# Integrated Urban Development and Mobility Planning

# **Reaching Success**

Climate change poses huge challenges for cities and urban regions: some 70 per cent of greenhouse gas emissions are of urban origin. At the same time, congestion and increasing traffic in cities pollute the environment and reduce quality of life. Is more mobility with less traffic possible? How can we dovetail urban and mobility planning – for diverse, mixed cities, streets as living spaces, short distances and lower emissions?

# Every city is different

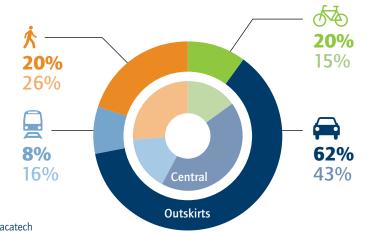
Integrated urban development and mobility planning means thinking about and shaping space and mobility holistically at all levels. The concepts for achieving this are developed locally because every city is different. The federal government does, however, define the operational framework for local authorities and regions by legislative requirements and funding. Placing trust in local stakeholders from policy making and administration, business and society is important for encouraging them to cooperate with one another in integrated urban development and mobility planning. Local stakeholders need sufficient legal leeway to design joint structures, forms of cooperation, instruments and processes and to implement specific measures. Together with the federal states, the federal government should also provide incentives through state funding programmes.

# Our recommendations

Expand the local operational framework: local authorities should be given more legal leeway to implement integrated measures independently.

Make space for innovation: experimentation clauses should be expanded and their application in urban development and mobility projects simplified.

Encourage integrated cooperation: funding programmes with adapted funding conditions should support an integrated approach in local authorities and regions.



## People who live on the outskirts need their cars more often

### 13 million Germans commute

to work in another district<sup>1</sup>. Which means of transport we choose depends on whether we live centrally or on the outskirts: people on the outskirts more often depend on cars with public transport usage being half what it is in central areas.

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# Expanding leeway, ensuring freedom of action

Overarching regulatory texts such as Germany's **Road Traffic Act** (StVG) and Spatial Planning Act (ROG) limit local authorities' leeway for implementing integrated urban development and mobility planning. These regulatory texts need to be adjusted to take account of the interaction between spatial structures and mobility.

The **reform of the Road Traffic Act adopted by the Lower House of Parliament** would have taken account not only of traffic safety and smoothness, but also of the environment and climate protection, health and urban development and significantly expanded local authorities' decision-making leeway. The **failure of the reform in the Upper House** sends the wrong signal to cities and municipal authorities.

"It's a dilemma: local authorities are supposed to be driving the mobility transition forward, but as soon as they try out new ways of putting public spaces to more versatile use and for instance pedestrianise streets, they are quickly threatened with legal action. The amendment of the StVG is an important basis for a mobility act with greater scope for local input."

Prof. Dr.-Ing. Helmut Holzapfel acatech/Centre for Mobility Culture, Kassel

There are various options for designing liveable urban regions. There are many different concepts and measures to choose from. Experimental approaches offer a great opportunity to try out **innovations in spatial design** and test their impact. Experience from Paris and Barcelona shows that this is possible.

**Experimentation clauses** should be expanded and simplified to enable local authorities and regions to shape urban spaces innovatively. It is crucial for local authorities and regions to be given greater legal leeway for specific local projects without their **legal certainty as users** being eroded. Experimental approaches provide valuable insights for a meaningful further development of the legal framework.

"Sendlinger Straße in Munich is a good example of a successful experiment. This street was initially redesignated as a pedestrian zone on a trial basis. Since then, people have been strolling around, enjoying the newly gained space and retailers have also benefited from higher footfall."

Univ.-Prof. Dr.-Ing. Klaus J. Beckmann, acatech/KJB.KOM

Instruments such as Integrated Urban Development Concepts (IUDC), Sustainable Urban Mobility Plans (SUMP) or Traffic Development Plans (TDP) are already being used by local authorities and regions today. These instruments are helpful in gathering new experience in integrated projects and in developing knowledge of integrated planning approaches, innovative process management and suitable formats for cooperation and communication.

Integrated instruments should be further developed in the future and be incorporated into **courses of study at universities** and **training in public administration**. The creation of **guidelines and assistance** helps local authorities and regions with their local applications. The use of integrated instruments should be promoted in a targeted manner, not least via government **funding programmes.** 

"Young people's training, apprenticeships and studies should familiarise them with the instruments, methods and process knowledge that prepare them for interdisciplinary work in the real world. Courses of study must be adapted so that they teach an integrated view of the challenges and design options." Univ.-Prof. Dr.-Ing. Klaus J. Beckmann, acatech/KJB.KOM

The successful application of integrated approaches in cities and local authorities requires sufficient **human and material resources** at regional and local level. Federal government and federal state funding programmes are central to financing the planning and implementation of integrated urban development and mobility projects. Following the Swiss model, Germany should also set up **funding programmes** which make regional **cooperation a prerequisite**, support **regional capacity building** and encourage the **establishment of regional cooperation formats**.

"Switzerland's agglomeration programmes act as a coordination instrument for planning settlement development and mobility. In the Kreuzlingen-Constance region, settlement and transport planning is coordinated not only across local authorities and cantons, but even across borders with German communities."

Prof. Dr.-Ing. Helmut Holzapfel acatech/Centre for Mobility Culture, Kassel

Public administration is also affected by a **shortage of skilled staff**. If they are to attract qualified **staff** for integrated urban and mobility planning tasks, retain them in the long term and prepare them for new challenges, local authorities and regions must receive more support from the **federal government and federal states**.

Funding instruments should in future be designed in such a way that funding does not cease completely at the end of a project. Instead, account should also be taken of long-term **costs and development prospects** for staff because this allows local authorities to make long-term **personnel plans** and increases their **planning certainty**.

## Integrated approaches work

The development of a mobility culture and mobility behaviour in many cities shows that integrated urban development and mobility planning is successful. There are examples all over Europe. However, concepts cannot simply be cut and pasted from one place to another. The differences and requirements of cities and urban regions demand solutions that are tailored to local challenges.

## Paris

In recent years, the French capital has initiated fundamental changes in urban development and mobility planning. The central element is a focus on good accessibility guided by the concept of a 15-minute city. As a result, between 2001 and 2018 there was a significant decrease in the number of daily journeys made by car, while the number of journeys made on foot increased by around 50 per cent over the same period. The number of journeys made by car even fell below the critical six million mark in 2018.

## Freiburg im Breisgau

This German university city has been pursuing the goal of avoiding traffic through a coordinated urban development and mobility policy since the late 1980s. This consistent focus on integrated planning can now clearly be seen to be bearing fruit. Accordingly, between 1982 and 2016, the share of ecomobility, i.e. pedestrians, cyclists and public transport, rose from 61 to 79 per cent, while the share of private motorised transport fell from 39 to 21 per cent.

## Hanover



With its elected regional assembly, Germany's Hanover Region is an example of a highly institutionalised form of regional cooperation. A regional transport development plan aiming to achieve spatial integration was adopted back in 2011. The transport development plan, renewed in 2023, now envisages cutting CO2 emissions by 70 per cent by 2035. Between 2011 and 2017, the share of motorised private transport in the region dropped from 59 to 55 per cent, while the share of ecomobility rose from 41 to 45 per cent.





# What matters

Four different levels of scale have to be considered in order to illustrate aspects of a liveable urban region and the interactions between spatial structures and mobility:



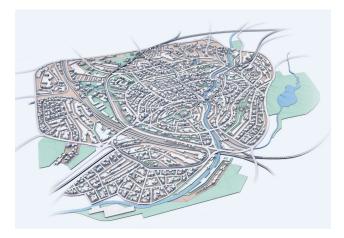
### Street

The street must become a high-quality public space. This is determined by spatial design, the division of space and traffic nuisance, for instance due to noise and pollutants. If the public space is pleasant and welcoming to spend time in, this encourages use for social interaction and getting around on foot or by bike.



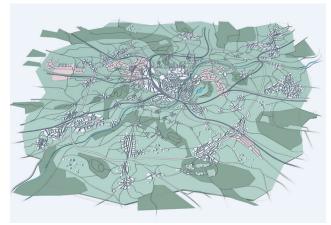
### Urban district

In urban districts, mobility options are primarily determined by infrastructure and the accessibility of everyday destinations. A wide variety of options for organising everyday local life and convenient access to public transport shorten distances and make for vibrant neighbourhoods.



#### Whole city

The locations of different service offerings are decisive for the city as a whole. It is indeed often not possible to achieve complete mixing at one location. However, everyday journeys can be reduced or made more resource-efficient if the locations are distributed throughout the city and can be easily reached by public transport or non-motorised means of transport.



#### Urban region

In the urban region, coordinating settlement development, infrastructure development and transport axes is key. If development takes place along public transport axes, attractive centres, where city dwellers will find amenities and services as well as good connections to the city centre, can be created around train stations and stops.



## **Further information**

This briefing sets out policy recommendations arising from the Academies' Project **Integrated Urban Development and Mobility Planning**. The focus is on a new paradigm in urban development that takes account of the interdependencies between spatial structures and mobility, and is based on cooperation between



policy makers, administration, society, business and academia. The project's results and a handout for public authorities are available online via this QR code.

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1 | See Pendleratlas: *Statistik der Bundesagentur für Arbeit. Datenstand Juni* 2020, 2020. URL: https://statistik.arbeitsagentur.de/ DE/Navigation/Statistiken/Interaktive-Angebote/Pendleratlas/Pendleratlas-Nav. html [last access 14 March 2024].

