

Project Results Catalogue

ERA-NET Cofund Call

**Urban Accessibility and Connectivity
(ENUAC)**



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**Urban Accessibility and Connectivity
(ENUAC)**

URBAN  EUROPE

<https://jpi-urbaneurope.eu>



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Introduction

The ERA-NET Cofund Urban Accessibility and Connectivity (ENUAC) was a research programme aimed at driving transitions to inclusive and sustainable models for urban connectivity and sustainability. This catalogue presents the results from the 15 projects funded in the first ENUAC call.

As part of the ENUAC research programme 23 partners from 16 countries pooled resources to implement a series of interdisciplinary calls for innovation and research projects with a focus on improving accessibility and connectivity for all groups of society while at the same time moving towards more sustainable urban mobility systems. For this, ENUAC invited cities, researchers, businesses, civil society, municipalities, and other stakeholders to create research and innovation projects.

The first ENUAC call opened in September 2019 and the projects funded in this call concluded in 2024. ENUAC issued two other calls; the Innovations for Managing Sustainable Urban Accessibility in 2022, a collaboration between seven funding agencies in five European countries, where innovative solutions are the focal point. The third call, the ERA-NET Cofund Urban Accessibility and Connectivity Sino-European call, was issued through a joint collaboration between JPI Urban Europe and the National Natural Science Foundation of China in 2022. This call address the urban mobility, accessibility,

and connectivity challenge in the Sino-European cooperation, with a focus on knowledge and impact.

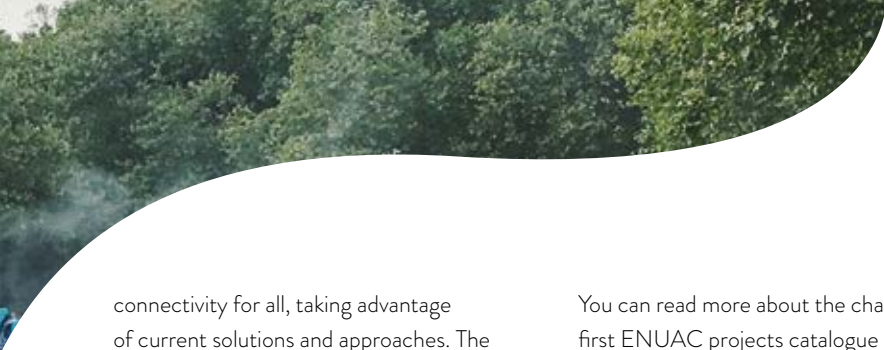
ENUAC was funded under the Horizon 2020 ERA-NET Co-fund scheme under grant agreement N°875022 and supported by the European Commission. The countries and funding agencies involved in ENUAC as well as coordinators per country and partners per type of organization can be seen in the graphics on page 15.

WHAT IS IN THIS CATALOGUE?

The ENUAC Projects Results catalogue provides an overview of the 15 projects funded in the first call in the programme, the respective challenges they tackled and encountered when carrying out their research, the methods they utilised, as well as the results they produced. The challenges ENUAC projects addressed can be seen in the graphic on page 12.

The call included five challenges that needed to be responded in order to move towards realising sustainable urban accessibility and





connectivity for all, taking advantage of current solutions and approaches. The funded projects addressed at least one of the challenges but some of the projects related to several challenges as they focused on a crosscutting subject or an issue that was at the frontier of several.

Challenge 1

Evolving solutions for an integrated approach on sustainable urban physical mobility and transport, land use and digital connectivity

Challenge 2

Develop and support the implementation of innovative mobility systems and services with a potential to contribute to sustainable urban mobility

Challenge 3

Transform and re-organise urban spaces to pave the ground for sustainable urban mobility and accessibility at local level, from the street scale to the district

Challenge 4

Develop effective policy options for achieving a shift towards sustainable urban accessibility and connectivity

Challenge 5

Change behaviours and perspectives towards sustainable urban accessibility and connectivity


You can read more about the challenges in the first ENUAC projects catalogue (www.jpi-urban-europe.eu/wp-content/uploads/2021/10/ENUAC-projects-catalogue_upd-081021_webb.pdf).

The catalogue also highlights the Accessibility and Connectivity Knowledge Hub for Urban Transformation in Europe (ACUTE) which was established under the framework of ENUAC and consolidated knowledge of all existing ENUAC projects.

The ENUAC projects united a broad range of research methods from mixed methods, testing AI inspired models, living labs, interviews, as well as experimental approaches, and the application of serious games. The projects bridged the gap between policy and real-world experiences amongst other things through putting decision makers in the shoes of users. ENUAC projects built capacity and awareness across Europe amongst policy- and decision makers through workshops, games, and trainings, which also served to identify remaining research gaps.

A NEW GENERATION OF URBAN SOLUTIONS

The variety of methods brought a wealth of new and often surprising results. For example, findings challenge common notions such as that park-and-ride facilities are the best way to encourage public transport use.



They further point out how supposedly optimal transport routes can fail vulnerable users.

Many of the findings outline the complexity of factors that need to be considered when designing public transport for all. Emerging findings included the need to consider the emotional and social needs of under-researched groups. They also elevate that residents in low-density and marginalised areas can have fewer opportunities to benefit from services such as shared mobility, highlighting potential equity concerns.

ENUAC projects investigated the potential of so-called superblocks to achieving climate targets and researched what is needed to make cities truly walkable. The projects showed how digital interventions can support active mobility choices, and how findings change when studying the whole door-to-door journey. They outlined the potential of geofencing to revolutionise urban mobility and analysed how mobility hubs could become game-changers for sustainable and inclusive urban transport.

The projects produced a wealth of practical tools publicly available such as workshop manuals for city administrations, comprehensive handbooks for practitioners and policymakers available in multiple languages as well as tools to gather feedback from citizens or analyse mobility needs across territories. The findings of ENUAC have already led to follow up projects that build on the produced results.

A EUROPEAN FRAMEWORK



ENUAC was conceptualised as part of the Joint Programming Initiative (JPI) Urban Europe. JPI Urban Europe was a strategic and intergovernmental partnership of countries that coordinated research and innovation around the challenge of sustainable urban development between 2010 until 2022 when the European Partnership Driving Urban Transitions (DUT) took over this role. Over the past years, JPI Urban Europe has been a key platform to make available knowledge for sustainable urban pathways. More than 20 countries were engaged in the initiative and JPI Urban Europe has a long-standing cooperation with the European Commission as demonstrated by a total of six ERA-NET Co-fund calls that were launched under the European research and innovation framework programme – Horizon 2020.

Through the ERA-NET instrument the European Commission provides top-up funding and strengthens the relationship of the European Agencies and JPI Urban Europe. Additionally, the ERA-NET Co-funds also facilitate the participation of EU Member States or Associated States in such joint calls and programme activities.

ACUTE

The Knowledge Hub ACUTE, established as an expert facility under the framework of ENUAC, started in November 2022. Experts engaged in ACUTE supported the ENUAC programme and its projects with the



PROJECT	MAIN CALL CHALLENGES ADDRESSED	URBAN LIVING LAB	KEY AREA 1	KEY AREA 2	KEY AREA 3	SUSTAINABLE DEVELOPMENT GOALS	URBAN AGENDA OF EU
ASAP	2			•	•	11,9	10.10,10.11
CATAPULT	4		•	•		11,10	10.10,10.11,10.5
COCOMO	2		•	•		11,10,9,3	10.10, 10.5, 10.3
Dynamic Mobility Nudge (DyMoN)	5		•	•		11,13	10.10, 10.11
EASIER	5		•	•		11,13,3	10.10, 10.5, 10.9, 10.3
EX-TRA	3		•	•		11,9,3	10.10, 10.9
GeoSence	4					11,3	10.10, 10.11, 10.2
ITEM	5		•	•		11,7,10	10.10, 10.11, 10.8, 10.5
JUSTICE	4					11,10	10.10, 10.12, 10.9
MyFairShare	4	•	•	•		11,13	10.10, 10.8
SmartHubs	5	•	•	•		11,19,5	10.10, 10.11, 10.5, 10.1
Sortedmobility	1		•			11,9	10.10, 10.11, 10.7
TAP for uncertain futures	1		•			11	10.10, 10.11, 10.7, 10.9
TuneOurBlock	3	•	•	•	•	11,13	10.10, 10.7, 10.9
WalkUrban	5		•	•		11,13,3	10.10, 10.11, 10.9

Key area 1: Multi-modal and sustainable urban mobility

Key area 2: Human-centred urban spaces and morphology

Key area 3: Smart urban production, logistics and services

[Read more about the SDG](#)

[Read more about the Urban Agenda of EU](#)



aim to help projects overcome the fragmentation of findings and experiences. ACUTE created a space to consolidate and synthesis of knowledge and encouraged cross-project cooperation.

ACUTE's five reports reveal key insights from the 15 ENUAC projects, focusing on their goals, strategies, challenges and real-world impact. The findings show that in terms of implementation and impact, pilot programs and testbeds across European cities are central for the projects. These projects have created tools such as mobility data analysis software, serious games for community engagement, and policy guidelines for inclusive urban planning. Crucially, collaboration among city governments, private companies, and community groups has driven success, enabling diverse insights to shape outcomes. Although challenges remain, particularly ensuring the longevity of project outcomes and deeper cooperation, these innovative approaches set a strong stakeholder involvement for future urban transformations.

The reports offer insights into the ENUAC projects, covering key objectives, accessibility concepts, coalition-building, and how project outcomes are implemented. They also suggest

improvements based on lessons learned. The reports highlight the research encouraged within the ENUAC portfolio, identify gaps in research and implementation, and outline an outreach plan to better engage practitioners and enhance the understanding of their needs.

[Download the reports here.](#)

A KNOWLEDGE HUB PLATFORM

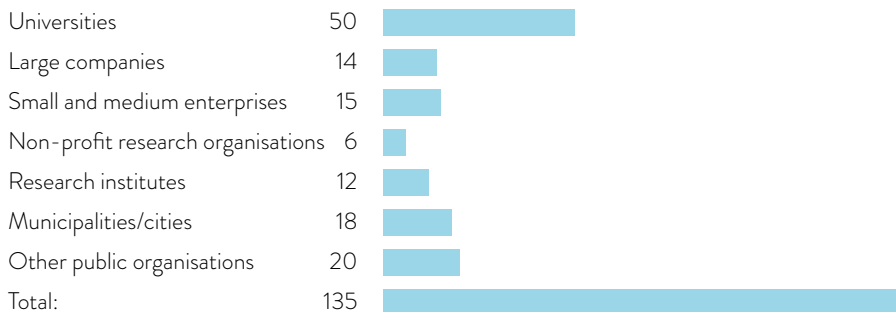
Another result of ACUTE's work is a digital community platform that provides an inclusive environment for urban actors from different backgrounds (researchers, practitioners, public administrators, entrepreneurs, social innovators, etc.) to upload reports, articles and start conversations. Check out the 15 Minutes City Community Knowledge Hub on the platform Expertises Territoires.

[Visit the platform here.](#)

COORDINATORS PER COUNTRY



PARTNERS PER TYPE OF ORGANISATION



COUNTRIES	AGENCIES
Austria	FFG
Belgium	FRSF.N.R.S, FWO, Innoviris, VLAIO
Denmark	IFD
Cyprus	RIF
France	ANR
Germany	BMBF
Italy	MIUR
Latvia	VIAA
Netherlands	NWO
Norway	RCN
Poland	NCN
Romania	UEFISCDI
Slovenia	ARRS
Sweden	Formas, SWEA, Vinnova
Türkiye	TÜBİTAK

All countries mentioned are eligible to access the European Commission funds.





The challenges for the projects in ENUAC



CHALLENGE 1

Evolving solutions for an integrated approach on sustainable urban physical mobility and transport, land use and digital connectivity



CHALLENGE 2

Develop and support the implementation of innovative mobility systems and services with a potential to contribute to sustainable urban mobility



CHALLENGE 3

Transform and re-organise urban spaces to pave the ground for sustainable urban mobility and accessibility at local level, from the street scale to the district



CHALLENGE 4

Develop effective policy options for achieving a shift towards sustainable urban accessibility and connectivity



CHALLENGE 5

Change behaviours and perspectives towards sustainable urban accessibility and connectivity



*Fludis - Floating warehouse to store and sort parcels that will later be distributed by cargo bikes.
(Source: Fluids)*

ASAP

Innovative Solutions For Existing Underutilised Resources

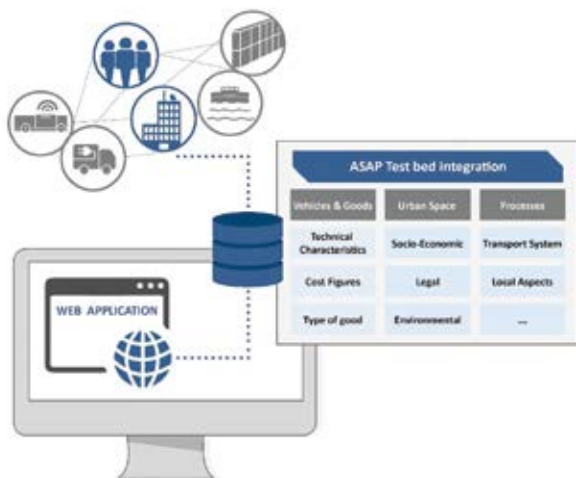
The Awakening Sleeping Assets project (ASAP) gathered and processed relevant information on obstacles, success factors, logistics parameters, framework conditions and impacts of sustainable urban logistics solutions. On its journey the project has revitalised resources across four European cities, Vienna, Stockholm, Hamburg, and Paris, and uncovered a variety of resources for a more sustainable logistics infrastructure.

ANALYSIS OF BARRIERS

One of the first project outputs was a comprehensive review of sleeping assets, i.e. underused or inactive infrastructure or resources for sustainable urban logistics, as well

as barriers impeding their implementation. This process involved 13 expert interviews with individuals from amongst others city departments, real estate companies, and construction organisations.

“We asked stakeholders mainly about the barriers facing these different types of sleeping assets—implementation barriers, user resistance barriers, financial barriers, and any political and legislative barriers”, says project coordinator Susanne Wrighton, University of Natural Resources and Life Sciences. To include a variety of stakeholders, the project facilitated numerous workshops in the partner cities with individuals from various city departments



which served as a basis for refining guidelines. Over the course of this process, a [workshop manual](#) was produced for project partners that can be used by city administrations in the future.

A key challenge the project identified, concerned so-called sustainable urban logistic plans (SULPs). These are blueprints for coordinating goods and freight movement within urban areas and offer policymakers pathways for achieving climate and logistic goals. SULPs face challenges due to the complexity of urban freight distribution and the involvement of many actors with different interests. ASAP produced a [report](#), analysing the state of SULPs, gaps, and opportunities to better integrate the Sustainable Development Goals in them.

FROM THEORY TO PRACTICE

An integral part of ASAP's approach are so-called "testbeds", pilot projects and living labs, that allowed cities to experiment with underutilised infrastructure and resources. The

project produced guidelines for cities, which will soon be available on the [project's website](#). As part of the process, the project conducted simulations like floating pop-up recycling barges, for example a transport combination of cargo bikes and waterways in Paris. These models allow cities to forecast aspects such as CO₂ emission savings, reduction in emissions and fuel use, which in turn enables data-driven decisions. Recognising the role of technology in sustainable logistics, ASAP provided an overview of opportunities for IT solutions and new technologies in an [overview](#).



MORE INFO

[JPI project page](#)

[Results interview](#)

Project coordinators: Patrick Hirsch, Susanne Wrigton, University of Natural Resources and Life Sciences, Vienna, and Hans Häuslmayer, h2 projekt-beratung KG. Project duration: 2021-2024

CATAPULT

Detecting Accessibility Blind Spots in City Transport Systems

Children, senior citizens and people with physical or cognitive impairments are under researched groups in automated mobility. How can it be designed and used in a more inclusive way? The CATAPULT project used innovative methods to assess the accessibility situation in city transport systems and uncovered valuable insights by focusing on the needs of these under researched groups.

The project conducted two field tests consisting of rides in regular public transportation and automated shuttle busses in Pörschach, Austria with 48 participants as well as in Linköping, Sweden with 25 participants. The test rides included different groups such as children, senior citizens, and people with visual and cognitive impairments. During the rides participants were encouraged to vocalise their immediate emotions, experiences, and thoughts.



LACK OF INFORMATION

A key finding of the project is a significant gap in appropriate transport information on both automated shuttle buses and regular public transportation. Specifically, this included the absence of braille and more visually legible text for the visually impaired and blind.

“The issue often boiled down to either a lack of information or the information not being presented in an accessible manner. This was particularly true for individuals with visual or hearing impairments, who frequently found themselves a little lost”, says Nora Spiegel, project coordinator, AustriaTech.

A striking discovery was the strong wish for human interaction expressed by transport users who were interviewed in the project, particularly senior citizens, which foster a sense of security and comfort on public transport vehicles.

A PLAYFUL APPROACH

To address the issues identified in their research, CATAPULT developed two so-called serious games. Serious games have a primary purpose other than pure entertainment. The games engaged decision-makers and transport users in planning and understanding automated mobility services.



CATAPULT route planning serious game session.

The first is a route planning game, tested and piloted in Leuven, Belgium. The game involved senior citizens in the planning process of optimal routes and stops for automated shuttle busses. The second game was an awareness game. It was designed to put decision-makers in the shoes of the target user groups when using public transport and was played with political decision makers in Pörschach, Austria.

The game presented various scenarios and challenges, such as navigating a bus without a driver, and asked participants to consider how they would react in these situations. By fostering empathy and understanding, this game sought to bridge the gap between policy and real-world experiences.

THE ROAD AHEAD

Despite the progress made by CATAPULT, the slow pace of technological development

and the challenges posed by safety regulations and legal frameworks present ongoing hurdles in the implementation of fully inclusive automated mobility services. However, as we move into an increasingly automated world, the lessons learnt, and the tools developed by this project will play a crucial role in shaping a more connected, sustainable, and equitable future for all.

Photo by the CATAPULT project



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Nora Spiegel,
AustriaTech*

Project duration: 2021-2023



COCOMO

Decoding Shared Mobility's Diverse Landscapes

Shared micro-mobility, which includes bicycles, e-bikes, and scooters available on-demand rather than owned by individuals, is transforming urban travel. But how can cities ensure these services work for everyone?

The COCOMO project examined this question across three European cities: Manchester, Utrecht, and Malmö, revealing important insights about who uses these services and how they impact transport equality, particularly for vulnerable and lower-income groups. The cities were specifically chosen for their contrasting environments.

“Since there’s lots of cycling infrastructure in Utrecht, but much less so in Manchester, policy objectives are different, and the mobility cultures are different”, says Dick Ettema, the project coordinator, Utrecht University.

DEMOGRAPHICS OF SHARED MOBILITY

The research revealed clear patterns in who adopts these services:

- Younger and male individuals were consistently more likely to use shared mobility across all three cities.
- Higher-educated people used shared bikes more frequently but e-scooters less.
- Household income was positively correlated with the use of shared e-bikes, e-mopeds, and e-cargo bikes in Utrecht.
- An unexpected finding emerged regarding accessibility for those with disabilities who used shared e-mopeds more than others in Utrecht.



THE IMPACT OF LOCATION ON MOBILITY USE

Location significantly influenced adoption patterns. In high-density central areas of Malmö, shared mobility services saw notably higher usage rates. Utrecht showed higher adoption of shared bikes and e-cargo bikes in denser areas with sufficient service supply, though interestingly, shared e-bikes saw less use in central areas due to parking restrictions. Manchester revealed a distinct pattern, with e-bikes and e-scooters showing higher usage near transit stations, reinforcing their role in public transport connections. The research found that residents in low-density and marginalised areas had fewer opportunities to benefit from these services, highlighting potential equity concerns.

BRIDGING GAPS

- Lower-income individuals reported increased accessibility through shared mobility across all three cities.
- The research showed that e-scooters and e-mopeds showed greater potential in facilitating transport equity than shared bikes.
- Low-income users received comparable or greater mobility benefits from these services compared to high-income users, likely because they could serve as alternatives to private cars.

CREATING AN INCLUSIVE FUTURE

The project's findings suggest several key paths forward for cities looking to make shared mobility more inclusive. The research emphasises increasing awareness and acceptance of shared mobility, particularly among underrepresented groups. Better cycling infrastructure and improved traffic safety, integrated into the system design from the start, could encourage more women to use these services, while shared tricycles might offer safer, more accessible options for older users.

The research suggests lowering prices could help improve mobility benefits, especially for low-income users. Cities should focus on improving accessibility through better infrastructure and parking facilities.



MORE INFO

[JPI project page](#)
[Results interview](#)

*Project coordinator: Dea van Lierop,
Utrecht University
Project duration: 2021-2024*

DyMoN

Smart Technology for Active Travel

Cities around the world are grappling with traffic congestion and the need to encourage people to use more active forms of transportation. The project **Dynamic Mobility Nudge (DyMoN)** explored a novel approach to the challenge by developing a system that combines real-time data to run a pilot that delivered personalised with context-dependent nudges to commuters. The project set out to uncover whether such a technology-driven approach could be technically feasible and to reveal if nudges motivate people to change their commuting behaviors.

REAL WORLD TESTS AND ANALYSIS

The system sends out messages of combined multiple data streams - traffic conditions, weather forecasts, and other contextual information - to deliver relevant notifications to its recipients. The project tested their system in Salzburg's Itzling Science City area, a business district home to multiple companies and a university department. 60 participants received notifications over three months, with researchers carefully calibrating the frequency. Two daily messages - one before work and one in the evening - proved optimal, with user feedback suggesting more would have been overwhelming.

The system included gamification elements to maintain engagement. Participants earned points for sustainable travel choices, contributing to a collective pool. Once certain point thresholds were reached, community events like picnics were unlocked, creating social incentives for participation.

Though the sample size was too small for definitive quantitative conclusions, qualitative feedback through three rounds of surveys revealed clear patterns. Messages focusing on health benefits proved most effective, followed by those highlighting environmental impacts, with generic inspirational messages coming third.





“These are soft interventions. They won’t sway someone who’s very set in their ways, but they can help people who are already on the fence or just need that last push”, says David Leister, project coordinator, Salzburg Research Forschungsgesellschaft mbH.

The project’s technical implementation proved highly successful. A data hub effectively processed various information sources and delivered contextually appropriate messages. This open source [technical framework](#) is now available, allowing other cities to build upon their work.

NUDGING CITIES FORWARD

The project produced several practical tools for cities wanting to implement similar systems. For instance, their comprehensive [handbook](#) is designed for practitioners and policymakers and provides accessible explanations and practical guidance for designing nudging campaigns.

Through co-creation workshops, researchers identified important nuances in how nudging

systems should work. Different user groups need different approaches—parents, for instance, need different messages than seniors. While the pilot was relatively small, it demonstrated both the technical feasibility and potential effectiveness of context-aware nudging systems. Most significantly, it showed how carefully designed digital interventions can support active mobility choices. As cities work to encourage walking, cycling and public transport use, DyMoN’s approach offers a promising addition to their toolkit.

Photo by the DyMoN project



MORE INFO

[JPI project page](#)

[Results interview](#)

Project coordinator:

*Claudia Luger-Bazinger, Salzburg Research
Forschungsgesellschaft GmbH*

Project duration: 2021-2024

EASIER

Making Sustainable Personal Transport More Attractive

EASIER aimed to understand how we can influence people to choose more sustainable and active modes of transportation by studying the entire door-to-door journey. For this, EASIER brought together a diverse international team of experts from psychology, architecture, policy, modelling, and mathematics from Denmark, Germany, Norway and Sweden to tackle this complex challenge.

The project includes case studies in four similar northern European countries, allowing for the exchange of insights and best practices across different contexts. That urban

surroundings significantly influence perceived safety, mode choice, and public transport ridership, was one of the early findings. Consequently, the project employed a useful 48-point criteria system for evaluating station performance. It has worked so well that it has, in turn, spawned a follow-up project with the Danish Standards organisation to create guidelines for the design and evaluation of transport terminals throughout the country.

Another surprising finding in the Copenhagen region challenged the common notion that providing park-and-ride facilities is the best way to encourage public transport use.



An integrated transit hub featuring S-train, metro, and bus services, showcasing the connectivity of public transport in the Copenhagen Capital Region. Metroselskabet/Bax Lindhardt



This station opens up to a bustling area in the Copenhagen Capital Region, seamlessly blending into the vibrant surroundings and human activity. Metroselskabet/Ditte Valente

Instead, the project found that having houses, apartments, and workplaces closer to stations increases public transport usage more than placing parking lots near the stations. In the project's optimisation work, EASIER examined the impact of passenger behaviour on the design of a bus rapid transit (BRT) line in the Greater Capital Region of Copenhagen ([see here](#) for more detailed information).

THE USER EXPERIENCE AT THE CENTRE

In Denmark, Norway, Germany, and Sweden, EASIER also focused on the policy side of urban mobility, examining why public transport organisations are sometimes reluctant to implement promising design recommendations. The research reveals amongst other things that when organisations at different levels of government are not aligned, it can quickly lead to conflicting priorities and make it challenging to work together effectively.

These issues can create obstacles to providing seamless door-to-door journeys for passengers. To tackle these problems, it's crucial to put the user and their entire journey at the heart of the decision-making process. This approach helps to break down silos between organisations and ensures that everyone is working towards a common goal: providing a well-connected, easy-to-navigate transportation system for users.



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Evelien van der Hurk,
Technical University of Denmark
Project duration: 2021-2024*



Photo drone area di intervento Procaccini.

EX-TRA

Experimenting to Transform Urban Mobility

The EX-TRA project championed a playful, experimental approach to urban redesign, providing a low-cost, low-risk way to test ideas and collect feedback from citizens. At the heart of EX-TRA is the concept of the “post-car city,” a city where accessibility is primarily provided by proximity, walking, cycling, or wheelchair use, and where there are ample alternative mobility options that reduce the need for car ownership and use.

The project involves six cities – Ghent, Amsterdam, Munich, Bologna, Milan, and London – each at different stages of the transition process but united in their desire to make significant strides towards becoming post-car cities. Using the tools produced by EX-TRA, these cities experimented with temporary interventions to test new ideas, gather feedback from citizens, and learn valu-

able lessons about what works and what does not in their specific contexts.

LEARNING FROM THE STREETS

One of the key tools developed by EX-TRA is StreetECHO, a platform, freely accessible globally for supporting citizen engagement in street transformation. Consisting of an online survey, a data visualisation webtool and a detailed protocol for face-to-face community workshops, StreetECHO helps policymakers collect feedback from citizens, understand their needs and preferences, and involve them in the co-creation of street transformation, valuable insights into how people perceive and interact with their urban environments.

PUTTING PEDESTRIANS ON THE MAP

Additionally, the project developed the Geo Open Accessibility Tool (GOAT). GOAT



Photo by Margherita Caprilli for Fondazione Innovazione Urbana.

takes a data-driven approach to assessing the quality of accessibility by walking and cycling. GOAT is an interactive tool that allows policymakers and planning offices to explore how different interventions could improve accessibility in their cities and regions. Built on the [OpenStreetMap](#) platform, GOAT enables users to assess the accessibility of everyday needs, such as grocery stores, schools, and healthcare facilities. The tool has garnered so much interest during the project that it has become commercially available through the company [Plan4Better](#).

EXPLORING FUTURE SCENARIOS

Another tool developed by EX-TRA is the Dashboard for Alternative Mobility Scenarios (D4AMS), an agent-based modelling platform that enables policymakers to explore radical future scenarios involving street closures, bike-sharing, and car-sharing. D4AMS helps cities understand the potential impacts of bold interventions and identify the most promising strategies for achieving their

mobility goals. EX-TRA has also developed the Strategy for Change Workshop Protocol and the Conversation Starter Deck, two tools aimed at fostering knowledge sharing and the effective governance of street experiments, bringing policymakers with different perspectives and concerns together.

With projects like EX-TRA leading the charge, cities can begin to imagine a future where streets are not just corridors for cars but vibrant public spaces that bring communities together and create a more sustainable, equitable, and joyful urban experience for all.



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Luca Bertolini,
Universiteit van Amsterdam
Project duration: 2021-2024*

GeoSence

Reshaping the Boundaries of Urban Mobility

In a world where cities are grappling with the challenges of rapid urbanisation, finding innovative solutions to ensure sustainable transportation and urban areas are safe is more critical than ever. The GeoSence project explores geofencing technology's potential to revolutionise urban mobility by creating invisible boundaries that produce zones within cities that are safer and cleaner for vulnerable pedestrians.

At the heart of GeoSence lies geofencing, a location-based virtual fencing technology that triggers specific actions when a recipient, such as a mobile phone or vehicle, enters or exits a designated area.

PROTECTING THE MOST VULNERABLE

In Gothenburg, GeoSence took a proactive stance on enhancing the safety of vulnerable road users, in the context of special transport services. These services cater to the needs of the elderly, disabled, and young passengers, providing them with dedicated taxi-like transportation. The city has received feedback about instances of over speeding by the service providers, raising concerns about passenger safety. To address this issue, GeoSence implemented Intelligent Speed Assistance (ISA) using geofencing technology. The project had a pilot which aimed to reduce speeding in 23 designated low-speed

zones around schools and elderly homes. The study provided promising results showing that the mandatory ISA technology had an impact on reducing over-speeding in the designated zones, with no case of a vehicle breaching the speed limit for more than a few seconds during deceleration, highlighting the potential for geofencing to create safer urban environments for those who need them the most.

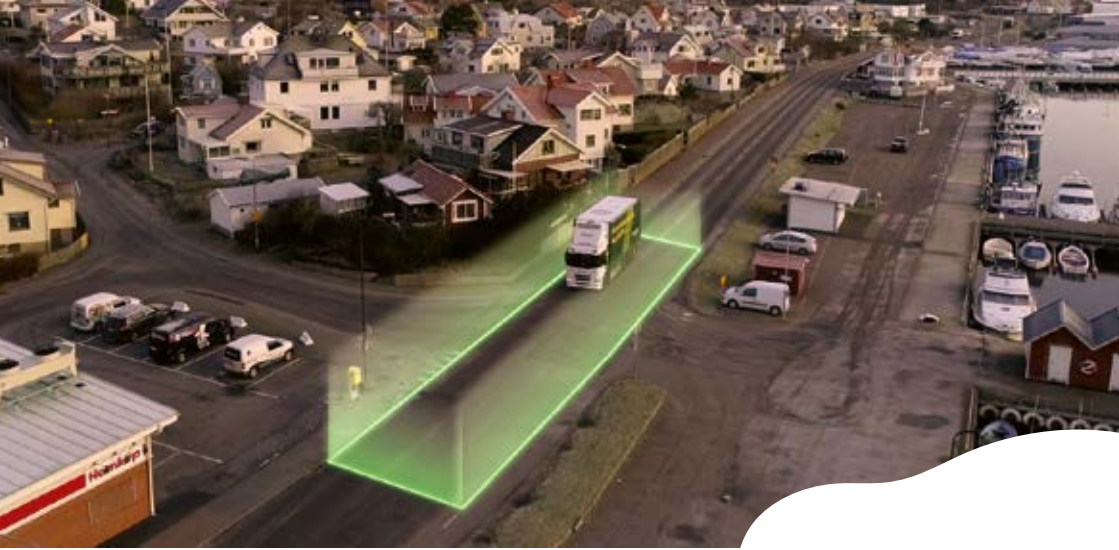
CITIES AS DATA STEWARDS

In Stockholm, the project delved into the city's role as a data and service provider for geofencing solutions. Through workshops with internal stakeholders involved in the processes of generating traffic regulation data, as well as conducting a trial on a retrofitted ISA system installed in one of the municipal government's own cars, the team sought to understand



E-scooters parked within the restricted area that they can be parked in the Alt stadt in Munich.

Photo: GeoSence project



Geofencing zon stad - Photo: Lindholmen Science Park

challenges and improve data quality and communication to road users. Preliminary results suggest that better synchronisation and communication with road users are needed.

“The quality of traffic regulations data is not always the restricting factor; the communication of the data to the road user is equally important, and this is usually not controlled by the city”, says Rodrigue Alfahel, project coordinator, Lindholmen Science Park (CLOSER).

TAMING THE E-SCOOTER CHAOS

In Munich, GeoSense used geofencing technology to tackle the challenge of chaotic and haphazard e-scooter parking. The city currently has four separate e-scooter vendors and over 18,000 e-scooters, so parking has become a significant issue. To address this, the city implemented a dashboard to communicate designated parking zones to e-scooter providers and monitor parking behaviour in real time. Information on parking zones was also integrated into the apps for e-scooters.

Following this new use case, Munich saw significant improvements in e-scooter parking behaviour.

THE FUTURE OF URBAN MOBILITY

As technology continues to evolve, with improvements in accuracy and responsiveness, geofencing is poised to play an increasingly crucial role in shaping the future of urban mobility. With initiatives like GeoSense leading the way, cities can navigate the complexities of modern transportation, creating safer, more efficient, and more livable urban environments for generations to come.



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Rodrigue Al Fahel,
Lindholmen Science Park (CLOSER)*

Project duration: 2021-2024

ITEM

Making Electric Mobility Work for Everyone

The transition to electric mobility is accelerating across Europe, but are we ensuring this shift benefits everyone? The ITEM project examines across four European cities, Oslo, Utrecht, Bristol, and Poznan, how cities can make electric mobility transitions more inclusive and equitable.

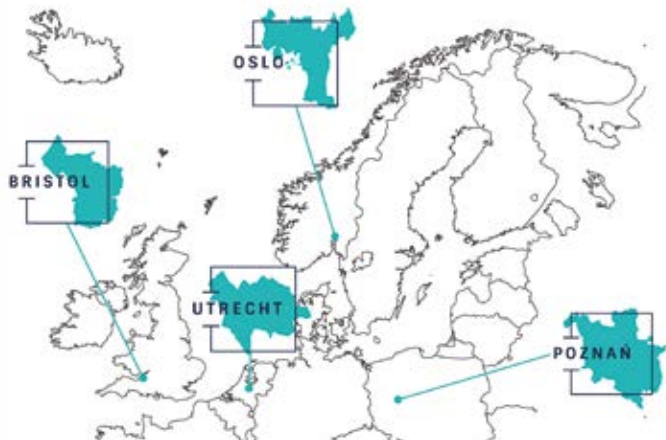
“There has always been a lot of emphasis on the environmental benefits. We believed it was time to also look at social dimensions, especially when we are advancing towards larger levels of uptake”, Lars Böcker, project coordinator, the Institute of Transport Economics (TOI). This shift in focus revealed important gaps in how cities approach electric mobility. Through an analysis of over 50 policy documents related to transport electrification and interviews with 50 local and national policymakers,

representatives of those delivering and using electric mobility services, and other stakeholders across the project’s four cities, researchers found that while environmental goals receive considerable attention, social inclusion often takes a back seat.

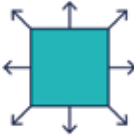
UNDERSTANDING NEEDS

ITEM conducted approximately 25 household interviews per city, carefully selecting both users and non-users of electric mobility, including socially and economically marginalised groups. The research revealed significant disparities in adoption patterns. In Oslo, for instance, researchers found higher electric vehicle uptake in higher-income areas and among single-family homes, highlighting how housing type affects adoption.

A map showing the four case study cities involved in the project.

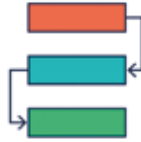


Three Pillars of Justice



Distributive Justice

How do decisions, policies, actions or changes influence who benefits from access, and opportunities and who faces risks, costs, and impacts?



Procedural Justice

How inclusive and participatory is decision-making and governance in terms of identifying problems and solutions, making or implementing policy?



Recognition Justice

Are the various needs, values, abilities, knowledge and practices of different groups involved in or affected by policy change acknowledge and respected?

COMPREHENSIVE POLICY ANALYSIS

One of the project's most valuable contributions has been helping cities authorities understand their complete electric mobility policy landscape. This [comprehensive overview](#) proved extremely valuable for policymakers, helping them identify gaps and contradictions in their approaches.

In the final workshop of three held in each city, the project brought together diverse stakeholders to evaluate policies. The workshops helped identify knowledge gaps and areas where different departments could better coordinate their efforts. The research also identified significant tensions between national and local approaches. For policymakers interested in further understanding this tension, a [paper](#) was produced, elaborating on these findings.

RECOMMENDATIONS

The project is producing detailed policy briefs for each city, with [Bristol's already published](#). These briefs provide comprehensive evaluations of current policies and specific recommendations for improvement.

Through its combination of household perspectives and policy analysis, ITEM provides cities with valuable tools for evaluating and improving their electric mobility initiatives. The project demonstrates that creating inclusive electric mobility systems requires careful attention to multiple forms of justice – distributive (who gets access and where), recognition (whose needs are considered), and procedural (who gets involved in decision-making).

Illustrations by the ITEM project



MORE INFO

[JPI project page](#)

[Results interview](#)

Project coordinators: Tanu Priya Uteng and Lars Böcker, Institute of Transport Economics (TOI)

Project duration: 2021-2024

JUSTICE

Making Public Transport Work for Everyone

How do cities ensure their public transport systems truly serve everyone? The JUSTICE project tackled this challenge by bridging the gap between quantitative analysis and lived experiences. Researchers working across three European cities – Strasbourg, France; Brussels, Belgium; and Konya, Turkey – developed innovative approaches to understanding and improving transport accessibility for the physically disabled, elderly, citizens living in precarity, and visually impaired people.

WHEN DATA MEETS DAILY STRUGGLES

The project's most significant innovation came from connecting quantitative approaches with qualitative ones. JUSTICE's researchers extended the capabilities of Open Trip Planner, an open-source tool for measuring transport accessibility, to account for diverse user needs. While public transport accessibility researchers have long used this tool, the JUSTICE project broke new ground by adapting it to consider the needs of multiple vulnerable groups simultaneously. Through "go-alongs" – accompanying vulnerable users on their journeys – researchers uncovered crucial insights that pure data missed.

"We discovered people often avoid certain stations that our models considered optimal. They would take longer routes to avoid complex

transfer points that, while technically efficient, proved challenging to navigate", says Alexis Conesa, project coordinator, LIVE, University of Strasbourg.

MAKING INVISIBLE BARRIERS VISIBLE

In Strasbourg, the project developed an innovative mapping platform called Atlas that innovates how transport planners visualise and address accessibility gaps. The interactive tool helps identify systematic infrastructure gaps, such as missing tactile paving for blind users.

In Brussels, researchers developed scenarios to help evaluate different improvement strategies. Transport planners used these simulations to evaluate various scenarios: Should they prioritise major hubs? Focus on specific lines? Or implement citywide accessibility improvements? The quantitative analysis in Brussels helped decision-makers understand how each approach would impact different user groups.

The project's impact extended beyond research into concrete improvements. In Konya, Turkey, exposure to solutions from other cities accelerated the implementation of accessibility kiosks at key stations. These devices enable vulnerable users to alert bus drivers about their needs in advance, ensuring appropriate assistance.



GIVING VOICE TO THE VOICELESS

The JUSTICE project placed procedural justice at its core – ensuring vulnerable users have a meaningful voice in decisions affecting them. Through carefully structured workshops, the project brought together policymakers, experts, and user representatives to discuss priorities and trade-offs. To reach broader audiences, the project produced a [YouTube video](#) documenting the challenges faced by visually impaired users in Strasbourg. This visual storytelling helped communicate complex accessibility issues to both decision-makers and the public. The JUSTICE project demonstrates that improving transport accessibility requires complex data and human insight. The project's emphasis on procedural justice – ensuring vulnerable users have a

voice in decisions affecting them – provides a model for truly inclusive transport planning. It shows that true accessibility isn't just about infrastructure – it's about understanding and responding to the real needs of all kinds of users.

Photo (below) by the JUSTICE project



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Alexis Conesa,
LIVE, University of Strasbourg
Project duration: 2021-2024*



MyFairShare

Making Transport Fair in a Carbon-Constrained World

How can we make dramatic changes to our mobility systems while ensuring fairness for all citizens? The MyFairShare project, tackled this challenge head-on by developing innovative tools and frameworks that help policymakers implement fair mobility solutions aligned with climate goals.

LIMITS TO MOBILITY

At the heart of MyFairShare's work lies a groundbreaking definition of minimum mobility budgets. Through an extensive literature review, the project identified essential life functions that any mobility system must support, e.g. work, education, leisure, and shopping. This definition also incorporates an understanding of the "law of constant travel time" – the observation that people are consistently willing to spend no more than 70 minutes daily on travel, regardless of location or transport mode.

"When we talk about mobility, we always assume it's limitless. But with climate change and the urgent need to become climate neutral in transport, we have to recognise there are limits", says Alexandra Millonig, project coordinator, AIT Austrian Institute of Technology.

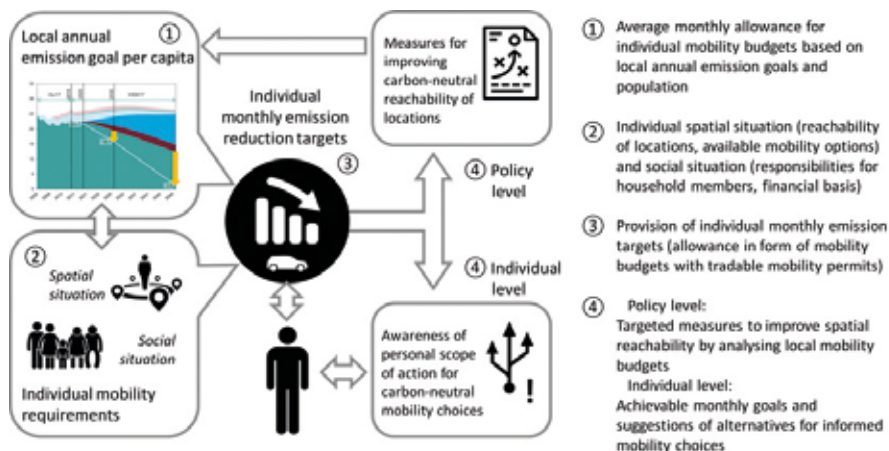
MAPPING THE PATH TO FAIR MOBILITY

Building on this theoretical foundation, MyFairShare developed the Minimum Budget Viewer, a sophisticated yet user-friendly GIS tool. This free, open-access resource helps policymakers visualise and analyse mobility needs across their territories.

Using open-source data from OpenStreetMap, the tool can determine whether residents in each grid square can access necessary services – from grocery stores to healthcare facilities – within acceptable time limits. It considers different modes of transport, starting with walking and cycling, and factors in the specific needs of various demographic groups, from families with young children to elderly residents.

FROM RESISTANCE TO ACCEPTANCE: THE ART OF FAIR IMPLEMENTATION

One of MyFairShare's contributions is its work on fairness concepts in mobility planning. Through living labs across six European cities, the project explored how to implement radical changes while maintaining public support. These labs ranged from intensive work with small groups of 15 participants to large-scale surveys reaching hundreds of respondents. A key finding across all living labs



was that citizens are generally more willing to accept significant changes than policymakers expect.

THE URBAN-RURAL MOBILITY DIVIDE – CITY DWELLERS TRAVEL MORE FREELY

The project also conducted a pioneering analysis of mobile phone data in Austria, revealing striking differences between urban and rural mobility patterns. The project purchased anonymised mobile data and developed algorithms to identify transport modes based on movement patterns. Its analysis showed that while city dwellers often travel far beyond their necessary minimum, rural residents typically stick closer to their minimum mobility needs due to limited infrastructure options.

TOWARDS FAIR MOBILITY SYSTEMS

MyFairShare demonstrates that the right tools and approaches can create fair, low-carbon mobility systems. The project's combination of practical planning

tools, fairness frameworks, and evidence-based implementation guidelines provides policymakers with a comprehensive toolkit for transforming transport systems fairly and effectively. The project shows that while reducing transport emissions is a significant challenge, solutions exist that can be effective and publicly acceptable. The key lies in careful planning, clear communication, and ensuring fairness across different demographic groups and geographical contexts.

Illustration by the MyFairShare project



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Alexandra Millionig,
AIT Austrian Institute of Technology
Project duration: 2021-2024*

SmartHubs

Europe's Mobility Hub Challenge

While cities rush to build mobility hubs, i.e. places where different transport options converge, many are missing a crucial point: good physical infrastructure alone doesn't make a hub 'smart'. So, what does? The Smart Hubs project, examining over 160 mobility hubs across Europe, has uncovered significant gaps between current implementations and genuine accessibility.

"We wanted to understand how mobility hubs could become real game-changers for sustainable and inclusive urban transport. What we found is that many implementations focus heavily on physical aspects while missing crucial opportunities for digital and social integration", says Karst T Geurs, project coordinator, University of Twente.

BEYOND PHYSICAL INFRASTRUCTURE

The project developed a novel framework examining mobility hubs through three crucial lenses: physical integration (how different transport modes connect), digital integration (how services are accessed), and democratic integration (how communities participate in planning hubs).

Their comprehensive analysis revealed a startling gap: while most hubs perform well at physical integration – providing spaces for bikes, scooters, and public transport – they

often fall short on digital accessibility and community involvement – shared mobility services require sophisticated digital skills that many citizens lack.

Through interviews with 50 vulnerable users and organisations and surveys across four living labs, researchers identified significant barriers to shared mobility use. The typical user profile – young, male, and highly educated – reflects the current system's limitations rather than true public need. A common need among vulnerable user groups is human assistance to support them when using transport services at mobility hubs, e.g. to provide necessary information or help to book a service or buy a ticket. The project tested innovative solutions like digital kiosks in Brussels and Rotterdam. These physical interfaces aimed to make shared mobility more accessible to those who struggle with smartphone apps. Perhaps most surprisingly, the research revealed a widespread lack of





One a SmartHubs cocreation event in Anderlecht and Munich, testing the digital kiosk in Rotterdam, and a co-created hub design in Anderlecht.

community involvement in hub planning. While mobility hubs thrive in city centres, private providers naturally target dense, affluent neighbourhoods, leaving other communities underserved.

TOOLS FOR CHANGE –

ASSESSING HOW SMART HUBS ARE

The project developed several practical resources for cities, including an [open data platform](#) visualising hub characteristics across Europe. Their [integration ladder framework](#) helps cities assess hub ‘smartness’ across physical, digital, and democratic dimensions, providing a practical tool for evaluation and improvement. The key lies in understanding local needs through genuine community engagement.

POLICY IMPLICATIONS

One of the project’s most significant findings concerns the tension between private service

provision and public needs. While shared mobility services often operate as private businesses, their role in urban transport suggests they should be treated more like public services. This shift in perspective has important implications for regulation. Cities might need to establish new requirements for mobility providers, starting with obligations to serve less profitable areas rather than just focusing on lucrative city centres.

Photos by the SmartHubs-project



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Karst T Geurs,
University of Twente*

Project duration: 2021-2024

SORTEDMOBILITY

How Self-Organising Railways Could Revolutionise Transportation

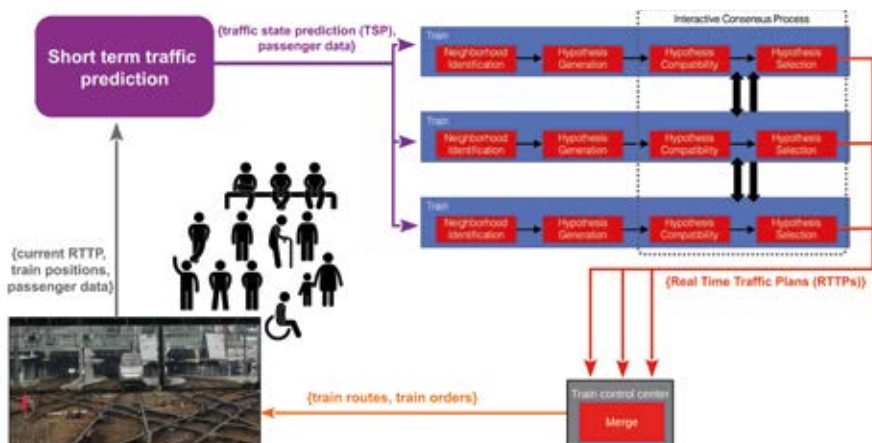
Railway traffic management is on the cusp of transformation. While self-driving cars and autonomous drones capture headlines, an international research project has been exploring whether trains could manage themselves. The SORTEDMOBILITY project brings together rail operators and researchers from France, Italy, Denmark, and the Netherlands to investigate whether self-organised rail traffic could match or even outperform traditional centralised management.

“Today, trains work according to a timetable, and when something happens, an operator decides how to deal with traffic, so delays don’t propagate through the network, but with networks becoming increasingly complex, we

wanted to explore if trains could have their own ‘brain’ and negotiate with each other”, says Paola Pellegrini, project coordinator, Université Gustave Eiffel.

SHIFTING AWAY FROM CENTRAL CONTROL – OPTIMIZATION INSPIRED BY AI

In this self-organised system, trains would communicate directly, making local decisions about priorities and platforms without central control. Within SORTEDMOBILITY’s autonomous system, trains use a consensus system inspired by artificial intelligence models when delays occur. Each train maintains a list of preferred options but doesn’t need to reveal why it prefers certain choices—crucial for maintaining commercial privacy.





If trains can't reach an agreement, they default to their original schedule, ensuring system stability.

The project tested this concept in distinctly different scenarios. One was a busy Italian line between Pioltello and Rovato, which is 54km long and carries both freight and passenger traffic. Here, researchers examined how self-organisation could work in a competitive environment where multiple operators share a track. Running simulations with over 75 trains in a five-hour period, they found the system could maintain overall performance while protecting operators' commercial interests.

HOW AUTONOMOUS SYSTEMS COULD PERFORM BETTER THAN THE STATUS QUO

Across all three contexts, self-organised systems performed comparably to traditional centralised management while offering distinct advantages. Beyond maintaining privacy and improving passenger service, self-organisation could help solve the scaling challenges that plague current systems.

A MODEL FOR FUTURE RESEARCH

Beyond its technical findings, the project demonstrated the value of allowing truly exploratory research in railway systems. "This was amazing," Paola reflects. "We had actual collaboration between academia and industry without needing to end up with a commercialised product. We were really doing pure research." This freedom allowed the team to investigate a concept that could reshape railway management thoroughly. While full implementation remains distant, the project proved self-organisation's viability and identified promising paths forward through hybrid systems and targeted deployment.

Illustrations by the SORTEDMOBILITY project



MORE INFO

[JPI project page](#)

[Results interview](#)

*Project coordinator: Paola Pellegrini,
Université Gustave Eiffel
Project duration: 2021-2024*

TAP for Uncertain Futures

Rethinking Urban Mobility for an Uncertain Future

In an era of rapid technological change and growing environmental concerns, traditional transport planning approaches are struggling to keep pace. The TAP for Uncertain Futures project, aims to address this challenge by developing and promoting Triple Access Planning (TAP) – a novel approach that considers transport, land use, and digital connectivity in tandem.

“Traditional transport planning was forecast-led and traffic-focused. And whilst it gave a nod to uncertainty, it hasn’t really taken seriously the idea that we can’t predict the future or even forecast a likely future”, says Glenn Lyons, project coordinator, University of the West of England.

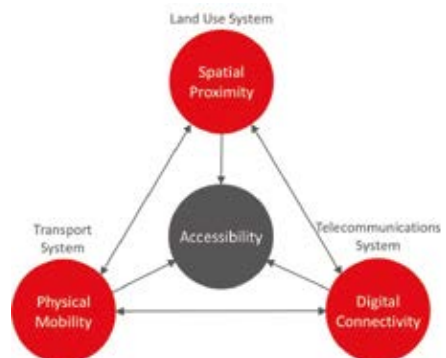
CONNECTING THE DOTS

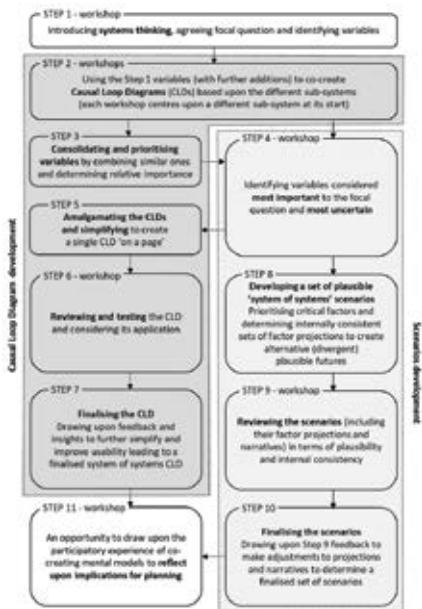
At the heart of TAP is the recognition that accessibility—the ability to reach needed or desired goods, services, and opportunities—can be achieved through physical mobility, spatial proximity, or digital connectivity. The project brought together partners from five countries; England, Netherlands, Slovenia, Sweden and Italy, including universities, city authorities, national governments, and consultancy firms, to explore this interconnected system. The team undertook a series of eight

workshops to help stakeholders co-create a mental model of the triple access system as a basis for understanding and applying Triple Access Planning. This approach gives planners a more comprehensive understanding of the factors influencing urban mobility and accessibility.

PREPARING FOR UNCERTAINTY

Recognising the inherent unpredictability of the future when undertaking long-term planning, the project developed six possible divergent future ‘triple access’ scenarios. To complement the scenario development, the team conducted an extensive review of 37 existing Sustainable Urban Mobility Plans (SUMP) and local transport plans across Europe, to identify gaps in current approaches and opportunities for improvement.





Outline methodology for creating present and future mental models of a system.



One of the project's most innovative outputs is a serious game that introduces TAP to practitioners. Throughout the project, about 40 teams played it across various settings. The game challenges its players to weigh up the strengths, weaknesses, opportunities, and threats of adopting TAP in their own contexts.

A HANDBOOK FOR THE FUTURE

The culmination of the project's work is a comprehensive handbook on Triple Access Planning. Designed to be both thorough and accessible, the handbook guides practitioners through the philosophy, process, and practical application of TAP. As cities worldwide grapple with the challenges of climate change, technological disruption, and shifting social norms, the TAP approach offers a flexible, forward-thinking framework for creating more resilient and accessible urban environments. By considering the interplay between physical mobility, spatial proximity, and digital connectivity, planners can develop strategies that are better equipped to navigate an uncertain future.

Illustration by the TAP for uncertain future project



MORE INFO

[JPI project page](#)

[Results interview](#)

Project coordinator: Glenn Lyons,
University of the West of England
Project duration: 2021-2024

TuneOurBlock

As Europe's cities grapple with climate change and liveability challenges, an urban design concept from Barcelona has caught the attention of city planners across Europe. 'Superblocks' - neighbourhoods reorganised to prioritise people over traffic are emerging as a powerful tool for urban transformation. But how can cities effectively implement this Spanish concept in different contexts?

The TuneOurBlock project, has spent three years investigating this question, revealing crucial insights about implementation strategies, measurement frameworks, and the vital importance of community engagement.

FROM BARCELONA TO EUROPE AT LARGE: A STANDARD DEFINITION OF A SUPERBLOCK

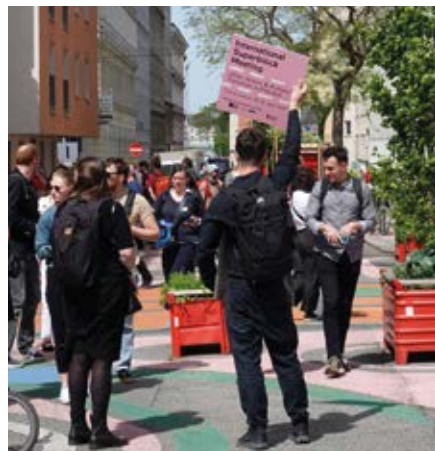
The project first tackled a fundamental challenge through extensive consultation with 55 European experts: establishing a clear definition of what constitutes a superblock. The resulting definition describes how superblocks leverage traffic reorganisation and public space reallocation to support urban sustainability transitions.

"By dramatically reducing motor vehicle through-routes, superblocks transform cities into mosaics of traffic-calmed neighbourhoods large enough to promote systemic change, prioritising active mobility, climate adaptation,

and inclusive public life", says Ulrich Leth, project coordinator, TU Wien. While the concept originated in Barcelona's grid-like streets, similar approaches exist under different names – from London's low-traffic neighbourhoods to Dutch Woonerfs.

MEASURING IMPACT: FROM THEORY TO PRACTICE

One of the project's most significant contributions is identifying 88 indicators for assessing superblock implementation. While early attempts at measurement often focused on complex factors like acoustic comfort and biodiversity indices, the project's investigation revealed that simpler, more measurable indicators are more valuable in practice. Building on these insights, project partner Changing Cities developed a practical three-tier evaluation framework.





Through studying implementations across Europe, the project discovered a crucial interrelation between scale, scope, and speed of implementation. In terms of scale, while individual superblocks can improve local conditions, networks of superblocks create more significant systemic change. However, the research also revealed that faster implementation often leads to greater public resistance.

BUILDING COMMUNITY SUPPORT

The project's research clearly demonstrated the crucial importance of early, transparent communication in building public support. Different demographic groups prefer different engagement formats—some respond well to formal letters explaining changes, while others prefer participating in public discussions. The project produced detailed guidelines outlining various engagement formats, providing cities with practical tools for building community support. Another key success of the project was its international superblock meetings. These meetings evolved into a powerful platform for knowledge sharing. These gatherings enabled cities to learn from each

other despite differences in political contexts and planning regulations.

The project has shown that superblocks represent a promising tool for achieving climate targets and improving urban life. However, their success depends on careful attention to implementation, robust community engagement, and cross-city learning. TuneOurBlock has provided a valuable roadmap for cities considering superblock implementation through its combination of implementation insights and its facilitation of city-to-city learning.

Photos by the TuneOurBlock project



MORE INFO

[JPI project page](#)
[Results interview](#)

Project coordinators: Ulrich Leth and Helmut Lemmerer, TU Wien
Project duration: 2021-2024



WalkUrban

While many urban mobility projects focus on vehicles, public transport, or shared mobility, the WalkUrban project tackled a fundamental yet often overlooked form of movement: walking. Working across three European cities – Gothenburg, Dortmund, and Genoa – this project’s researchers developed new tools and methods for understanding what makes cities truly walkable. Their study of neighbourhoods, examining both middle and lower socioeconomic areas, revealed important insights about how different groups experience and use pedestrian spaces.

A NEW WAY TO MEASURE WALKABILITY

One of the project’s key achievements was developing the Short Perceived Walkability

Scale, a framework that examines five critical aspects of the walking experience. At the foundation lies feasibility – essential elements like pavement condition and adequate pavement width. Building up through convenience and comfort, the scale extends to whether walks feel pleasant and ultimately stimulating. Testing this framework across 1,103 households revealed crucial insights. “People who perceive better walkability walk more in both duration and distance,” says Noriko Otsuka, project coordinator, ILS Research.

BEYOND NUMBERS

Another key project outcome was pioneering a comprehensive approach to understanding different pedestrians’ needs. While household



surveys provided broad insights, walk-along sessions with children, older people, and those with disabilities revealed perspectives that might otherwise have been missed. In Genoa, researchers worked with schoolchildren participating in the “pedibus” (walking bus) program. *“Children told us they liked nature – trees, animals, birds, and flowers. But they were very concerned about safety, such as traffic crossing quality and traffic speed,”* says Noriko Otsuka.

SMALL CHANGES CAN LEAD TO BIG IMPACTS

The project’s research revealed that significant improvements don’t always require major infrastructure projects. In examining both objective and perceived walkability, researchers found that basic maintenance and small interventions could make substantial differences, like adding planters or improving street cleaning.

CREATING LASTING CHANGE

Perhaps most importantly, the project demonstrated the value of combining different research methods. Their mixed-

method approach, using everything from GIS analysis to children’s walk-alongs, provided a more complete picture of walkability than any single method could achieve.

WalkUrban’s findings are already influencing policy. The project’s tools, particularly the Short Perceived Walkability Scale, give cities practical ways to assess and improve their walking environments. Their [booklet](#), aimed at decision-makers and the wider public, is available in four languages and provides municipalities with clear guidance for creating more walkable neighbourhoods.

Illustration and photo by the WalkUrban project



MORE INFO

[JPI project page](#)
[Results interview](#)

*Project coordinator: Noriko Otsuka,
 ILS Research GmbH
 Project duration: 2021-2024*





Projects partners

ASAP

University of Natural Resources and Life Sciences Vienna, BOKU – h2 projekt. beratung KG, h2pro-Fraunhofer Institut für Materialfluss und Logistik, FHG-Freie und Hansestadt Hamburg, Behörde für Wirtschaft und Innovation, Hamburg-Incharge GmbH, incharge-Association pour la Recherche et le Developement des Methodes et Processus Industriels, Centre de Gestion Scientifique, ARMINES-L'agence mobile de messagerie ecologique, Fluids-Orange S.A, Orange, Stockholms stad, Stockholm, Stockholm Vatten och Avfall, SVOA

CATAPULT

AustriaTech, Gesellschaft des Bundes für technologiepolitische Maßnahmen GmbH, KULeuven, RISE RESEARCH INSTITUTES OF SWEDEN, FACTUM

COCOMO

Lund University, University of Leeds, Utrecht University

DyMoN

Ecollective, Sustainability InnoCenter, Salzburg Research Forschungsgesellschaft, Stadt Salzburg, University of Salzburg, Uppsala University, Trafficon GmbH

EASIER

German Aerospace Center, The Copenhagen Metro, The Capital Region of Denmark,

Technical University of Denmark, Technische Universität Kaiserslautern, Norwegian University of Science and Technology, Lund University, Deutsches Institut für Urbanistik

EX-TRA

Transport for London, Ghent University, Technical University of Munich, Politecnico di Milano, University of Amsterdam, University of Westminster, City Experience GmbH

GeoSense

RISE Research Institutes of Sweden AB, City of Munich, SINTEF Community avd Trondheim, Chalmers University of Technology AB, Technische Universität Dresden, Norwegian Public Roads Administration, City of Gothenburg, City of Stockholm, Lindholmen Science Park AB, University of Westminster

ITEM

Institute of Transport Economics, Utrecht University, TSU, Oxford University, Heksagon Research, Adam Mickiewicz University in Poznań

JUSTICE

Collectif Accessibilité Wallonie Bruxelles, STIB, MIVB Laboratoire Image, Ville-Environnement, UMR CNRS 7362, Konya Metropolitan Municipality, UC Louvain, CREAT, Université Libre de Bruxelles, IGEAT, Unité de Recherche Sport et

Sciences Sociales, Necmetin Erbakan
Universitesi

MyFairShare

Deutsches Zentrum für Luft- und Raumfahrt e.V., AIT Austrian Institute of Technology GmbH, University of Natural Resources and Life Sciences, Vienna, Latvia University of Life Sciences and Technologies, University of Latvia, Transportøkonomisk institutt – London School of Economics and Political Science, Lorenz Consult, planning, content and innovation for postcarbon urban transition (Florian Otto Lorenz e.U.)

SmartHubs

Taxistop Asbl, Wien 3420 aspern Development AG, Aspern Mobility Lab, UPS Germany, HTM Personenvervoer, RET – NS Stations, Lojika Field Labs, University of Natural Resources and Life Sciences, TU Wien, Transport System Planning, TU Wien, Multidisciplinary Design and User Research, Verkehrsverbund Ost-Region (VOR) GmbH/ ITS Vienna Region, Federal Government of Lower Austria, Stadt-Umland-Management Wien/NÖ, Mobility Lab Graz, Vrije Universiteit Brussel, Service public régional de Bruxelles, Anderlecht Municipality, University of Munster, Technical University of Munich, City of Munich, Munich Public Transport Association – University of Bologna, Municipality of The Hague, Municipality of Rotterdam, Metropolitan Region Rotterdam the Hague, CROW, Istanbul Metropolitan Municipality, University of Twente, MO.Point

SORTEDMOBILITY

Société nationale SNCF, Rete Ferroviaria Italiana, BaneDanmark, Université Gustave Eiffel, Technical University of Denmark, Istituto di Scienze e Tecnologie della Cognizione, Delft University of Technology

TAP for Uncertain Futures

Mott MacDonald, Cagliari Metropolitan Council, City Municipality of Nova Gorica, Norrköping Municipality, Swedish Transport Administration, Nijmegen City Council, City of Utrecht, Bristol City Council, Transport Scotland, Aberdeen City Council, University of Cagliari, Urban Planning Institute, KTH Royal Institute of Technology, Radboud University, University of the West of England, MuConsult

TuneOurBlock

Smarter Than Car, Deutsches Institut für Urbanistik, Institute for Advanced Sustainability Studies (IASS Potsdam), Changing Cities e.V., Austrian Institute of Technology, TU Wien, City of Vienna, Department for Urban Planning and Development, Research Centre of the Slovenian Academy of Sciences and Arts, studio LAUT, Landscape Architecture and Urban Transformation

WalkUrban

Comune di Genova, ILS Research gGmbH, University of Gävle, University College London



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