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## Karlsruhe Mobility Lab

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Hub for intelligent urban and regional mobility concepts





Please visit us

### TechnologieRegion Karlsruhe GmbH



Public authorities have joined forces with businesses, chambers of commerce and scientific institutions to form the TechnologieRegion Karlsruhe GmbH.

Together we are shaping the development of the region with the aim of strengthening and promoting it as a hub for business, science and innovation. Our focus is very much on the themes of mobility, energy, bioeconomy and IT. Projects are initiated on a real-lab scale through the strategic networking of partners from business, science and the public sector. The TechnologieRegion Karlsruhe GmbH acts as a innovation platform, takes over the steering of the different actors and contributes to co-finanacing.

### www.trk.de

#### **Facts and figures**

- Around 1.7 million people living within an area of 6,000 km<sup>2</sup>
- Working population of 675,000
- Around one-third of the labour force work in technology-intensive industries
- Economic output above the German average for many years<sup>1)</sup>
- Regional GDP risen to more than € 60 billion in recent years



Jochen Ehlgötz Managing Director TechnologieRegion Karlsruhe GmbH

Through its partners, the Karlsruhe Mobility Lab powered by TechnologieRegion Karlsruhe GmbH (TRK) has developed into a globally recognised centre of intelligent concepts in urban and regional mobility. In a unique ecosystem, science, industry, the public sector and innovative transport companies work together on interdisciplinary approaches for sustainable and user-friendly mobility. In this unique climate of innovation, ideas for tomorrow's mobility are being created, put into practice, analysed and tested. The TRK paves the way for lighthouse projects and assists in the search for co-funding.

A major focus of the Karlsruhe Mobility Lab is on continuously developing local public transport and new mobility concepts. As a hub of research, the Karlsruhe region offers a unique density of mobility-related institutions. Together, all actors contribute to the mobility revolution worldwide.

On the following pages we proudly present the solutions for the future of mobility made in Karlsruhe to be experienced at our joint stand.

Yours sincerely Jochen Ehlgötz

# **Karlsruhe Mobility Lab**

powered by Karlsruhe TechnologyRegion

### Hub for intelligent urban and regional mobility concepts

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The Karlsruhe Mobility Lab powered by Karlsruhe Technology-Region is a globally recognized Centre for the development of intelligent concepts for the urban and regional mobility of the future. A major focus of its innovation efforts is on the further development of local public transport and the development of new mobility concepts - both essential for the mobility transition. The Karlsruhe Mobility Lab is a pioneer in sustainable mobility development.

In the unique ecosystem of the Karlsruhe TechnologyRegion, science, business, the public sector and innovative transport

companies work together on interdisciplinary approaches. In the region, public transport and new mobility concepts are developed, put into practice, analyzed and tested with the citizens. This sense of community is a driver of the region's strong innovative power.

Politics and science are also focusing on this unique climate of innovation: the region is home to state institutions such as the Baden-Württemberg Institute for Sustainable Mobility and a location of the German Center for Future Mobility (DZM).



### on-demand mobility

modelling & simulation & gamification

automated mobility systems

data & artificial intelligence

multimodal transport planning

multimodal logistic solutions

As a university and research location, the Karlsruhe TechnologyRegion offers a unique density of mobility-related research projects and institutions. In addition to science, some internationally leading companies such as INIT or PTV have their headquarters in the region and successfully spread mobility solutions "Made in the Karlsruhe TechnologyRegion" all over the world.

Much has already been achieved in the Karlsruhe Mobility Lab, e.g., a convenient mobility platform that integrates individually usable means of transport such as car and bike

#### e-mobility

### last mile

**PT networks optimization & operation** 

sharing as well as intermodal traffic control, via autonomous first/last mile services in on-demand traffic, cross-border mobility solutions, a large-scale network of cycle paths and innovative high-speed cycle routes, and last but not least the Karlsruhe Tram Train Model, which has attracted worldwide attention.

# Karlsruhe Mobility Lab

### **Country to City Bridge (C2CBridge)**



Country to City Bridge (C2CBridge) is developing a user-centered public transport service that offers attractive alternatives to private cars between rural and urban areas. The core components are autonomous, platooning-capable, car-sized on-demand shared buses and intelligent transfer hubs. Citizens and stakeholders are involved in the development process through immersive visualizations. The aim is to create sustainable and efficient mobility solutions that reduce traffic and improve the quality of life in both urban and rural areas.

### www.kamo.one/c2c-bridge

🗾 Fraunhofer







### **Moby Dex – multimodal mobility index**



The public transport of the future? Sustainable, comfortable, fast, and affordable, of course. But how do we achieve that? To help with this, the research project Moby Dex is developing a platform to compute a regional mobility index that compares mobility demand with available offers. This allows many planning questions to be solved in data-driven fashion.

Where are connections missing? Where can bicycles or e-scooters optimally complement the offerings? But Moby Dex doesn't just help planners. Companies can also use Moby Dex for site selection or for the mobility planning of their employees. We'll be happy to show you how it works.

### mobydex.org

### **Overcoming the challenges** of staff shortages

### Messe Karlsruhe IT-TRANS | 3 – 5 March 2026



Public transport companies are facing major challenges: Qualified drivers are in short supply, and the lack of experienced professionals is becoming increasingly critical across all departments. But INIT's smart solutions can help you tackle the shortage of human resources and expertise.

- Speed up onboarding of new employees
- Bridge operational and knowledge gaps
- Overcome language barriers
- Ease the burden on existing staff

Discover how assistance systems, language assistance solutions, automation, tailored service, as well as cloud and hosting options can support you in navigating these challenges.

#### www.initse.com

Visit us at hall A3, booth 500!



As organiser of IT-TRANS, the leading international conference and exhibition for intelligent solutions in passenger transport, Messe Karlsruhe offers a platform for exchange to actively shape the future of passenger transport.

Therefore, Messe Karlsruhe is happy to announce the follow-up event in 2026, which will offer a dedicated stage to showcase future-oriented innovation and digital solutions.

With a new formed Steering, Market and Programme Committee made up of experts from industry, science and transport companies, Messe Karlsruhe identifies the latest trends and topics of the sector and takes IT-TRANS to the next level! Join us: 3 – 5 March 2026, Karlsruhe Trade Fair Centre

#### www.messe-karlsruhe.de/en www.it-trans.org/en

### **KAMO: Karlsruhe Mobility High Performance Center**



The transition in mobility has many facets. Sustainability, individuality and independent travel must be harmonized and implemented with the technical possibilities of mechanical engineering, computer science and electrical engineering. Interdisciplinary solutions are required in order to develop demand-oriented mobility offers.

Since 2016, the institutions for research, education and transfer in Karlsruhe, Germany have been working together on innovative mobility solutions.



### **KIT Mobility Systems Center**



We show how future, automated mobility and logistics solutions can influence urban and rural traffic. Therefor we present results from current research projects at KIT. The target group are municipal decision-makers and interested municipalities who would like to get an idea of what future mobility could look like.

#### www.kamo.one

#### www.mobilitaetssysteme.kit.edu

### Karlsruher Verkehrsverbund regioKArgoTramTrain GmbH (KVV)



The KVV is one of the largest public transport networks in southern Germany and the most important mobility provider within the Upper Rhine Valley, consisting of more than 20 transport companies. Albtal-Verkehrs-Gesellschaft (AVG) and Verkehrsbetriebe Karlsruhe (VBK) operate the tram and light rail within the KVV area. AVG is an elementary pillar of the "Karlsruhe Model" which is a tram-train system linking the inner-city tram network of the fan-shaped city with the rail lines in the region.

126 million passengers use this attractive public transport offers of the municipal association yearly, which was founded in 1994.



regioKArgoTramTrain addresses the increasing demand for logistic and mobility services as well as transportation infrastructure while living spaces are becoming more limited, as a result of urbanization and increasing e-commerce.

A concept for dual use of rail infrastructure and vehicles for both, passenger and cargo transport, will be developed. New technological opportunities of automation and digitalization are addressed by automated stopping and starting at platforms based on Artificial Intelligence. A living lab to demonstrate the developed system will be carried out in 2027.







#### www.regioKArgoTramTrain.de

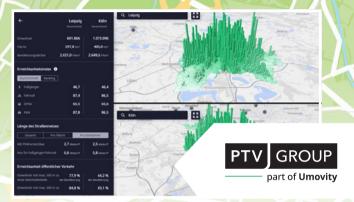
#### www.kvv.de

### regiomove: Anything is possible



The goal of regiomove: Connecting the existing public transportation network with new mobility services and the communities in the area. No matter if tram, train, bus, bike, e-scooter, ondemand-shuttle or car sharing. No matter if rural or urban.

The regional cross-linking is carried out using two fundamental components: The ports and the app. At regiomove ports people can easily connect their journey with tram, bus, on-demandshuttles, shared bikes, e-scooters or cars. Such combined journeys are digitally connected via the regiomove app. With only one single account you can route, book and pay intermodal journeys. Furthermore, the ports may offer new service components, like digital information terminals, charging stations, locker boxes or bicycle service stations.



Whether it's private or public transport, traffic needs to keep moving. At the same time, promoting sustainable mobility and ensuring the safety of all road users are key priorities. That's why transport modelling and simulation are becoming increasingly important. At the PTV booth, UITP Summit visitors can explore how data and software come together to support smarter mobility: from multimodal forecasting and demandbased service planning to in-depth accessibility analysis. With the help of VR headsets, they can step into a virtual traffic management centre and experience the power of traffic simulations and forecasts firsthand.

Please visit us at our stand A3252 in hall A3!

#### www.kvv.de/regiomove

#### www.ptvgroup.com

**PTV Group** 

### TTK – Your Mobility Expert URBANE



TTK is an independent Mobility Consulting company. For 30 years, TTK has strategically advised and closely cooperated with public authorities and transport operators on the optimization and development of public transport networks and systems. More than 60 international employees provide both strategic transport and infrastructure planning.

Looking for advanced expertise in mobility planning? Working on a transport infrastructure project? Meet our TTK specialists at the Karlsruhe Mobility Lab stand – let's shape your mobility together! The project URBANE – Upscaling Innovative Green Urban Logistics Solutions Through Multi-Actor Collaboration and Physical Internet (PI) – supports the European Commission's goals for "zero-emission last-mile deliveries". It promotes the transition to effective, safe, and sustainable last-mile transport through four Lighthouse Living Labs (LLs) in Helsinki, Bologna, Valladolid, and Thessaloniki, which will demonstrate innovative last-mile solutions. An Innovation Transferability Platform with digital twinning tools and a data-driven Impact Assessment Radar enables the adaptation and replication of these solutions in the Twinning Living Labs in Barcelona and Karlsruhe. The project will run until February 2026.

**IRBANE** 

#### www.urbane-horizoneurope.eu

#### www.ttk.de/en

### UITP Regional Training Centre Karlsruhe



Technologie Region Karlsruhe

In collaboration with:

Three times a year, the UITP Regional Training Centre Karlsruhe offers training programmes for public transport. Those programmes are: Ticketing, Bus planning and Scheduling, Cybersecurity, Autonomous Driving and Mobility as a Service.

In 2025, the Karlsruhe TechnologyRegion will host UITP training programmes on the following topics:

1. training programme: Data and Business Intelligence (May 13 – 15, 2025) PTV as venue & technical visit at FZI Content input from INIT and PTV:

- Michael Beck, Director Development, INIT Case Study: How to use passenger data for PT operation
- Sebastian Sielemann, Product Management, PTV Case Study: Incorporation of (passenger) count data into transportation models and what are the benefits

2. training programme: Ticketing and Fare Management (September 9 – 11, 2025) INIT as venue & technical visit at KVV Content input from PTV and KVV

3. training programme: Intelligent Transport Systems in Public Transport (October 7 – 9, 2025) Programme details in preparation.

### www.uitp.org/trainings

### **Future Mobility Award**



The Future Mobility Award is intended to recognise sustainable mobility solutions for the transport sector. The aim is to give start-ups the opportunity to present themselves and make their ideas and solutions for the transport sector visible and to establish an international competition that takes place each year. The award is organized by the initiators aen – automotive. engineering. network e.V., Messe Karlsruhe and Nahverkehrspraxis/Fachverlag Dr. H. Arnold GmbH. The Economic Development Agency of the City of Karlsruhe is providing the winning prize of 5,000 euros. In addition, the winning start-up will receive coaching from aen experts on request.

This year, the award will be presented for the sixth time during the Regionalkonferenz Mobilitätswende on 23rd September 2025 in Karlsruhe.

### www.ae-network.de/future-mobility-award-2025





### 8. Regionalkonferenz Mobilitätswende Intelligente Mobilität – Innovationen und KI für die Zukunft

Tuesday, 23 September 2025, Karlsruhe Congress Center



www.regionalkonferenz-mobilitaetswende.de

Main sponsors







**Cooperation partner** 











The partners of the Karlsruhe Mobility Lab at UITP Summit Hamburg 2025:



















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