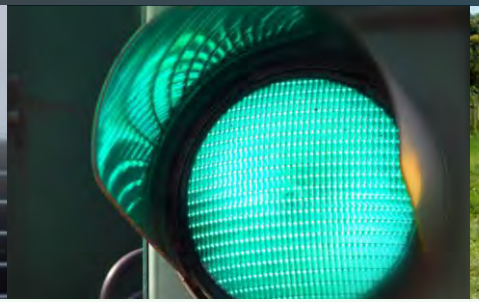
Based on the 'Unlocking the potential of Connected Services in the UK' outline business case briefing pack, WSP for DfT, 2025

Future services align with the three Streams

Future services that demonstrate the art of the possible

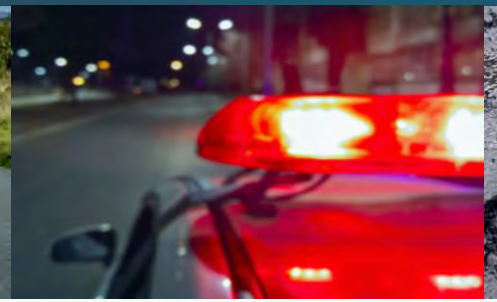


In-Vehicle Signage (IVS)



Green Light Optimisation Speed Adaption (GLOSA)

Road Works Warning (RWW)



Hazard Location Notifications (HLN)

Public Transport and Asset Management

Based on the 'Unlocking the potential of Connected Services in the UK' outline business case briefing pack, WSP for DfT, 2025

The Connected Vehicle Services (CVS) Framework - Use Case Groups

Use Case Group	Description
A	Safety and Emergency
B	Traffic Management
C	Advanced Vehicle Capabilities
D	In-Vehicle Experience and Convenience
E	Vehicle Management and Maintenance
F	Support for Authorities
G	Fleet and Logistics

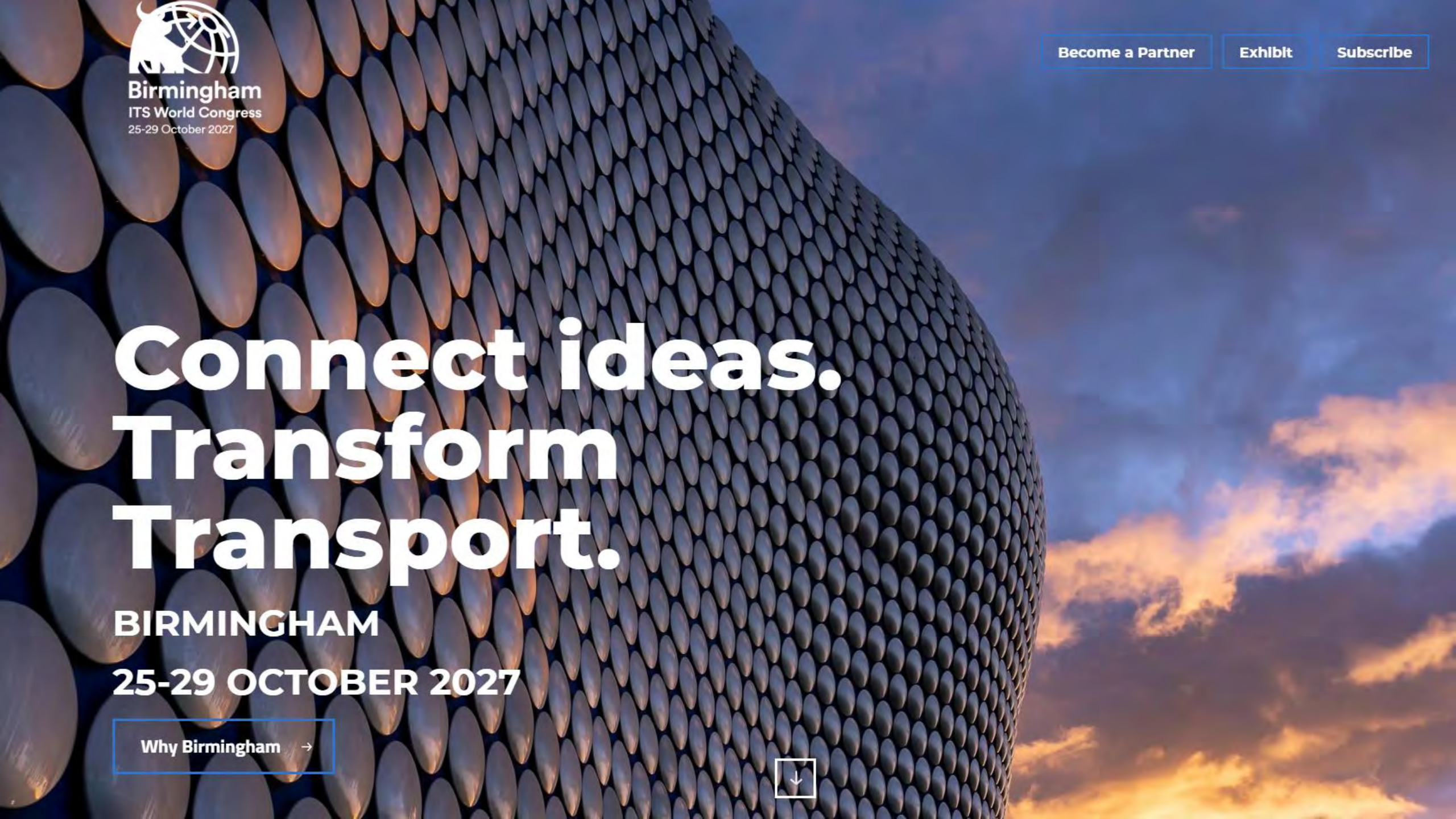
Use Case Sub-Groups	Description
A1	Safety information for vehicle occupants:
A2	Safety information for road-transport operations:
A3	Emergency services:
A4	Automated Emergency Call Systems (eCall/AECS):
A5	VRU* protection:
A6	Support for Authorities
A7	Natural disaster and crisis management:
A8	In-vehicle notifications and warnings:

Service	Description
A1.1	Vehicle Connectivity makes it possible to provide real-time notifications and warnings to built-in systems and vehicle occupants about possible hazards. These notifications and warnings are based on received information, integrated with direct sensing by the vehicle.
A1.2	Vehicle Connectivity makes it possible to report various types of possible local hazards, allowing for a more comprehensive risk assessment.
A1.3	Notifications and warnings include, but are not limited to, information about wrong-way driving, traffic congestion, VRU presence, slippery roads, vehicles with excessive speed, presence and directions of emergency vehicles, and other road hazards.

Department for Transport

Connected Vehicle Services

DRAFT, for consultation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Horizon Europe for Mobility for 2026 and 2027

18 November 2025

Louise Mothersole – National Contact Point (NCP) for Mobility
Teresa Arumardi – NCP for European Institute of Innovation & Technology (EIT)

OVERVIEW

- National Contact Point (NCP)
- Horizon Europe
- UK as an Associated Country
- Horizon Europe Mobility Opportunities
- EIT Opportunities

UKRI Innovate UK

HORIZON EUROPE NATIONAL CONTACT POINTS (NCPs)

Team of national advisors, appointed by the Government, to support organisations to successfully participate in Horizon Europe by:

- Raising awareness of the programme
- Helping you find the right topic
- Identifying the best ways to find partners
- Navigating the EU funding & tender opportunities portal
- Answering any other Horizon Europe related questions

Top Tip – get to know your NCP

List of UK NCPs

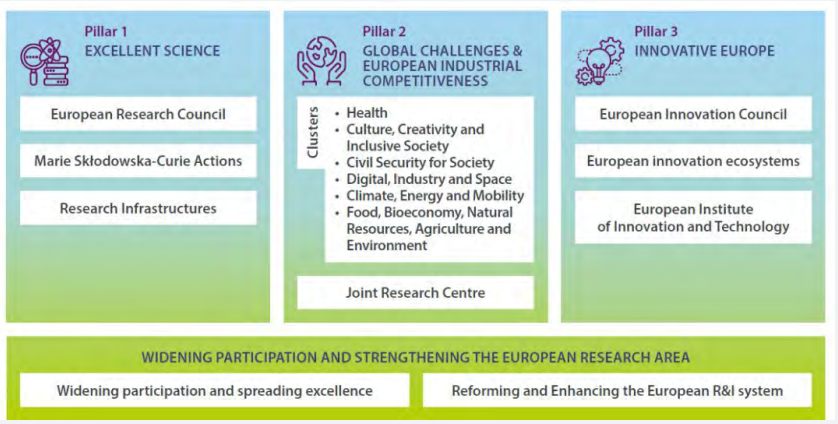
UK NCP Newsletter

Innovate UK

What is Horizon Europe?

- Horizon Europe is the current EU's Framework Research and Innovation funding programme.
- It is the largest R&I funding programme in the world, with a budget of over £81bn for 2021-27

- The programme is divided into **three main parts - Pillars**:
  - Pillar 1 supports excellence in science;
  - Pillar 2 focuses on solving global challenges through collaborative research & innovation; and
  - Pillar 3 supports business growth and competitiveness.



- Other parts of Horizon also include support for research infrastructure and widening participation.
- Key priority areas include food, bioeconomy, climate change, health, digital, transport and mobility, space, energy, industry, civil security and humanities. The programme is open to all types of organisations of all sizes.

UKRI Innovate UK

UK is a ‘Country Associated to the Programme’

- ‘the Programme’ is Horizon Europe, i.e., UK is an Associated Country (AC) from the 2024 Work Programme onwards
- UK contributes funding to the programme:
  - EU decides where to allocate UK government contribution (paragraph 50 of Regulation establishing Horizon Europe)
- Except in a very few Topics that are restricted (and clearly marked as such):
  - UK organisations **are** fully eligible to coordinate projects
  - UK organisations **are** classed as one of the minimum required ‘three different legal entities from three different eligible countries’, as long as at least one consortium member is also from a Member State
  - Successful UK organisations **are** funded by EU as project participants/beneficiaries
- The UK is not the only Associated Country, there are currently 19 and more are negotiating association (South Korea will associate from 2025 onwards). A full list can be seen here

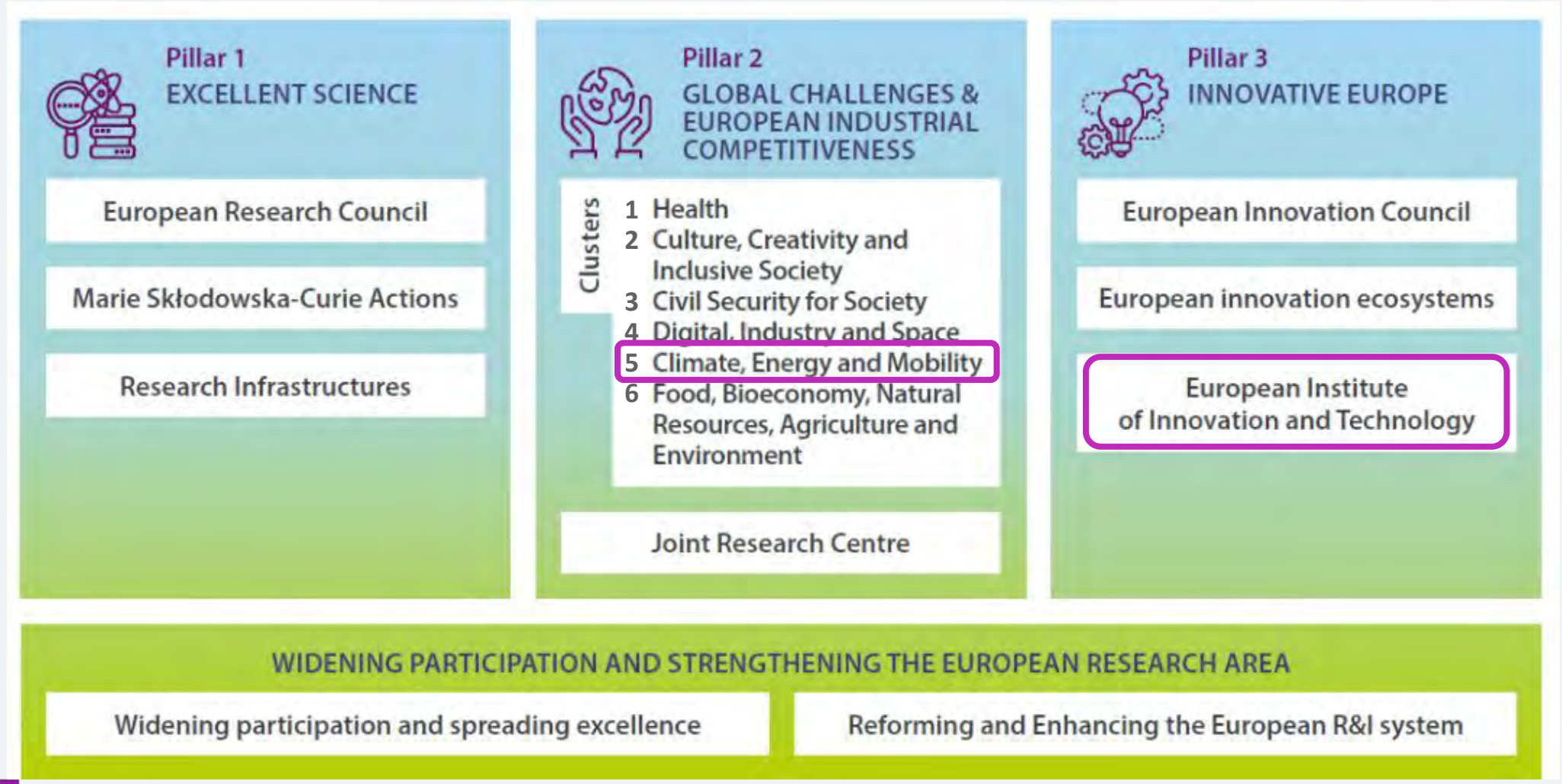
UKRI Innovate UK

Why International collaboration is important

- Solve global grand challenges through collaborative R&I
- Collaborate with world leading organisations to learn from the best
- Access cutting edge technologies, infrastructure, talent & markets
- Contribute to the dialogue on standards, regulations and research policies
- Ensure that technology development aligns with global marketplace
- Collaborative relationships frequently become commercial ones – developing system solutions in supply chain partnerships
- **Creating jobs, growth and stronger supply chains**

UKRI Innovate UK

Horizon Europe



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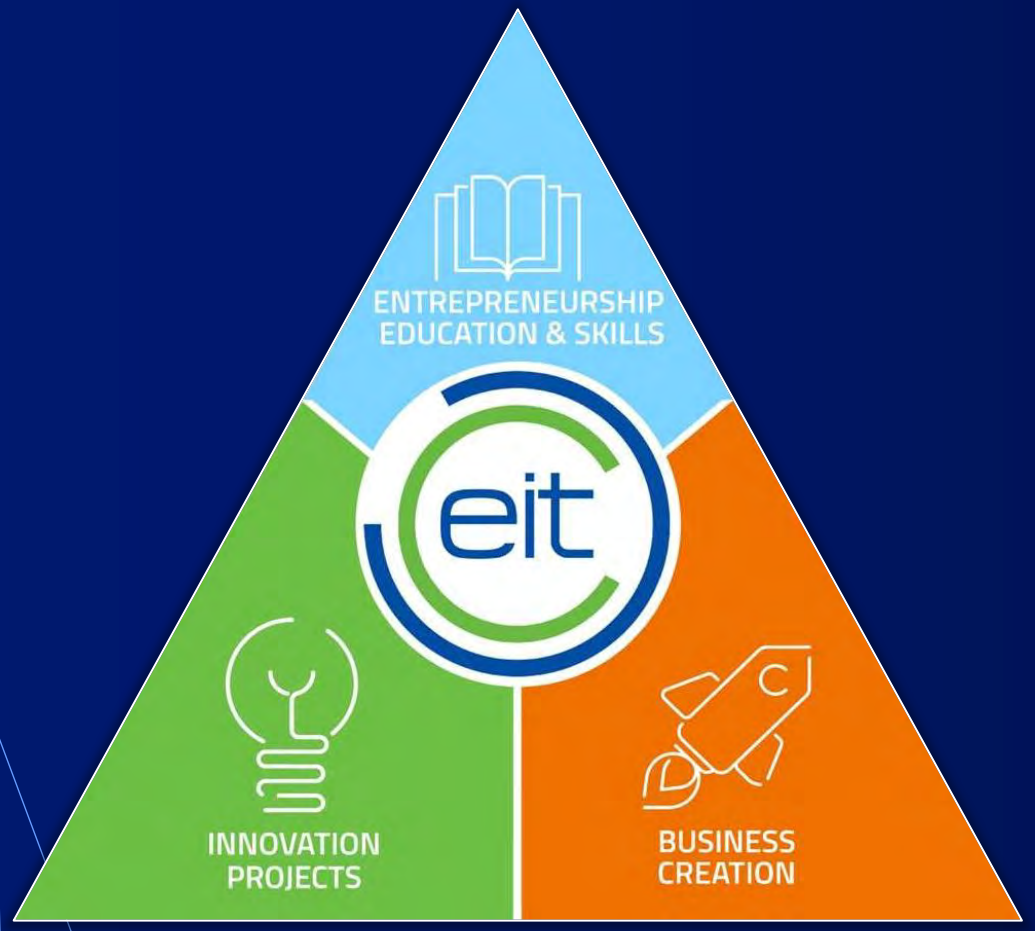
Budget figures exclude UK and other Associate Country contributions

Horizon Europe Mobility – where to find the Competitions

- Cluster 5 Climate, Energy & Mobility
  - Clean and competitive solutions for all transport modes
  - Safe, resilient transport and smart mobility services for passengers and goods
- Some mobility projects also within:
  - Climate Neutral and Smart Cities Mission
  - Driving Urban Transitions – not always open to UK as depends on additional central UK financial contribution
  - EIT Urban Mobility

UKRI Innovate UK

EIT ACTIVITIES



WATCH VIDEO

EDUCATION & SKILLS

Creating future innovators:
Deliver entrepreneurs and provide business and industry with a skilled workforce

WATCH VIDEO

INNOVATION

Breaking down the barriers for collaboration:
Innovation projects between universities, research organisations and business that helps to turn research into commercial products and services

WATCH VIDEO

BUSINESS CREATION

Turning ideas into businesses.
Help start-ups and ventures to start and accelerate the growth of their business.

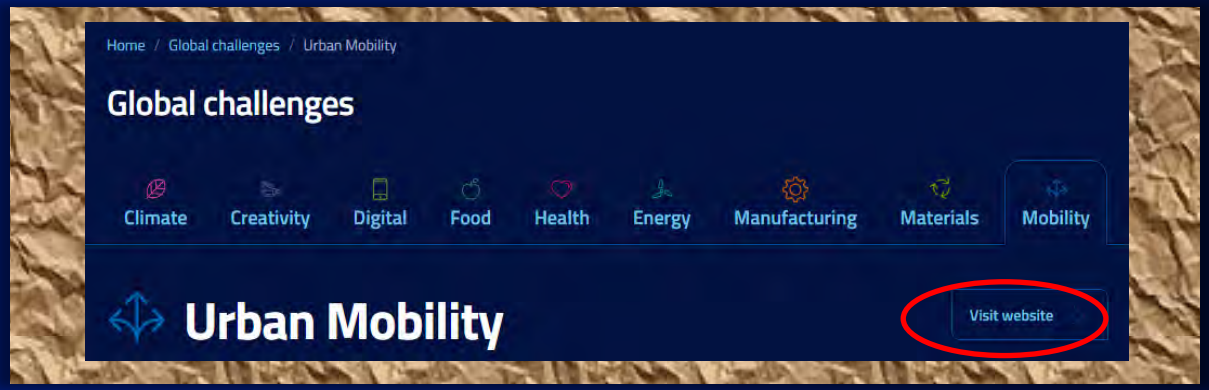
EIT KNOWLEDGE & INNOVATION COMMUNITIES (KICs)

The EIT KICs and their partners make up the ***EIT Community***

EIT OPPORTUNITIES

EIT Opportunities

EIT KIC websites



EIT URBAN MOBILITY OPPORTUNITIES

SME Market Expansion Open Call 2026 - EIT Urban Mobility

Contact: agileinnovationteam@eiturbanmobility.eu

Please also cc ncp-eit@iuk.ukri.org

- Fourth iteration
- Tentative start-end date of projects: 1 April 2026-31 October 2026
- Aim: to promote business growth and market expansion, encouraging the replication and scaling of successful solutions in new regions or sectors
- Topics in focus:

  Public Transport - Urban Logistics - Electrification of transport and alternative fuels - Mobility data management - Health and mobility
- The total estimated funding allocated to this Call is 600,000 EUR
  - Around 10 projects are to be implemented by 10 different SMEs. Each entity awardee will receive EIT funding allocation of 60,000 EUR
- This Call is a **mono-beneficiary** call addressed to small and medium enterprises (SMEs) that are supported by an end client, a public or private entity, committed to testing and demonstrating the solution

EIT URBAN MOBILITY OPPORTUNITIES

Urban Mobility Explained (UMX) Open Call - EIT Urban Mobility

Contact: agileinnovationteam@eiturbanmobility.eu

Please also cc ncp-eit@iuk.ukri.org

- 2nd cut-off date: 12 February 2026 (17:00 CEST)
  - Additional cut-off dates 2026-2027-2028 TBA
- Aim: to accelerate the development and delivery of high-quality, sustainable professional training and support services that close the urban mobility knowledge gap
- The total indicative EIT funding allocated to this Call is between approximately 2-4 million EUR
  - The maximum EIT funding per proposal is 700,000 EUR
- This Call for Proposals is open to all legal entities established in the Member States of the European Union, and/or in Third countries associated with Horizon Europe. These legal entities may be small and medium enterprises (SMEs), universities, research and technology organisations, cities or large businesses, among others.
- This Call is open to **multi-participant proposals and mono-participant proposals**.

EIT URBAN MOBILITY OPPORTUNITIES

Strategic Innovation Open Call - EIT Urban Mobility

Contact: innovationcall@eiturbanmobility.eu

Please also cc ncp-eit@iuk.ukri.org

- 2nd cut-off date: 12 February 2026
  - 3rd cut-off date: 18 June 2026
  - 4th cut-off date February 2027
  - 5th cut-off date: June 2027
- Aim: to accelerate the deployment of impactful solutions that address the most pressing challenges in urban mobility
- Sectors in focus:

  Public Transport - Urban Logistics - Electrification of transport and alternative fuels - Mobility data management - Health and mobility
- The total estimated funding allocated to this Call is 60 million EUR for the period 2026-2028 and has multiple cut-off dates.
  - Each project may receive up to 2 million EUR. EIT Urban Mobility will reimburse up to 65% of the eligible project costs, while the minimum co-funding rate for all proposals is 35%.
- This is a **multi-beneficiary** call for proposals and therefore there must be a minimum of two independent legal entities, working together. These entities must be established in two different European Member States, and/or Third countries associated with Horizon Europe.

UKRI Innovate UK | eit European Institute of Innovation & Technology | European Commission HORIZON EUROPE 2021-2027

Get in Touch

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Innovate UK

Questions?

Innovate UK

Innovate UK

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Refreshment Break

18 November 2025

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Accelerating the sustainable mobility transition in cities

We are part of the EIT Community

Access the largest and most influential innovation community

EIT Health
Giving European citizens greater opportunities to enjoy a healthy life

EIT Food
Leading a global revolution in food innovation and production

EIT Digital
Driving Europe's digital transformation

EIT Climate-KIC
Working to accelerate the transition to a zero-carbon economy

EIT InnoEnergy
Achieving a sustainable energy future for Europe

EIT Manufacturing
Bringing European manufacturers together

EIT RawMaterials
Developing raw materials into a major strength for Europe

EIT Urban Mobility
Mobility for more liveable urban spaces

EIT Culture & Creativity
Transforming Europe's cultural and creative sectors and industries

EIT Urban Mobility is accelerating the urban mobility transition

ECOSYSTEMS

EUROPEAN

NATIONAL

URBAN

MATCH AND CONNECT

TALENT TO BUSINESS

INNOVATIONS TO MARKET

STARTUPS TO SCALE

MOBILITY FOR MORE LIVEABLE URBAN SPACES

eit Urban Mobility

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We are the largest European innovation community for urban mobility

Status: September2025

Creating impact in cities across Europe

420+

PILOTS IN

185+

CITIES

We focus on innovations that most efficiently support cities on their way to net zero

PUBLIC TRANSPORT

HEALTH AND MOBILITY

ELECTRIFICATION OF TRANSPORT AND ALTERNATIVE FUELS

URBAN LOGISTICS

MOBILITY DATA MANAGEMENT

We engage in four main intervention areas to drive change

MATCH AND CONNECT

Connecting private and public sector partners to access markets, talent, finance and knowledge

TALENT TO BUSINESS

Fostering entrepreneurship through practical learning

INNOVATIONS TO MARKET

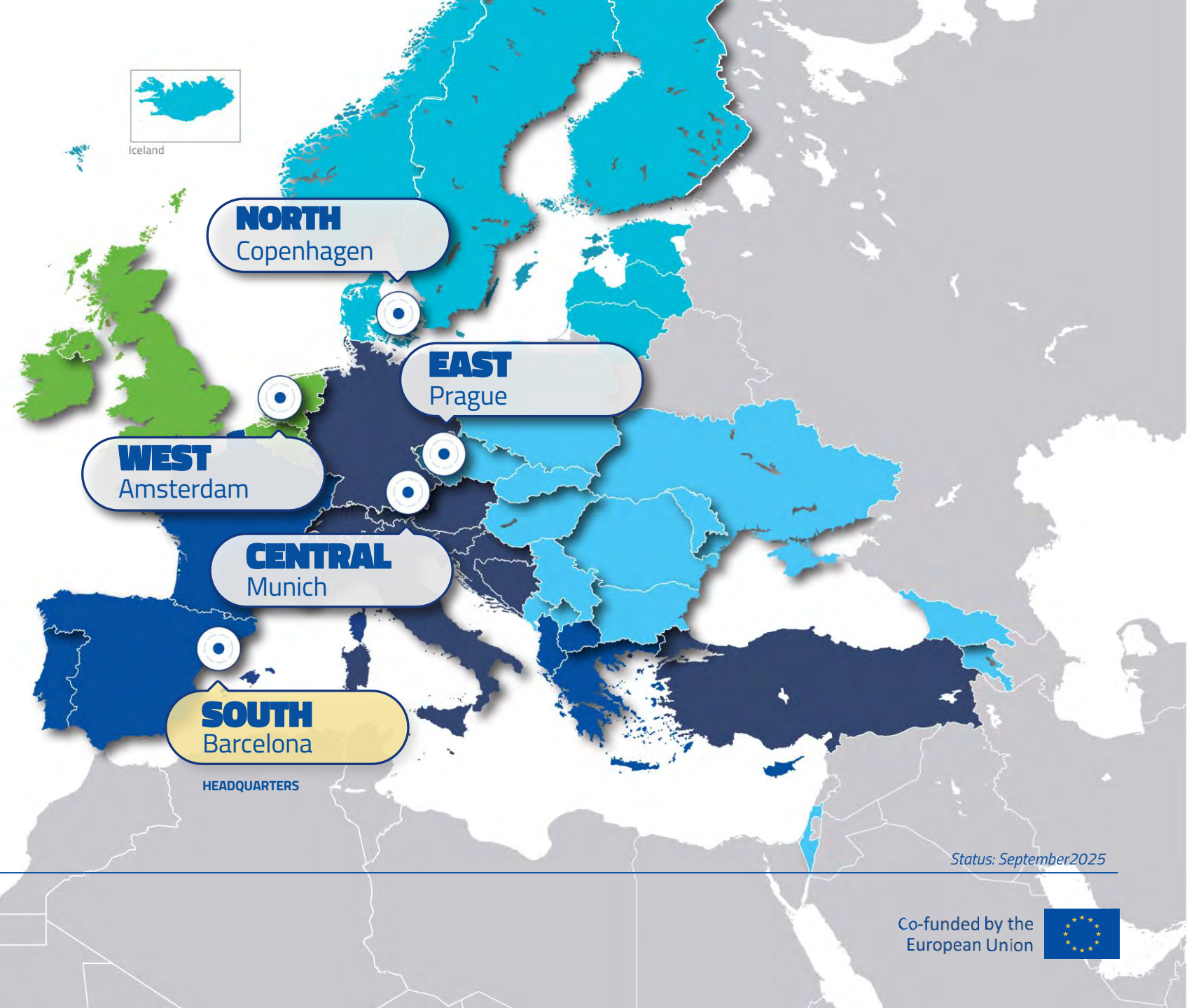
Piloting market-ready solutions in cities

STARTUPS TO SCALE

Boosting startup growth for long-term impact

Status: September2025

We are the leading network for urban transport innovation across Europe



Status: September2025

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Innovation **Programme**

Funding & strategic actions

eit Urban Mobility

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Innovation Focus

- Respond to an **existing or anticipated urban mobility challenge**
- Projects that are in the final stages of tech demonstration and that we can **accelerate their market deployment (TRL 5-6)**
- Focus on the **development, piloting and deployment of close-to-market solutions** that accelerate impact → more liveable cities and commercial uptake
- **Topics**: Public Transport, Health & Mobility, Electrification & AF, Urban Logistics, Mobility Data Management

Funding mechanisms and strategic actions

Main funding mechanisms and strategic actions to enable innovation via the EIT Urban Mobility community:

- Pan-European projects to pilot solutions over a period up to 24 months
  [Strategic Innovation Call]
- Mono-beneficiary startup/SME projects to demonstrate fast innovation with an end-client
  [SME Market Expansion Call & RAPTOR Call]
- Support to identify, apply for and secure alternative European funding for urban mobility projects
  [Horizon Lab]

Strategic Innovation Open Call

Seeking new **bold and transformative innovations** that tackle the most **pressing urban mobility challenges**. Solutions should demonstrate **strong potential for scalability and market uptake**. Projects should drive **systemic change** involving both public and private stakeholders, with a **clear pathway to market deployment** by the project's end.

Consortium
All proposals must be composed of at least two independent legal entities established in two different EU Member States and/or third countries associated with Horizon Europe.

Mandatory elements
KPIs EITHE2.4 (marketed innovation) or EITHE4.4 (startup created); minimum co-funding (35%), EITUM membership once project is approved and contribution to EIT Urban Mobility financial sustainability mechanism (FSM).

Project duration
Up to 24 months

EIT Funding
Up to 2M€

References
Call website

SME Market Expansion Open Call

Deadline:
1st Dec 2025
17:00 CET

The call aims to support monobeneficiary consortia (SMEs) to either develop a new product/service or significantly improve an existing product/service for **expansion into a new industry sector or a new geographic area**. It provides SMEs with an opportunity to do **full usage testing with an end-client** within the project implementation.

Type of applicants & Requirements
Mono-beneficiary call addressed to SMEs established in Member States of the European Union, and/or in third countries associated with Horizon Europe, with innovations for urban mobility challenges. Each applicant must have a letter of support from an end-client who will do a full test of the product/service.
Financial Sustainability & EITUM Membership are required.

Project duration
7 months

EIT Funding
59.5k€

References
Call website

RAPTOR Open Call

Rapid Applications for Transport (RAPTOR) aims to support the development and piloting of cutting-edge solutions, developed by startups and SMEs, to **solve niche urban mobility challenges of cities**.

Topics
Niche urban mobility challenges defined by cities.

Type of applicants
Mono-beneficiary call addressed to startups and SMEs established in Member States of the European Union, and/or in third countries associated with Horizon Europe.

Participation of cities: Define niche urban mobility challenges; participate in the evaluation and selection of proposals; provide projects relevant access to software, data, hardware etc; facilitate in-situ demonstration of solution and access to infrastructure

Project duration
6 months

EIT Funding
59.5k€

References
Call website

RAPTOR Open Call – Piloting Cities 2025

Programme of calls 2026*

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb

STRATEGIC INNOVATION OPEN CALL

2ND CUT-OFF:
12 FEBRUARY 2026

3RD CUT-OFF:
18 JUNE 2026

4TH CUT-OFF:
FEBRUARY 2027

SME MARKET EXPANSION OPEN CALL

LAUNCH: 1 OCTOBER 2025
DEADLINE: 1 DECEMBER 2025

LAUNCH: OCTOBER 2026 (TBC)
DEADLINE: DECEMBER 2026 (TBC)

RAPTOR OPEN CALL

LAUNCH: JANUARY 2026
DEADLINE: MARCH 2026

*Call dates are indicative and subject to change

Scan here

Register your interest and let's connect!

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Connect with us

EIT Urban Mobility Innovation Hub West
west@eiturbanmobility.eu

Prins Hendrikkade 21e, 5th floor
1012TL Amsterdam
The Netherlands

For more information

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Q&A

18 November 2025

Speakers

Scott Cain
Innovation Programme Lead
UK Bicycle Association

Susan Tully
Research Fellow
Edinburgh Napier University

Sam de Smet
Co-Founder and CEO
OTIV

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MDS International

Bicycle Association

Scott Cain

18 November 2025

ARISE

Advanced **R**ail **I**nnovation for **S**afety and **E**fficiency

Connected Futures: UK–EU Collaboration for Mobility Innovations

Manchester, 18 November 2025

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OUR VISION

AUTOMATING THE BACKBONE OF SOCIETY TODAY

OTW

Introduction

OTIV: Fact sheet

Locations
Ghent, Belgium
Köln, Germany

Founding
02/2020

Team
41

Mission
OTIV aims to increase the safety and efficiency of rail by teaching rail vehicles to drive autonomously

Customers

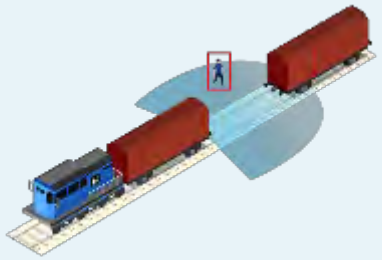
Founders
Niels Van Damme (MSc. Automation Engineering, UGent): Co-founder and Tech lead
Sam De Smet (MSc. Business Engineering, UGent) : Co-founder and Business lead

Partners

OTIV product range

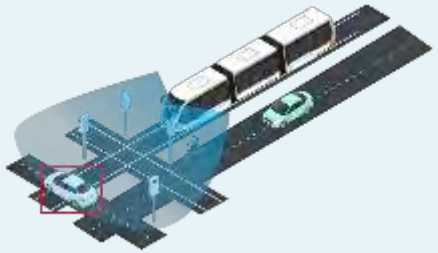
Step-wise approach towards full automation

OTIV.ONE



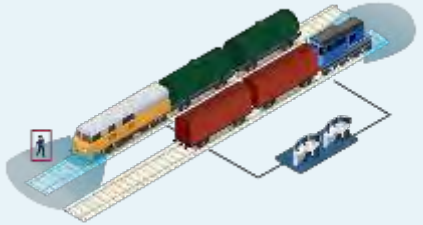
Driver assistance for industrial rail

OTIV.TWO



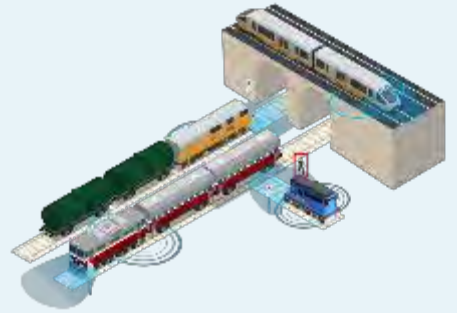
Driver assistance for urban rail

OTIV.THREE



Remote control and supervision

OTIV.FOUR



Perception for full self-driving (GoA4)

Driver assistance

Tele-operation

Full autonomy

TRANSPORT

Transport Emissions: Represent 25% of the EU's total greenhouse gas emissions (European Environment Agency, 2022).


Railways: 0.4%


Aviation: 13.4%


Water: 14%


Road transport: 71.7%

EU Green Deal Goal: Achieve a 90% reduction in greenhouse gas emissions from transport.

Key Policy Area: Focuses on efficient, safe, and environmentally friendly transport.

Tram Advantages:

- Emit 9 times less CO2 than road vehicles.
- Consume 6 times less energy than road vehicles.

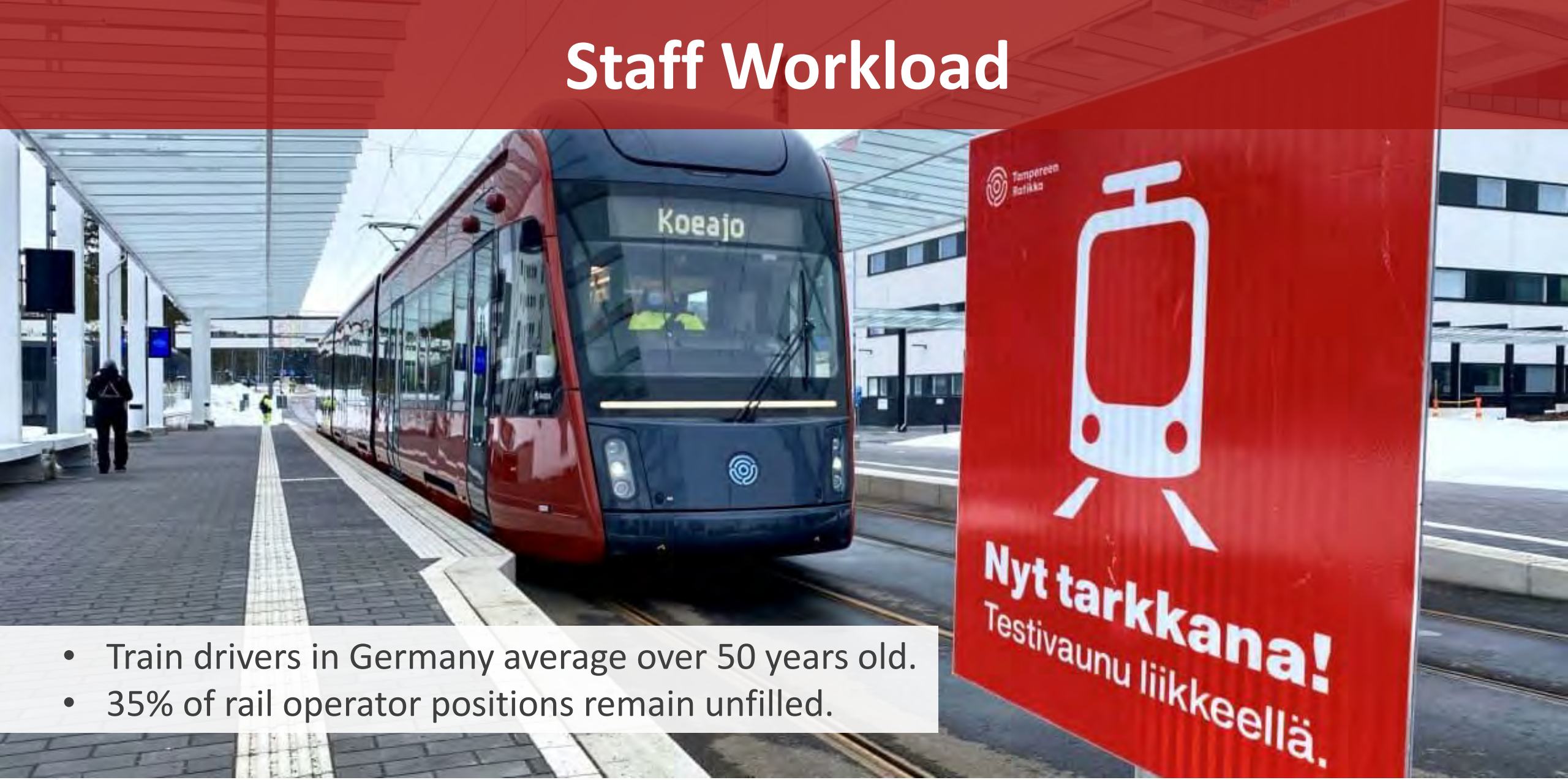
Impact: Trams are essential for meeting the EU Green Deal's ambitious climate goals and promoting a sustainable future.

PUBLIC TRANSPORT USERS ASSOCIATION

Accidents

- Example: 1.289 tram accidents involving personal injury in Germany.
- €3,2b annual costs from fatalities and injuries in the EU.
- 75% of accidents are due to human error.

Staff Workload



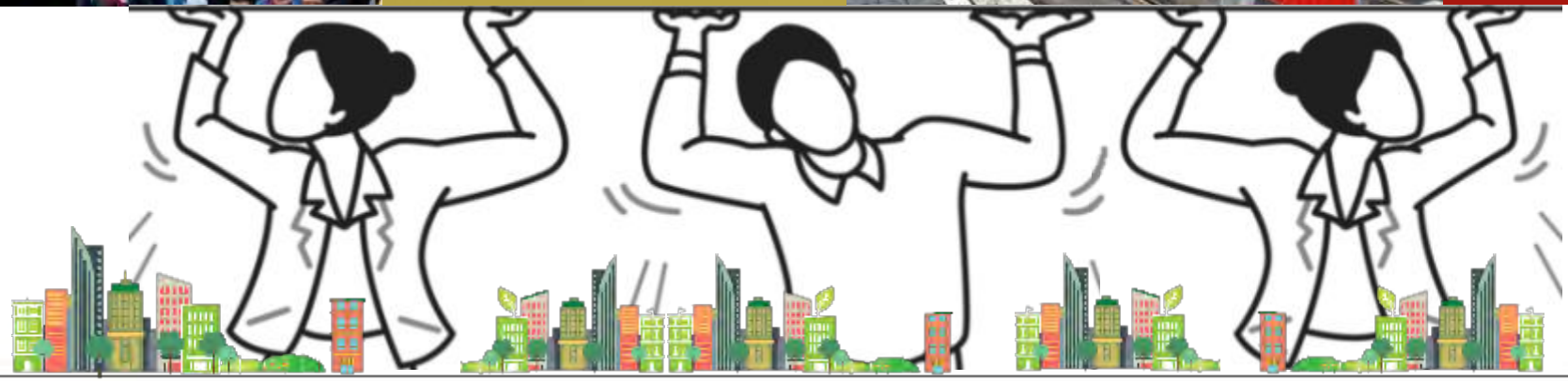
- Train drivers in Germany average over 50 years old.
- 35% of rail operator positions remain unfilled.

Accidents

Vehicle Availability

Journey Delays

Staff Shortage

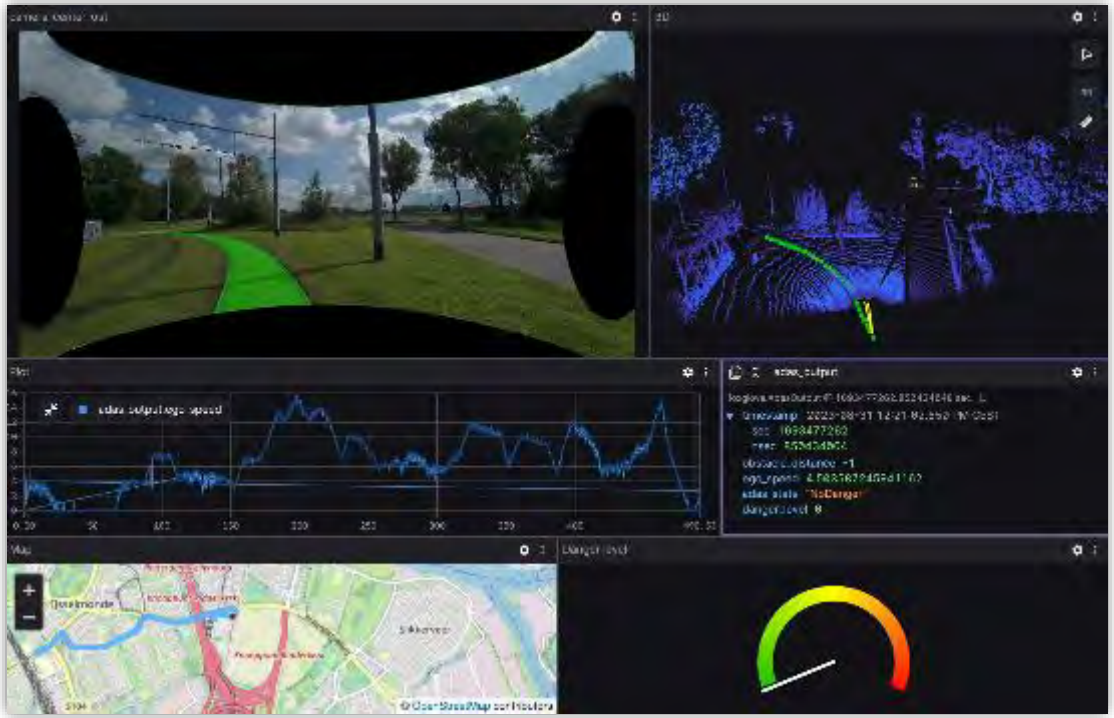


The innovative solution (1/2)

OTIV.**TWO**, an Advanced Driver Assistance System (ADAS) for trams, that supports drivers in complex environments with:

Tram-agnostic hardware components

Software component



The innovative solution (2/2)

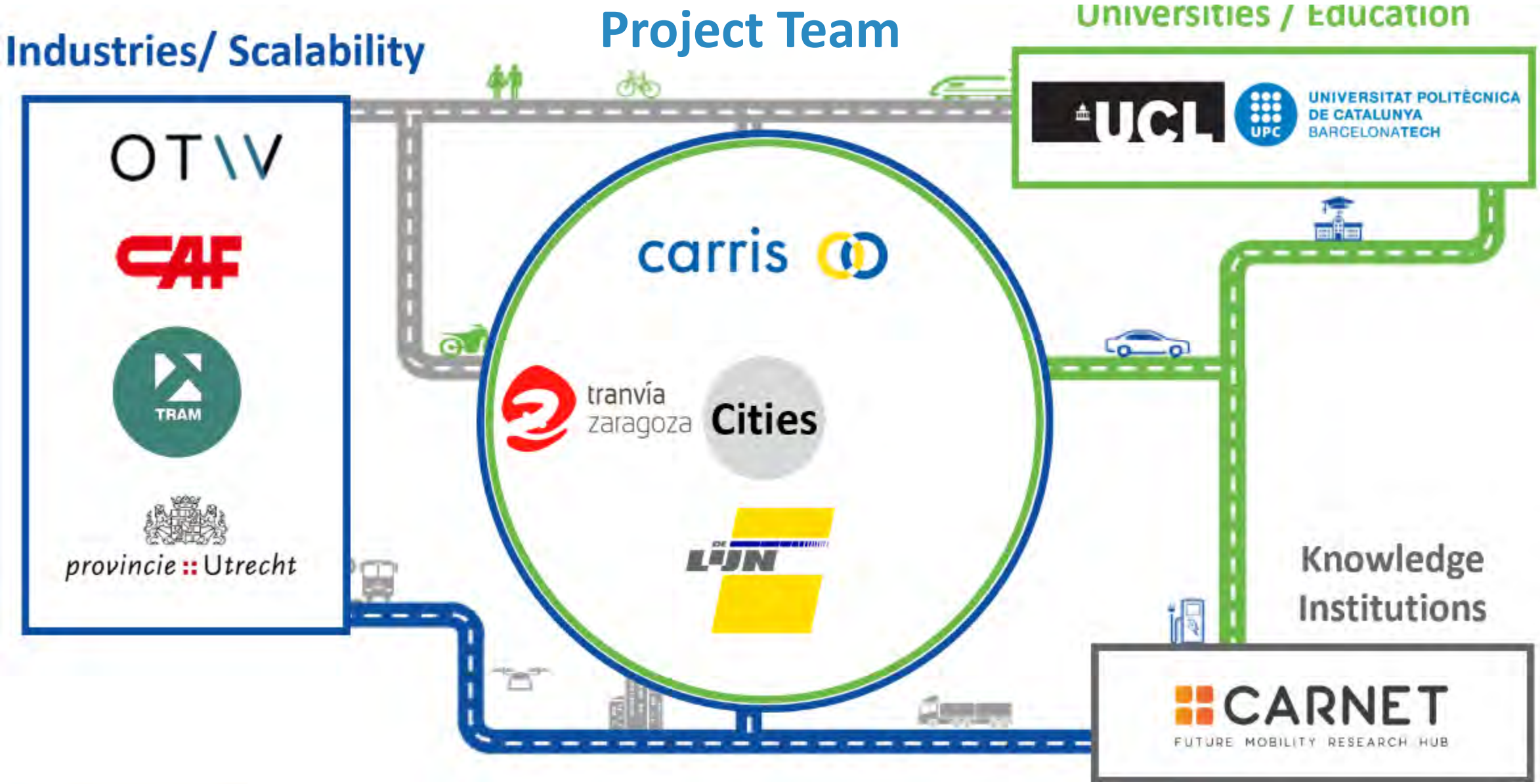
OTIV.TWO supports drivers in complex environments

- Real-time co-pilot
- Signaling detection
- Audiovisual notifications
- Collision avoidance
- Modular configuration
- Active intervention
- (Corner) speed monitoring

The competitive edge of OTIV.TWO lies in:

- OEM and vendor-independent solution
- Size-driven pricing advantage
- Seamlessly retrofit into existing tram systems
- Scalable, modular design that easily adapts to evolving demands

Project Team



Pilots/demonstrations (1/2)

Pilot selection aligns with

100 Climate-Neutral and Smart Cities by 2030

3 partnering operators in the cities of

1. Zaragoza (Spain)
2. Lisbon (Portugal)
3. Antwerp (Belgium)

Interested cities (scalability partners) - observers:

- Barcelona (Spain)
- Utrecht (The Netherlands)

Pilots/demonstrations (2/2)

These three networks collectively represent 90% of tram networks worldwide and cover the majority of operational scenarios found in tram systems globally.

Key Aspects	Zaragoza (Spain)	Lisbon (Portugal)	Antwerp (Belgium)
Deployment of Assisting Systems	Implementation of assisting technologies in a modern tram network	Testing assisting systems in a mixed-operation historical tram network	Deployment in a dense, multimodal urban transport environment
Network Characteristics	Modern, segregated tram infrastructure	Historic tram network with mixed traffic	High-density network integrated with other public transport modes
Operational Challenges Addressed	Safety, efficiency, and traffic interactions	Adaptation to historical urban settings	Handling high passenger volumes and multimodal interactions
Validation & Key Learnings	Testing in a fully separated network	Ensuring compatibility with existing mixed-traffic conditions	Evaluating in complex urban mobility scenarios
Global Relevance	Represents modern tram networks	Represents historical, mixed-traffic tram networks	Represents dense urban tram networks with multimodal integration

Validation metrices

1. **Accident rates**: Compare accident frequency, type, and severity pre- and post-installation using hypothesis testing and Student's t-test.
2. **Service quality**:
   - Delays, service cancellations, punctuality, vehicle availability, accuracy of route timings
   - Statistical analysis to measure improvements in service quality.
3. **Tram operator workload and system adaptability**:
   - Assess stress levels and workload using physiological sensors and surveys.
   - Feedback on operator adaptation to new system and its influence on daily operations.
4. **Human-Machine Interaction**
5. **Tram operators feedback**: Surveys and interviews to gather qualitative insights on system's impact on operators' work environment.


Innovation for rail freight transport.
ATO RTO
Shaping the future together.
DB Cargo
ProRail
HITACHI
2


OTIV
455
CAF

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BaselineNC: Driver Fatigue Monitoring

Project Focus and Objectives

Transport Safety: Driver Fatigue

Driver fatigue may contribute to as many as 20% of all road collisions (Jackson et al., 2011)

For professional drivers in the transport sector, shift work, extended driving hours and tight route schedules exacerbate the risk.

Despite regulation to limit driving time and mandate rest periods, fatigue-related incidents persist

In a survey of European bus and coach drivers, 66% reported regularly feel tired when driving and that 24% had fallen asleep whilst driving once in the previous 12 months (Vitols and Voss, 2021).

A possible driver 'microsleep' is thought to have contributed to the 2016 Croydon Tram derailment (RAIB Report18/2017)

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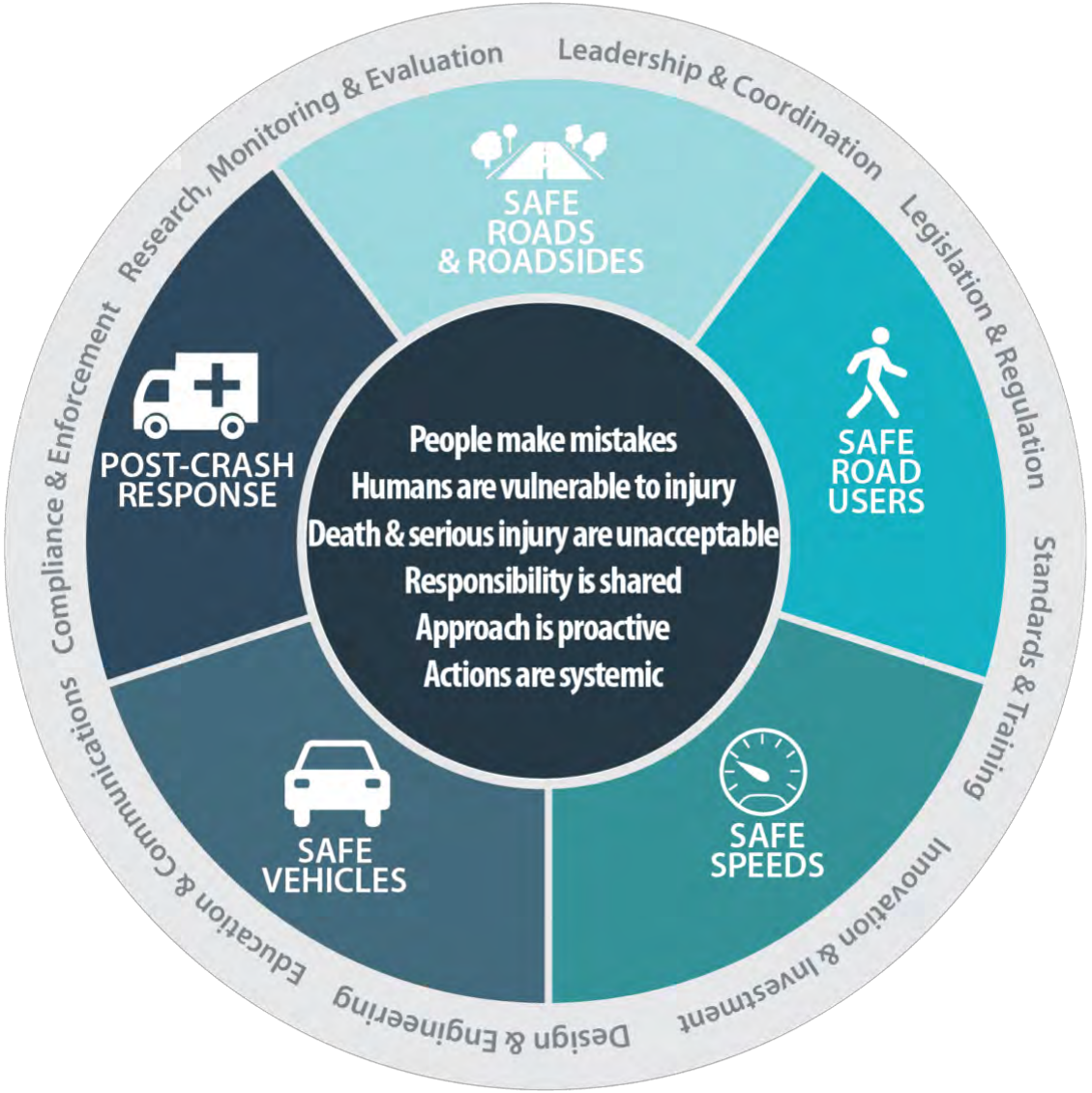
Project Focus and Objectives

Safe Systems approach to Vision Zero



Source: Agilysis, 2022 (based on models by Commonwealth of Australia, 2022; Parliamentary Advisory Council for Transport Safety & Loughborough University, 2017; NZ Transport Agency, 2016; Canadian Council of Motor Transport Administrators, 2016

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The Solution Tested

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Solution Tested – BaselineNC Workplace Fatigue Monitoring Wearable

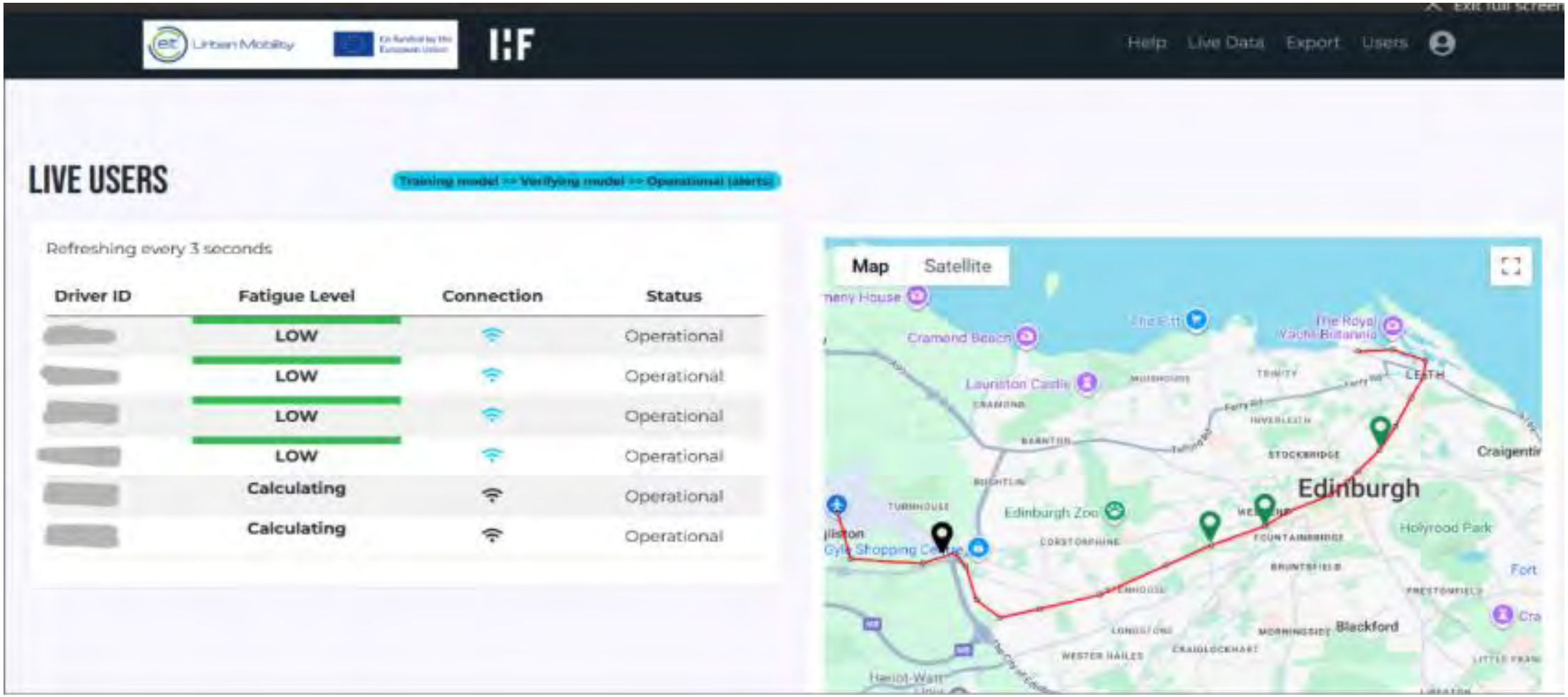
1 Wearable

2 Hub

BASELINE NC™

IHF INTEGRATED HUMAN FACTORS

Solution Tested – BaselineNC Workplace Fatigue Monitoring Wearable



The Project Consortium

eit Urban Mobility

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Edinburgh Trams

DKV

BaselineNC Project Consortium

Next Steps

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Edinburgh Napier UNIVERSITY

Susan Tully: s.tully@napier.ac.uk

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Panel Q&A

18 November 2025

Breakout Sessions – after lunch!

- Public Transport – Auditorium
- Electrification of Transport & Alternative Fuels - Auditorium
- Urban Logistics – Café
- Mobility Data Management – Café
- Health Mobility – Café

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Lunch Break

18 November 2025

Innovate UK

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- Public Transport – **Auditorium**
- Electrification of Transport & Alternative Fuels - **Auditorium**
- Urban Logistics – **Café**
- Mobility Data Management – **Café**
- Health Mobility – **Café**

Innovate UK

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Refreshment Break

18 November 2025

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Closing Remarks

18 November 2025

To connect with EIT UM Team

Register your interest and let's connect!

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