Interreg North Sea

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Active Cities

MOBILITY HUBS FOR WALKING & CYCLING

Lessons from the Active Cities Project: Inspire and guide cities in the redesign of mobility hubs for walking and cycling

More information

Authors

Carlos Cañas, Walk21
Jim Walker, Walk21
Juliette Ténart, Bax Innovation

Contributors

Andrea Victoria Hernandez Bueno, Aalborg University
Daniel Hermansen, Aalborg University
Tina Vestermann Olsen, Aalborg University
Astrid Plaugborg Pedersen, City of Aarhus
Gustav Friis, City of Aarhus
Johanne Bräuner Nygaard Hansen, City of Aarhus
Mathilde Bech Epstein, City of Aarhus
Einar Johan Grieg, City of Bergen
Nora Ragnhildstveit Erland, City of Bergen
Myriam Bossard, City of Lille
Jeanne Trottier, City of Lille
Veerle de Meyer, City of Mechelen
Dennis Martinez, Bax Innovation

And the rest of the Active Cities partnership:

Lead partner: Gemeente Leeuwarden
Contact person: Ewout Oppers
Organisation: Gemeente Leeuwarden

Email: ewout.oppers@leeuwarden.nl

https://www.interregnorthsea.eu/active-cities

Aarhus

Ville de Lille

Mechelen

Bergen

Aalborg University

Walk21 Europe

Bax Innovation

Introduction

The context

Mobility hubs are places within urban landscapes which facilitate shifts between human modalities. The urban landscape covers environments in rural areas as well as the dense urban environments within highly populated cities. Hubs may create links to various modalities, from train and bus stations to bicycles, e-scooters, and walking.

Crucially, mobility hubs are more than nodes facilitating sustainable mobility choices; they are also valuable public urban spaces for everyday life, whose design and conditioning has agency in relation to the situations which may occur.

While the combinations between different modalities are endless, the links to non-motorised modalities are extremely important for sustainability and the creation of liveable environments. With these variations in mind, mobility hubs come in various sizes and take root in different contexts, acting as a potential tool aiding the transition towards more sustainable ways of moving.

The project

The Active Cities project was directly inspired by this global push to support more, and better, walking and cycling experiences. It established a partnership between eight European municipalities: Aarhus (Denmark), Bergen (Norway), Lille (France), Mechelen (Belgium), Groningen and Leeuwarden (The Netherlands), Hamburg (Germany), and Lund (Sweden). These cities were supported by knowledge partners from Aalborg University, KU Leuven, and the Walk21 Foundation, coordinated by Bax Innovation, and co-funded by the Interreg North Sea programme.

Between 2022 and 2025, the project planned, developed, and implemented street interventions and mobility hub redesigns focused on increasing and improving active travel. The pilots aimed to achieve this through a combination of urban planning, social awareness, engagement, and co-creation, ultimately working to re-design public space and reduce the negative impacts of car-dependent urban areas, thereby creating sustainable, liveable, and human-scale active cities.

The policy brief

This brief is one of three interlinked policy briefs published using the learnings from the Active Cities Project; the other two documents focus on **"Streets for Walking and Cycling"** and **"Behaviour Change for More Walking and Cycling"**.

The document adopts the framework of the Active Travel Policy Template published by the Partnership for Active Travel and Health (PATH), and specifically considers the interrelationship between people, places, and processes. The brief presents a clear workflow, detailing five main stages undertaken by the project's partners in their pilots: Baseline data, Vision, Actions, Monitor and Evaluate, and Outcomes. Examples from the Groningen, Hamburg, Bergen, Leeuwarden, and Lund pilots are used to illustrate each stage. It is anticipated that sharing these collective experiences will inspire and guide other cities in supporting, enabling, and encouraging further active cities.

Create baseline data

Creating a baseline of evidence is a fundamental component of any active travel pilot project. It provides the foundation for understanding the current context and situation; setting relevant and realistic goals and targets; guiding monitoring and evaluation impact to measure change; facilitating comparisons; enhancing accountability; demonstrating value for money; and helps inform and justify future investment plans for promoting active travel and its associated benefits.

MECHELEN: Baseline driven by citizen's needs

Mechelen's decision to deploy Fietshubs (cycling hubs) was firmly grounded in its strategic policy. The city's commitment to active travel was a focus during the last legislative period, driven by heavy investment in cycling infrastructure. This strategic effort culminated in Mechelen being named the Cycling City of Flanders in 2022–2023.

The city of Mechelen surveyed over 600 cyclists to understand what services they needed to support a comfortable and enjoyable cycling experience. Additional interviews with riders and in-depth consultations with local bike repair businesses were also held and a focus group was set up of representatives from the cyclists' union, local bicycle dealers and policymakers involved in cycling. The baseline data identified a clear demand for bicycle repair facilities and secure bicycle parking at mobility hubs in the city.

This blend of broad citizen survey data and targeted market insight ensured that the Fietshubs, once installed, were a highly functional intervention, effectively complementing the physical infrastructure investment and aligning with the policy objective to encourage residents to keep cycling.

Agree on a vision

A well-defined vision and clear objectives are crucial for the success of active travel pilot programmes. A robust vision helps to identify precisely where the necessary resources for delivery, funding, personnel, and infrastructure, are most likely to be sourced and how they could be allocated for maximum impact. Both short- and long-term visions need to be "SMART" (Specific, Measurable, Achievable, Relevant, and Time-bound) and "CONTEXTUAL" (Locally grounded, Situated, Democratic, Inclusive, and Equitable).

A co-created vision by stakeholders ensures that everyone works towards a common goal, fostering collaboration and synergies amongst policies and practices with shared interests.

To get started, project teams must build on the baseline data to understand the current situation and be informed by existing strategies at global, national, regional and city levels, such as Global Action Plan for Physical Activity, EU Road Safety: Towards Vision Zero, and the EU Mobility Transition Pathway.

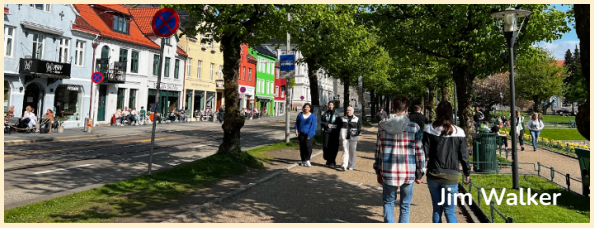
BERGEN: A long-term vision with short-term steps

Bergen's vision for active travel is firmly rooted in transforming the city to be human-centric and sustainable, with the overarching aim of achieving carbon neutrality by 2030. This ambition necessitates a complete shift from car dependency, aligning with a national "Zero growth" policy for traffic and the safety commitment of Vision Zero (zero traffic injuries).

The core strategy is to prioritise pedestrians, cyclists, buses, and light rail ahead of private cars, with the explicit goal of generating greater uptake of active travel, particularly cycling for home-work and recreational trips. The objective is to increase the modal split of cycling significantly.

Bergen's approach is dual-focused: substantial investment in high-quality infrastructure paired with the application of 'low-tech' social innovation. The city is leveraging its massive infrastructure investment, the world's longest purpose-built bicycle tunnel the 'Fyllingsdaltunnel', to promote the corridor's use by everyone and to reimagine the surrounding mobility hubs.

Supporting this work is the imperative to deliver safe bike-parking options, ensuring active travel becomes the easiest choice, door-to-door. This effort delivers a process that effectively improves the city for pedestrians, ensuring accessibility for all users, including children and the elderly, by embedding equity into the transport appraisal process. The ambition is clear: all growth in passenger transport must be absorbed by active travel and public transport, ensuring citizens achieve better value from their transit investment.



Deliver actions

Pilot interventions on hubs

Successful mobility hubs that cater for walking and cycling consider three main aspects of action. Firstly, provide and improve a good location for walking and cycling catchment areas around the hub. Secondly, supply a range of physical premises, amenities and facilities within the hub. Thirdly, manage all processes involved in the functioning of the hub and the services provided to pedestrians and cyclists.

LILLE: A place to engage citizens, businesses, schools and students

In contrast to infrastructure-led pilots, Lille developed a 'soft' mobility hub focused on human-centric engagement and information provision: the Sustainable Mobility House (SMH). The SMH is strategically located in one of the city's densest areas, positioned between the two major international train stations (Lille-Flandres and Lille-Europe), near metro, tram, and free-floating bike systems. This central location acts as a crucial intermodal nexus for commuters, travellers, students, and businesses.
The SMH aims to centralise information and offer a high-quality place experience. The entire indoor space is warm, welcoming, and fully accessible, featuring a large exhibition hall, meeting and workshop rooms, and an inviting entrance designed to be intuitive for locals and visitors alike. This quality of stay is paired with comprehensive mobility facilities and amenities, including a self-service repair station, racks, and a successful monthly second-hand cycle market run with partner NGOs.

Crucially, the SMH functions as a toolbox for users, delivering advice tailored to individual lifestyles and needs. It hosts permanent and temporary exhibitions on sustainable mobility, provides educational sessions for children, offers customised advice to local businesses on sustainable logistics, and promotes multimodality through debates and conferences. The second-hand market's success stems from selling different types of bikes, offering a bike marking service to prevent theft, and providing self-repair tips, thereby actively promoting intermodality, empowerment, and community-building to foster a collective shift towards active travel.

Process: Build capacity

To successfully plan and conduct mobility hub investments, cities need to ensure there is a supportive strategic planning framework and good governance. This includes the need to invest in leadership and coordination skills and effective engagement with all relevant stakeholders including residents, local business, local authorities and institutions, academics and professionals, suppliers and construction workers.

AARHUS: Lending cargo bikes to students

Aarhus Municipality decided to introduce electric cargo bikes to high school students in the suburban Egå area as a strategy to curb future car dependency, targeting young citizens whose mobility preferences were still forming. This intervention required careful coordination and capacity building outside of standard municipal operations, directly addressing the theme of process within mobility hub development.

The project involved key actors, including the high school principal (acting as a vital 'gatekeeper' to the target group) and the local bicycle shop, which served as the actual loan point. Implementing this scheme required resources beyond core municipal tasks, demanding time and effort for managing the four-day loan system, communication, and supervision.

Crucially, baseline focus groups revealed that older students, the key target group due to impending driving age, largely viewed cargo bikes as heavy, inconvenient, and suitable only for young families, creating a significant barrier. This highlighted the challenge of translating awareness into participation, proving that successful implementation hinges not just on providing a novel alternative, but on overcoming perceptions.

Monitor and evalutate

Effective monitoring and evaluation are crucial components of walking and cycling planning interventions, enabling policymakers and practitioners to assess the progress, impact, and effectiveness of their projects and policies. Monitoring through systematic and continuous collection, analysis, and use of data, helps track the progress of the intervention toward reaching its objectives and guide decisions during the project. Good monitoring and evaluation enhance accountability and transparency, while helping future project design and implementation.

BERGEN: Monitoring the return on structural Investment

The 3-kilometre active travel tunnel in Bergen, known as the Fyllingsdalstunnelen, cost over 300 million NOK (equivalent to approximately €25.4 million at the time) and took 4 years to construct. Monitoring to validate the return on that significant investment was therefore crucial for the city.

Bergen established a robust, mixed-method strategy led by the Institute of Transport Economics (TØI), combining automated and human-sourced data collection over four rounds of surveys (2022–2024). This comprehensive approach utilised automated bicycle counters for continuous traffic volume statistics, providing precise data on both pedestrians and cyclists. It was supplemented by physical interviews and SMS-based online surveys to capture user perceptions and demographics.

Furthermore, Bergen adopted modern methods such as Strava Metro to monitor cyclists' movements, allowing the team to map and verify new usage patterns along the new route. For other interventions, such as the safe bike lockers, usage was meticulously tracked, and follow-up surveys were planned for both users and residents.

This mixed-method strategy proved that structural investment was the most effective driver of modal change: the data revealed a significant 3 to 5 percentage point rise in cycling among commuters who achieved travel time savings. Furthermore, continuous counting uncovered the unexpected finding that pedestrian use, particularly for exercise, was roughly three times higher in winter than in summer, demonstrating that by removing physical barriers and enhancing perceived safety and comfort, the tunnel delivered substantial, evidence-based results far exceeding the impact of soft communication campaigns.

Sharing outcomes

Positive Results

The pilots demonstrated that mobility hubs successfully evolve beyond simple transport nodes to become valuable, multifunctional public urban spaces. In Bergen, the Fyllingsdalen tunnel, designed for connectivity, proved to be a sheltered, multi-functional destination for activities such as sports training, running, and spontaneous concerts. This unexpected usage achieved a high level of social security, with no reported crime (which was a major initial concern) while transforming a previously inaccessible geography. Lille's Sustainable Mobility House (SMH) created an effective centre for cultural engagement, successfully increasing knowledge of active travel choices and stimulating change through its thriving second-hand cycle market. Similarly, the Aarhus cargo bike trial identified a key market niche: the rental system was a success for families using it as a crucial "try before you buy" service for a major investment, directly addressing an economic barrier to active travel adoption.

Challenges and limitations

Despite strong citizen engagement, implementation faced critical governance and political challenges. Friction between the top-down political agenda and local stakeholder understanding proved significant. In Aarhus, the installation of simple roadside furniture, like a cycle totem, revealed that interventions are not neutral and can conflict with local aesthetic or planning views, requiring detailed negotiation even when the municipality owns the land. Lille struggled with political disagreements that led to a confusing vision for the SMH, resulting in internal challenges regarding the focus on off-site versus on-site engagement.

Lessons learned and new knowledge

Each pilot project in this work package engages with the concept of mobility hubs in different ways. In Aarhus, the pilot actions encompassed 1:1 interventions in existing near centre park and ride facilities as well as trials with cargo bikes targeted young students aiming towards influencing their active travel choices.

In Lille, the Sustainable Mobility House showcases an outward oriented cultural engagement of current but also non-users in the area, with the aim of increasing the knowledge on available active travel choices and stimulating change. In Bergen, the Fyllingsdalen tunnel adds a clear experiential dimension to the understanding of mobility hubs.

Through rich sensorial experiences in combination with smart infrastructural positioning the pilot offers new connections through a previously inaccessible geography as well as showcasing the possibility of tunnel landscapes for a multiplicity of user purposes.

In Mechelen, a range of small-scale cycle hubs in various geographies from city centre to rural periphery, offers cyclists better opportunities of servicing their bike on the go while also experimenting with adding other functions and supplementing with digital communication.

These examples confirm that beyond the physical infrastructure, building a culture of active travel is as key to make mobility hubs for walking and cycling.