

2 | 2024

RESEARCH NEWS



Dear Readers,

Life outside the big city is becoming increasingly attractive for many people. Affordable housing, proximity to nature and a well-developed infrastructure in many places make smaller towns and rural regions alternatives. But what does it take for these places of residence to not just remain places of longing, but to become long-term centres of life?

Studies by the BBSR show that the mix is crucial: local provision of doctors, schools and shopping facilities meets affordable rents and building plots, digitalisation and good connections to larger cities, even in smaller municipalities.

Nevertheless, challenges cannot be overlooked: According to a recent BBSR analysis, almost 4 million employees commute more than 50 kilometres to work. Despite increasing flexibility through working from home, dependency on the car remains high, especially in rural areas. Sustainable mobility and innovative concepts such as flexible public transport solutions offer starting points for local authorities here. A new study by the BBSR shows ways to achieve this.

However, living and working in rural areas means more than just infrastructure. New housing concepts, social cohesion and individual demands play a central role. A new BBSR research project is investigating the factors that motivate different population groups - and how cities and municipalities can respond to them.

I wish you an interesting read.

A handwritten signature in black ink that reads "Markus Eltges".

Dr Markus Eltges
Director of the Federal Institute for Research on Building,
Urban Affairs and Spatial Development (BBSR)

Innovative use of mobile data: BBSR's middle-order catchment-areas

Rent brakes and rent caps: how are the regulations implemented?

Architecture of children's hospitals can reduce stress and anxiety

The future of local public transport in rural areas: flexibility as a key to success

by Rafael Kistner and Lucas Biermanski

Flexibility in local public transport is becoming increasingly important in an ever-changing world. The Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) has been researching mobility for several years in order to promote sustainable solutions to the challenges particularly faced by rural areas.

The first edition of the "Handbuch zur Planung flexibler Bedienungsformen im ÖPNV" (Manual for Planning Demand-Responsive Transport) (2009) has recently been updated. It includes latest trends and research results in the field of local public transport. Focusing on rural areas, the

manual provides a comprehensive guide for those who want to make local public transport more effective and adaptable. It covers all the important aspects required for the successful implementation of demand-responsive transport, from the analysis of possible applications to customer communication.

The development of digitalisation in the last decade has considerably contributed to improving local public transport options. By using digital technologies, timetables can be dynamically adjusted, bookings can be simplified and passenger information can be provided in real time. The resulting benefits are explained in the manual and show how modern technologies can make local public transport more flexible and customer-oriented.

The first step towards successful implementation described in the manual is an analysis of the possible applications of demand-responsive transport. A thorough examination of mobility needs, passenger potential and user groups enables the identification of regions suited to flexible transport options. A selection grid helps to systematically evaluate the suitability of a region and to make the right decisions. Various types of services are then presented that can make local public transport more flexible. Specific forms of spatial and temporal flexibility provide numerous opportunities to adapt local transport to the needs of passengers. Each type of service has its own strengths and weaknesses that need to be taken into account.

Once potential fields of application have been identified, planning demand-responsive transport requires considering various factors, ranging from estimating passenger demand to defining the transport options. By providing a comprehensive overview of the most important steps, the manual shows how local demand-responsive transport can be effectively planned, paying particular attention to the integration of school transport and linking it with regional public transport.

Attention must also be paid to the legal framework for local public transport, which is complex and varies depending on the level of governance. In the manual, the authors examine the European, national and regional legal requirements



Source: BBSR; Graphic: Technische Universität Braunschweig, Institut für Verkehrswesen, Eisenbahnbau und -betrieb (IVE)

relevant to Germany and show how demand-responsive transport services can be integrated into existing local transport plans. They also deal with approval procedures and the role of the various actors in planning and implementing demand-responsive transport.

Another focus is on the economy of flexible modes of transport. The authors present various optimisation options and financing models to ensure the long-term sustainability of demand-responsive transport. The manual offers practical recommendations for sustainable financing, e.g. how to assess the need for grants or identify possible funding opportunities.

The successful launch and operation of a service also requires effective communication with potential passengers. The manual sheds light on the importance of marketing in the field of local public transport and presents various marketing strategies and instruments. It includes practical tips for customer-oriented communication, e.g. in the fields of product and pricing policies and digital communication.

Flexibility is not the only answer to the challenges of local public transport. Apart from demand-responsive transport,

the manual also presents alternative concepts such as citizen buses, privately organised transport and multifunctional services. These offer new possibilities for shaping local transport and may be a useful addition to demand-responsive transport. More information and practical examples of flexible types of operation and alternative concepts can be found on the Mobilikon portal at www.mobilikon.de.

The manual for planning local demand-responsive transport serves as a comprehensive guide for those who want to strengthen future local public transport. A thorough analysis of the general conditions, careful planning and customer-oriented communication can help to make flexible types of operation an attractive alternative to private transport.

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 **Handbuch zur Planung flexibler Bedienungsformen im ÖPNV (Manual for Planning Demand-Responsive Transport) [in German]**

Innovative use of mobile data to redefine the BBSR's middle-order catchment-areas

by Jakob Misof and Dr Matthias Furkert

For the first time, the BBSR has used mobile data to define its middle-order catchment-areas. Their advantage over the commuter data used hitherto by the BBSR and German federal state institutions is that they better reflect everyday socio-spatial interactions. In contrast to the dominant residence-workplace relations of employees subject to social security contributions, mobile data not only depicts labour market interactions but also all other basic functions like the phone users' educational or leisure activities.

Middle-order catchment-areas usually consist of urban and rural municipalities and associations of municipalities that have closer socio-spatial interdependencies to a middle-order centre, a network of middle-order centres or a higher-order centre as defined in the spatial plans of the federal states, and are therefore assigned to that centre.

The German conference of ministers responsible for spatial development emphasises that the middle-order centre level is particularly important to ensure the best possible and balanced provision of the population with easy access to services. In the view of the conference, which is composed of federal government and federal state representatives, middle-order centres with their interaction areas offer adequate spatial scenery to provide all regions with a wide range of services of general interest. The committee therefore recommends a definition for the middle-order catchment-areas of the federal states that is both comprehensive and comprehensible.

However, some federal states no longer determine middle-order catchment-areas. Differences in the concepts and methodologies of the federal states also make nationwide comparisons difficult. Some federal states, for example, provide for municipalities to be assigned to several middle-order catchment-areas or for overlapping areas, or they simply use municipalities instead of distinguishing between municipalities and associations of municipalities as a geometrical basis. The advantages of using associations of municipalities as a geometrical basis are that it reduces local government-related differences in the structure and size of municipalities between the federal states and provides more spatial data available for analytical purposes.

In order to fulfil the analytical tasks in the context of spatial monitoring (Section 22 of the Federal Spatial Planning Act), the BBSR works towards the periodic and comprehensive updating of middle-order catchment-areas. By developing nationwide homogeneous definitions of middle-order catchment-areas, the BBSR is able to improve the reliability and comparability of its analysis of the supply and viability of services of general interest. The BBSR's middle-order catchment-areas are thus an analytical construction and should explicitly not compete with the middle-order catchment-areas planned and defined by the federal states.

In practical terms, the BBSR assigned the associations of municipalities to the BBSR's 803 middle-order catchment-areas on the map based on a multistage, largely automated test procedure or more precisely, based on the daily mobile data of May 2023. To this end, the BBSR experts processed mobile connection data acquired by Teralytics and aggregated them at the appropriate spatial level.

They checked the viability and affordability of services of general interest compared to the population, their accessibility as well as special functions and spatial characteristics like border situations or touristic attractiveness. Due to a lack of viability, around 250 middle-order areas still had to be checked "manually", and assigned or merged according to their priority orientation. Despite their lack of viability, there were some particularly sparsely populated but large middle-order catchment-areas which were not combined into even larger middle-order catchment-areas even while taking accessibility of available services and equivalence of living conditions into account. These areas are marked in grey on the map.

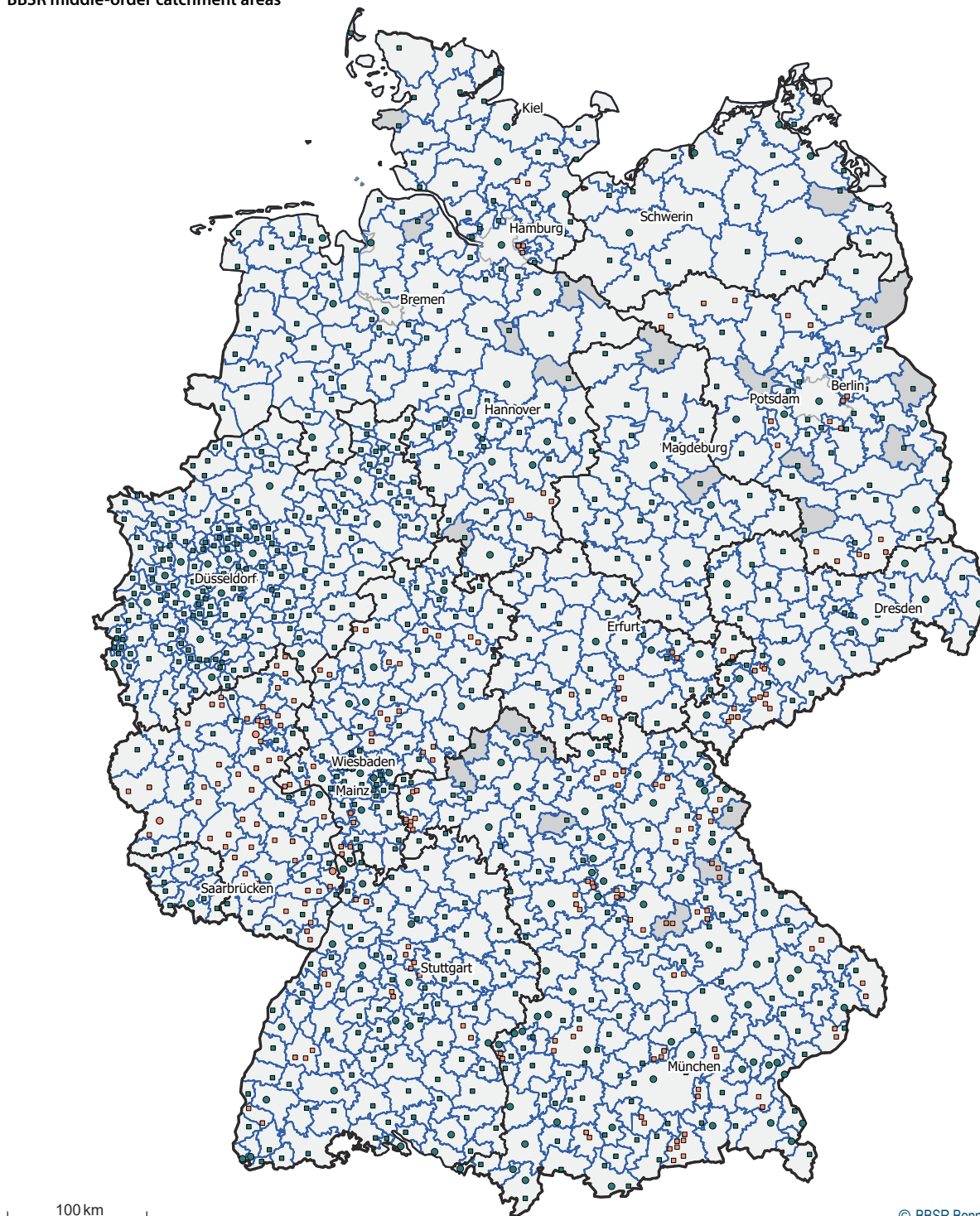
Detailed explanations of the methodology and threshold values used as well as a reference table can be found in the download area of the spatial monitoring section of the German-language BBSR website.

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📖 www.bbsr.bund.de > Forschung > Daten und Karten > Raumbeobachtung > Raumabgrenzungen > BBSR-Mittelbereiche [in German]

BBSR middle-order catchment areas



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Definition of middle-order catchment areas

- BBSR middle-order catchment areas
- BBSR middle-order catchment areas with special functions or spatial characteristics
- federal state borders, not city states
- federal state borders of city states

Central places

- higher-order centre
- middle-order centre
- higher-order centre with shared functions
- middle-order centre with shared functions

Data source: Spatial Monitoring System of the BBSR
 Geometric database: VG5000 (local authorities),
 as of 31/12/2022 © GeoBasis-DE/BKG
 Author: J. Misof

MORO final report: Putting resilience and central places into context

by Dr Matthias Furkert

The extreme weather events of recent years, the challenges of the COVID-19 pandemic and energy supply have clearly demonstrated the importance of increasing the crisis resilience of infrastructures and services of general interest in all areas of Germany. The Demonstration Project of Spatial Planning (German acronym: MORO) "Resilient spatial structures and infrastructures through central place concepts", launched in 2021, therefore focused on the question of how services of general interest can be maintained in the event of sudden or creeping crises.

For the first time, the MORO brought together issues advancing central place concepts and more recent strategies to increase spatial resilience. The research assistance engaged by the BBSR carried out the demonstration project with five differently structured model regions from different parts of Germany and was thus able to ensure a high level of innovation and practical orientation. The final publication of the project describes the methodology and illustrates the results of the demonstration project in a target-oriented manner.

Based on extensive preliminary studies, concept development and modelling, the model regions were selected with the aim of covering a wide range of topics and requirements for spatial structures. The approach also increases the ability to transfer the results to other regions.

Model regions of the Demonstration Project of Spatial Planning (MORO) "Resilient spatial structures and infrastructures through central place concepts"

Model region	Main topic
Eiderstedt	Evacuation of tourists in the event of a crisis
Gardelegen	Inter- and intra-municipal cooperation in securing services of general interest in a large municipality
Crimmitschau	Large-scale power cut and cascading effects (services of general interest and critical infrastructure)
Northern Eifel	Inter-municipal cooperation and hazard prevention in drinking and processed water supply
Rüsselsheim am Main	Investigation of cascading effects of power cuts

source: BBSR 2024; pp. 45

In cooperation with local stakeholders, the model phase provided insight into the effect of regionally significant critical infrastructures on spatial structures, on the importance of the accessibility of services of general interest and on the relevance of systemic criticality and cascading effects in the event of a crisis. The investigations carried out in the model regions (identification of critical infrastructures, simulations, analyses, etc.) are presented in the publication in more detail and are intended to invite other regions to imitate them. The various approaches to increasing crisis resilience served as a basis for recommendations to develop resilient, central place-oriented spatial structures and infrastructures on site. They are also the basis for the strategies to increase the resilience of the institutions, instruments and procedures of spatial planning.

At regional level, strategies are required to strengthen central place-oriented infrastructures in the event of a crisis. They provide options for spatial planning interventions that consider various aspects of resilience, for example:

- Reduce exposure
- Increase the redundancy of spatial structures and infrastructures
- Increase their robustness

The charts of central places (see figure) show and explain related basic strategies.

Altogether, the results of the demonstration project show the need to better integrate resilience ideas into spatial planning and to develop new adaptive and flexible planning approaches to tackle the challenges of contemporary and future crises. They provide a good basis for developing strategies and solutions.

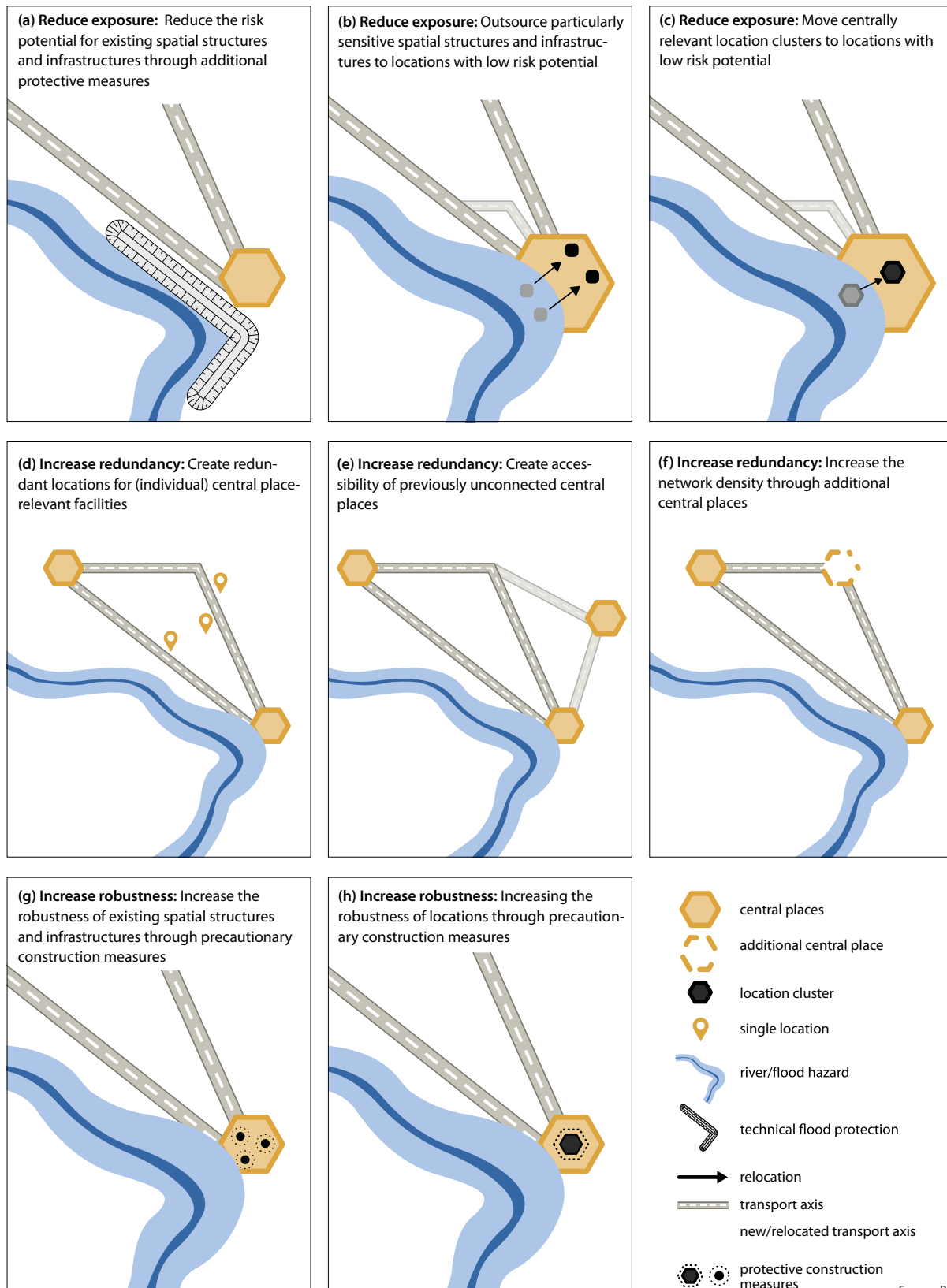
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 [Resilience and centrality \[in German\]](#)

 www.bbsr.bund.de > Research > Programmes > MORO > Resilient spatial structures and infrastructures through central place concepts

Approaches for central place-oriented spatial planning interventions increasing crisis resilience



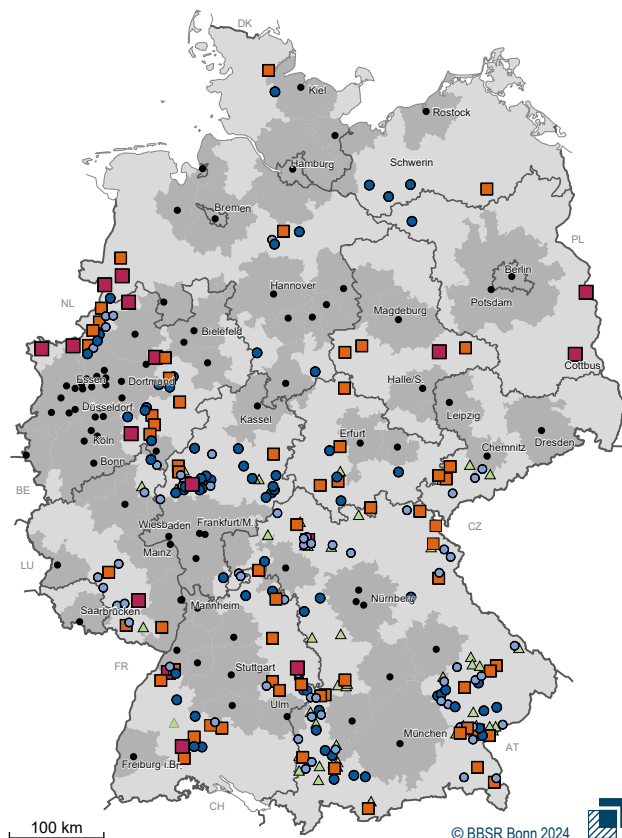
Countryside instead of large city

by Thomas Pütz and Dr Brigitte Adam

Why is living in the countryside or in the many smaller towns of Germany attractive? And how do people who have moved to the countryside rate life outside large cities? A nationwide quantitative analysis of the BBSR has already addressed these questions. The qualities of cities, towns and villages were mapped through an attractiveness index based on a variety of location indicators. In the recently (May 2024) launched project "Wohn- und Lebenskonzepte in der Peripherie"

(Residential and living concepts on the periphery), funded under the programme Region gestalten, these questions are treated in more detail to better assess the motives and spatial effects of the residential and living concepts of the people who have moved to the countryside. The results may provide the basis for the further development of municipal and regional housing market strategies as well as to forecast future internal migration flows.

Countryside instead of large city



Small and medium-sized towns and rural municipalities with high attractiveness index outside large city regions

- large medium-sized town
- small medium-sized town
- larger small town
- little small town
- ▲ rural municipality
- large city
- large city region

Data source: Spatial Monitoring System of the BBSR
Geometric basis: VG5000 (municipalities),
as of 31/12/2022 (c) GeoBasis-DE/BKG
Author: T. Pütz

In recent years, the increasing digitalisation of working environments has significantly improved the conditions for working remotely and opened up opportunities for further decentralising living or the spatial separation of living and working. It is therefore important to investigate whether rural areas as a whole benefit from this trend; whether vacancies are eliminated or places become more vibrant as a result, or whether only certain cities, towns and villages with particular characteristics are attractive.

Moving to peripheral and rural areas is often due to the desire to have more living space with less financial outlay. But what role do individual needs play when choosing a new home in a rural area? Are the local infrastructure, closeness to nature or good accessibility to the next large city important? Are changes in the place of residence also influenced by new residential and living concepts? And how have these resulted in changes in leisure and mobility behaviour?

The project will analyse these questions according to different population groups which is why surveys were conducted with people who moved to selected case study municipalities with many pull factors to discover their motives for migration and choice of location. The findings from the surveys as well as from expert discussions and interviews with relevant local actors from local government, marketing, urban and transport planning and the real estate sectors form the basis for reassessing the pull factors, developing the indicator concept and updating the attractiveness index.

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📖 BBSR-Analysen KOMPAKT 06/2023 [in German]

Primary and secondary ways to establish a Small Town Academy

by Dr Olaf Asendorf and Christoph Vennemann

For a long time, politicians, academics and society have failed to give sufficient attention to small towns which is why for ten years the BBSR has been researching into the over 2,100 small towns in Germany. Their over 24 million inhabitants live on more than half of the area of Germany. Research shows that small towns are strongly characterised by their geographical and economic situation. But despite their heterogeneity, they have numerous similarities.

The Experimental Housing and Urban Development (ExWoSt) research project "Potenziale von Kleinstädten in peripheren Lagen" (Potentials of small towns in peripheral areas) dealt with their different developments, but also with their shared needs. The researchers worked with the small towns to develop tailor-made solutions to enable them achieve sustainable urban development. Many urban development tools and formats are currently targeted at large and medium-sized cities and rarely take into account the unique challenges faced by small towns. One example of these challenges is their relatively low staffing and available financial resources to solve problems similar to those facing large and medium-sized cities, e.g. in the fields of mobility and services of general interest.

In order to promote the exchange and networking of small towns in Germany, the idea of a Small Town Academy emerged from the research work in 2015. Between 2019 and 2023, the researchers carried out studies with 28 small towns in six networks under the slogan: "By small towns, with small towns and for small towns!" in which different formats of cooperation, exchange and learning were used. The activities showed that the support given to the self-organised associations together with the different formats helped them develop their own solutions for small towns.

The results of the investigations underpinned the necessity of a Small Town Academy, which enables an exchange of experiences and joint learning processes and in which experimentation is expressly requested. Its purpose is to create sustainable solutions for the development of small towns that are actively used and advanced by them.

Despite its intended decentralised, network-like character, it became clear that the Small Town Academy needed a small-



Announcement of the location of the Small Town Academy office

Source: BMWStB, Henning Schacht

town location. A call for a nationwide competition between locations in May 2023 was followed by applications from 44 small towns, five of which were shortlisted and visited by a jury.

On 15 February 2024, Federal Minister for Building, Klara Geywitz, announced the town of Wittenberge in the federal state of Brandenburg as the winner and future location of the Small Town Academy office. The BBSR is providing technical support in the set-up phase and is also assisting Wittenberge in administrative matters. The other candidate cities were invited to submit their ideas to the set-up and to contribute to networking.



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BBSR-Online-Publikation 62/2024 „Innenstadt (be)leben!“ (Stimulating the inner-city development!) [in German]



Stadtentwicklung von Kleinstädten, mit Kleinstädten, für Kleinstädte (Urban development by small towns, with small towns, for small towns) [in German]



www.bbsr.bund.de > Themen > Stadt und Region > Städtensystem, Stadttypen > Fachbeiträge > Cluster Kleinstadtforschung (in German)



<https://t1p.de/kleinstaedte> (in German)

Number of commuters increasing

by Thomas Pütz

As of 30 June 2023, 20.48 million employees subject to social security contributions lived and worked in different municipalities, that means the number of employees commuting to work has increased by 140,000 compared to the previous year (20.34 million). However, the share of commuters remained stable at about 60 per cent, because the number of employees subject to social security contributions has also increased compared to 2022. The figures are a result of an analysis by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) based on data from the Federal Employment Agency.

Among the 80 large cities in Germany, Munich continues to exert the greatest attraction to workers from the surrounding areas. In 2023, 454,900 of the employees working in Munich lived outside the city borders, followed by Frankfurt am Main (404,800), Hamburg (391,900), Berlin (391,200) and Cologne (305,200). Hamburg recorded the largest year-on-year increase in commuters (+13,200 employees), followed by Munich (+10,900), Berlin (+8,800) and Düsseldorf (+8,300).

The average one-way commuting distance remained unchanged at 17.2 kilometres compared to the year before. 7.13 million commuters covered more than 30 kilometres on their way to work in 2023 (7.07 million in 2022), 3.96 million travelled more than 50 kilometres (3.91 million in 2022) and 2.28 million more than 100 kilometres (2.25 million in 2022).

The districts of Märkisch-Oderland (Brandenburg, 27.4 kilometres), Ludwigslust-Parchim (Mecklenburg-Western Pomerania, 27.3 kilometres) and Altmarkkreis Salzwedel (Saxony-Anhalt, 27 kilometres) lead the list of districts with the longest average commuting distances. They are followed by the districts of Landsberg am Lech (Bavaria, 26.9 kilometres) and Pfaffenhofen an der Ilm (Bavaria, 26.3 kilometres).

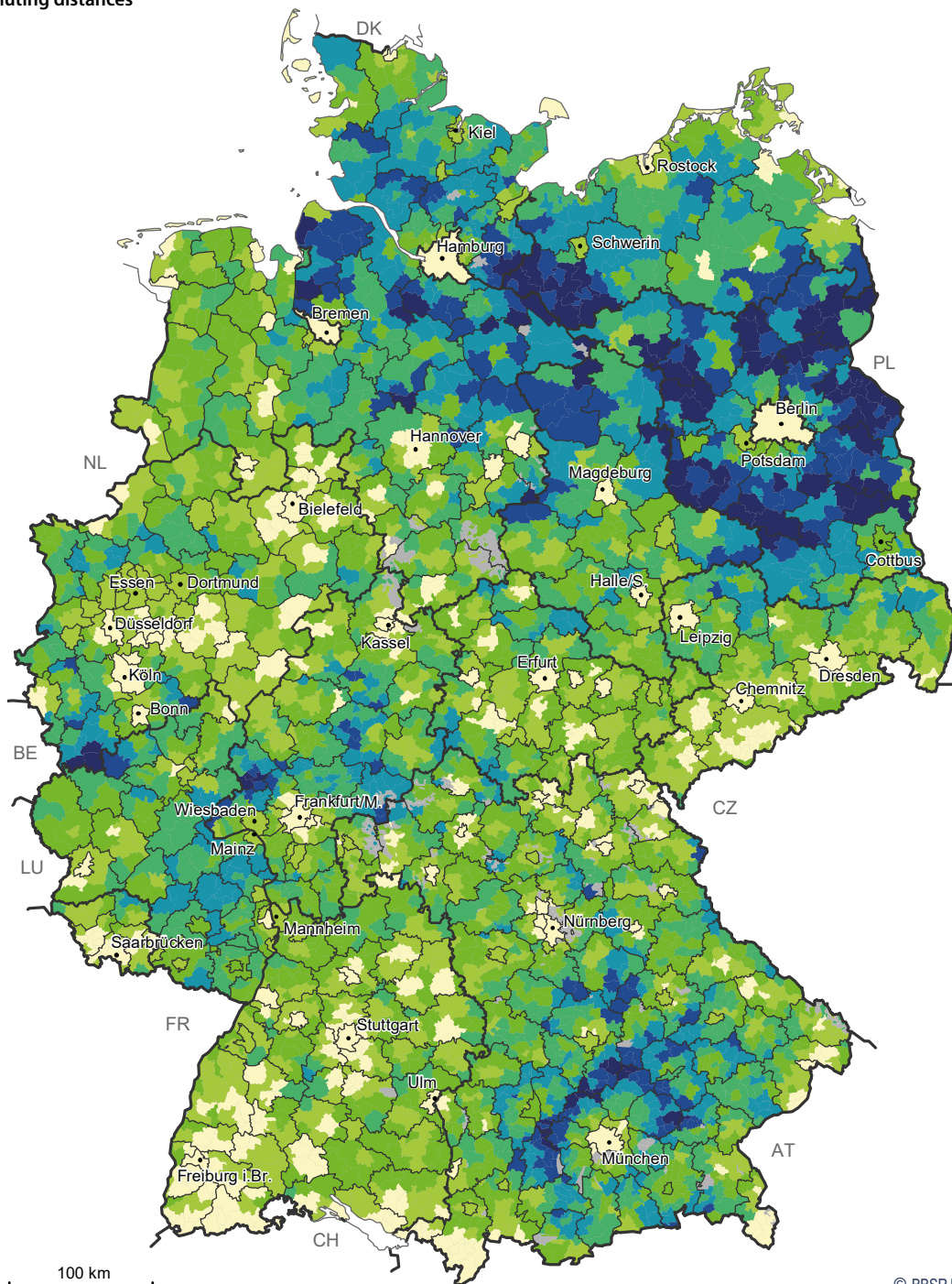
"The attractive power of labour market centres such as Munich, Hamburg and Berlin is unbroken, with the number of commuters increasing slightly last year," says BBSR expert Thomas Pütz. "Traffic jams and commuting stress are part of the daily life of employees from surrounding areas. Working from home helps to reduce traffic and negative impacts on the climate, the environment and the health of employees. Also of crucial importance are that the surrounding

municipalities are connected to local public transport, that buses and trains are well timed and that their capacities are expanded," emphasises Mr. Pütz.

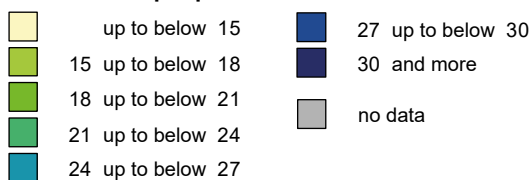
According to a study published by the BBSR in 2023, the vast majority of people in Germany live within walking distance of regular local public transport stops. Fully 90 per cent of the population in Germany can easily walk to at least one bus or train stop with at least 20 departures a day. However, densely populated districts usually have better public transport connections than sparsely populated ones. The BBSR scientists determined the proportion of the population that has an appropriate bus stop within a radius of 600 metres or an appropriate train station within a radius of 1,200 metres.

Methodological note: The figures show the place of residence and the place of work of employees subject to social security contributions as of 30 June 2023. They do not show how many people actually travelled to work or have worked from home during the reporting period. Particularly long commuting distances give rise to the suspicion that employees do not commute every day. The data also do not show which means of transport were used on the way to work, but they do show how the labour market centres are regionally distributed and the extent they have an effect on the surrounding area. The data do not include information about employees residing abroad and about travel patterns from home to places of work with less than three employees.

Commuting distances



Average commuting distances of all employees subject to social security contributions per place of residence 2023 in km



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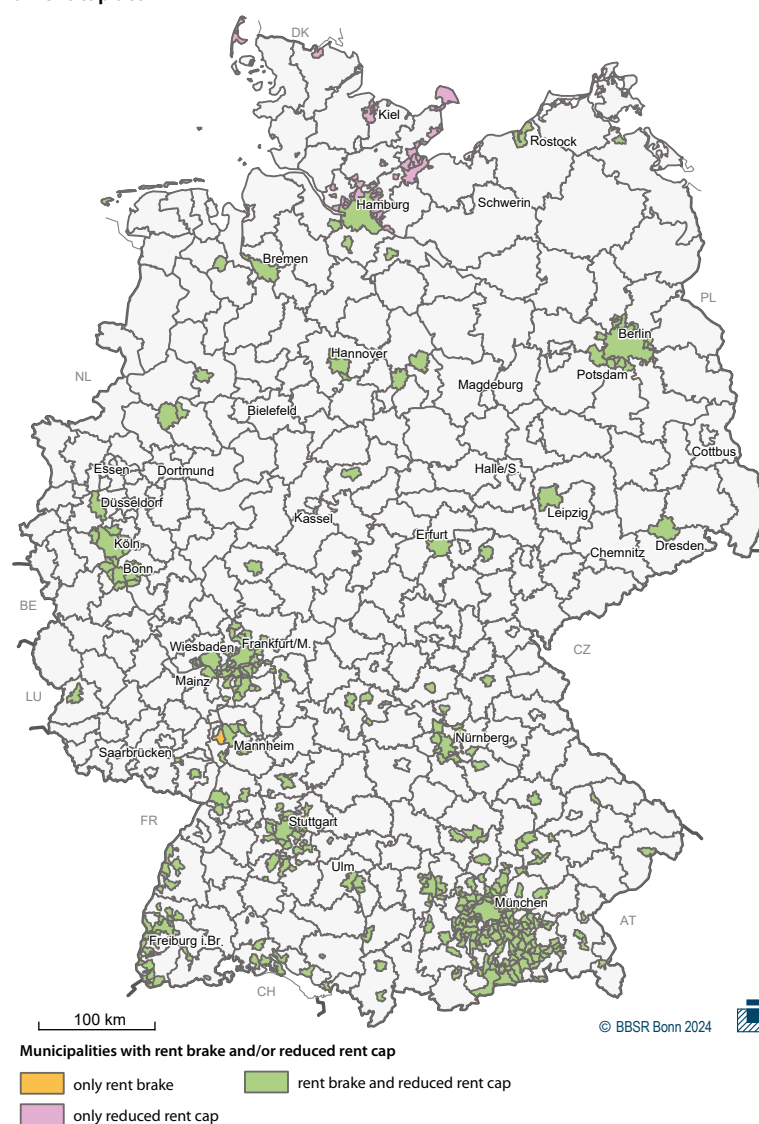
Datenbasis: © Federal Employment Agency figures: inbound and outbound commuters by local authority, Nuremberg 2023
 Geometrical basis: unions of local authorities (generalised), 31/12/2023 © GeoBasis-DE/BKG
 Author: T. Pütz

Rent brakes and rent caps: how are the regulations implemented in the German federal states?

by Gudrun Claßen

In the case of rent brakes, the German federal states were authorised to designate areas with a tight housing market for a maximum of five years each. An analysis by the BBSR shows the state of implementation.

Municipalities in Germany applying the rent brake and/or rent cap act



Data source: Act ceiling rents fixed in the context of new tenancy agreements and act ceiling rent increase in the context of existing tenancy agreements of the German federal states, BBSR investigation (as of July 2024)
Geometrical basis: VG5000 (municipalities and districts) as of 31/12/2022 © GeoBasis-DE/BKG
Author: G. Claßen, F. Ostermann

The period of rising rents that has continued for several years has increasingly impeded the provision of affordable housing and caused continuous discussions about housing policy. Particularly in large cities and agglomeration areas, housing markets have increasingly tightened. New tenancy agreements have been concluded with rents shooting up by 30% or more. In these tight markets, rents in existing tenancy agreements also increased above average so that achievable rents increasingly exceeded the average local reference rent in some cities. The act amending the rent law ("Mietrechtsnovellierungsgesetz") of March 2015 is expected to halt this development. Against this background, the housing policy debate focused on:

■ **Options to increase rents in existing tenancies:** They had already been revised in the context of the act changing the rent law ("Mietrechtsänderungsgesetz") of 2013. Rent increases within three years may not exceed 20% of the rent before the last rent increase. The act changing the rent law enables the federal states to limit rent increases to 15% in areas where the supply of appropriate housing is particularly endangered.

■ **Limiting the permissible rent in new tenancy agreements (rent brake):** The act passed by the German parliament in March 2015, includes a new federal regulation according to which rents in new tenancy agreements must not exceed the average local reference rent plus 10%. Newly built and comprehensively modernised housing units will be exempted from the rent brake when letting them for the first time. A permissible rent can be fixed in subsequent tenancy agreements.

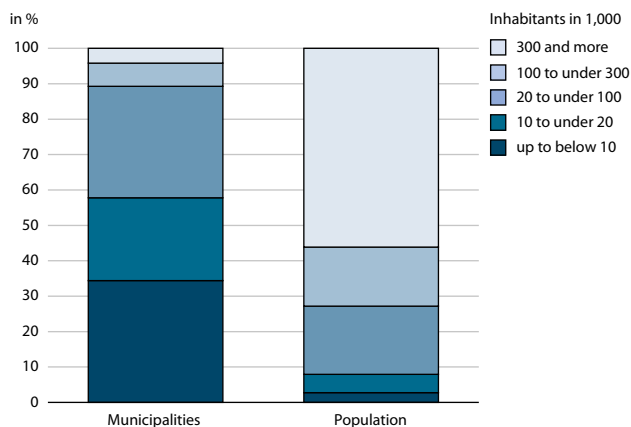
The federal states were authorised to designate areas where the rent brake would apply in which a tight housing market had persisted for a maximum of five years. These areas may be municipalities or parts of them. The federal states

have so far designated entire municipalities. According to an analysis by the BBSR (July 2024), a total of 472 municipalities were designated under the two acts, the rent brake being applied in 410 municipalities.

Areas with a tight housing market can mainly be found in the city states and in the federal states of Baden-Württemberg, Bavaria, Hesse and North Rhine-Westphalia. In total, almost 27 million people live in areas with rent brake or cap, which is about every third German inhabitant.

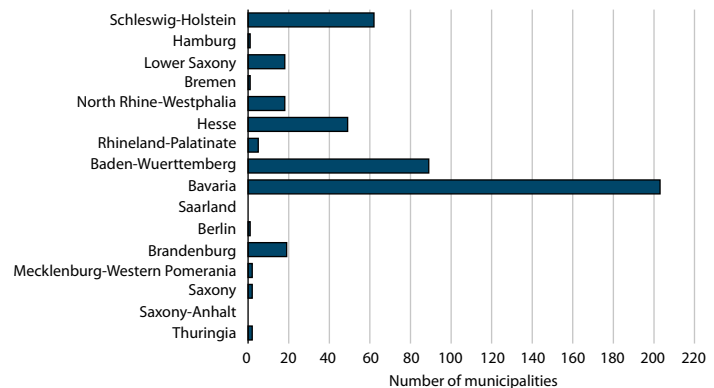
The rent brake is not only applied in the larger cities of Germany. Of all municipalities with rent brakes, 89% have less than 100,000 inhabitants, 34% less than 10,000 inhabitants. Overall, 56% of the population affected by the rent brake live in municipalities with over 300,000 inhabitants, 36% in municipalities with between 20,000 and 300,000 inhabitants and 8% in municipalities with less than 20,000 inhabitants.

Size and population of municipalities with rent brake according to population categories



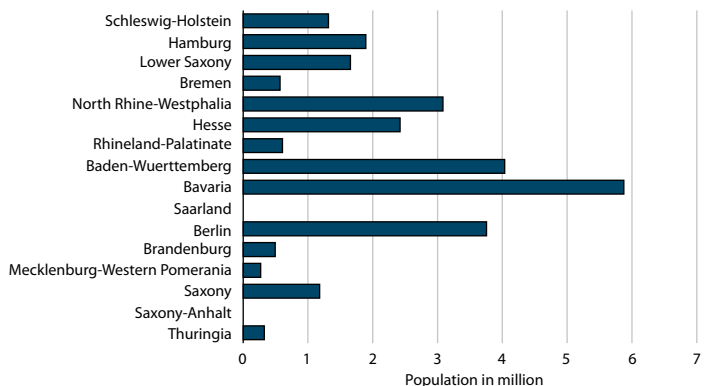
Database: Rent brake and rent cap acts of the German federal states, own investigation (July 2024); Population figures of the German Federal Government and the federal states 2022
© BBSR Bonn 2024

Number of municipalities with rent brake and/or reduced rent cap according to federal state



Database: Rent brake and rent cap acts of the German federal states, own investigation (July 2024)
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Population in municipalities with rent brake and/or reduced rent cap per federal state in million



Database: Rent brake and rent cap acts of the German federal states, own investigation (July 2024)
Population figures of the German Federal Government and the federal states 2022
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Housing benefit reduces housing costs

by Nina Oettgen, Monique Haake and Franziska Bensch

The BBSR analyses the regular (index-linked) adjustment of housing benefit, which had been introduced with the housing benefit reform at the beginning of 2020. As a result of the index linking, the government's housing benefit will be automatically adjusted every two years following a structural reform, taking into account the changes in general rent levels and consumer prices.

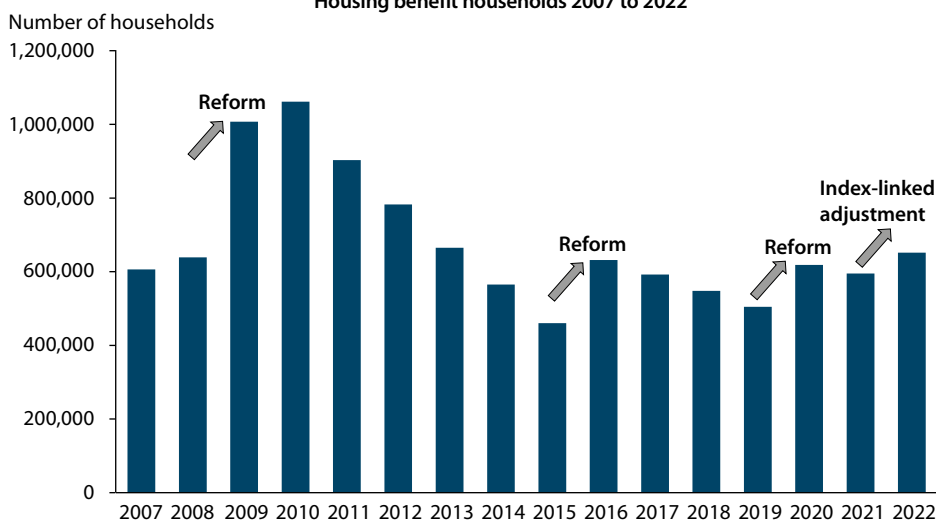
In 2022, housing benefit was for the first time adjusted to maintain its relief effect. Due to increased heating costs, households additionally received a heating subsidy. The recently published housing allowance statistics now allow initial evaluations of the effects of these changes in housing benefit in 2022.

At the end of 2022, around 650,000 tenants and owners received benefits, that represents an increase of 50,000 households over the previous year and around 30,000 households more than following the housing benefit reform of 2020 (cf. figure).

Around half of all pure housing benefit households in 2022 were single pensioners. The second largest group with housing benefits were families: 26 % of households receiving housing benefit comprised families of four or more people. Single parents with one or two children accounted for 10% of beneficiary households, which shows that the housing benefit also plays an important role for single parents.

With an average rent of 394 euros per month, single pensioners received an average monthly rent subsidy of 141 euros in 2022. A family of four with two children aged under 18 paid an average rent of 662 euros per month and was supported by an average monthly rent subsidy of 231 euros. This means that on average, housing benefit covers around one third of the rent and that a lower proportion of household income is swallowed up by housing costs. Detailed analyses of the index-linked adjustment of housing benefit will be shortly

Housing benefit households 2007 to 2022



Data source: Housing Market System of the BBSR, Federal Statistical Office of Germany - housing allowance
© BBSR Bonn 2024

possible when further, regionalised housing benefit figures become available.

In 2023, the most far-reaching housing benefit reform to date came into force with the Housing Benefit Plus Act. By raising the income limits, it was possible to significantly expand the group of eligible households, which according to forecasts, and will treble the number of households receiving housing benefit to 2 million. Housing benefit expenditure for the federal and state governments has risen to an estimated 5.2 billion euros. The three main reform components included the permanent introduction of a heating cost component and the increase of the maximum rent amounts based on a climate component.

The BBSR is going to evaluate the housing benefit reform of 2023 as soon as the related housing benefit figures become available, probably at the end of 2024. Two years after the housing benefit plus reform in 2023, the housing benefit will be adjusted again, becoming effective at the beginning of 2025. The BBSR will then analyse the effect of the regular housing benefit adjustments in more detail.



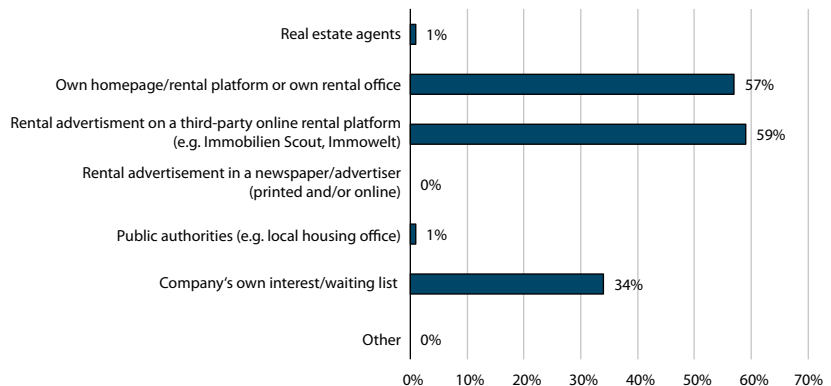
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Private companies and their housing stocks in Germany

by Jonathan Franke

At the end of 2022, the BBSR surveyed private housing companies about their rented housing stocks, aiming, among other things, to obtain latest information on their structure on the rental housing market as well as on the development and management of their stocks. The results provide a compelling insight into the business activities of this landlord group. In recent years, private housing companies have been heavily discussed due to the critical situation on the rental housing markets, and a well-founded information may help to put the discussions on to an objective basis.

Distribution channels for offering rented flats



Data source: company data. Multiple assignments possible. The information provided by the companies was weighted according to the housing stock.

In a nationwide company survey, carried out as part of an Experimental Housing and Urban Development (ExWoSt) research project, the BBSR and its contractor questioned housing companies about their corporate structure and organisation, and also collected detailed information about their housing stock in the 40 largest German cities. Despite low participation, they were able to collect information on over 900,000 flats, which is partly due to the fact that the rental housing stock is owned by a few larger housing companies.

The survey results show that the housing companies are very heterogeneous in terms of size, management and development of their housing stocks. General statements about private housing companies are usually insufficient, as their form of business and business strategy are very diverse.

The survey concentrated on the rental process and rent levels. Rental flats are offered through various distribution channels, and the strategies used by the companies involved vary considerably. In more than half of the rental transactions, the companies used online platforms or their own rental platforms, and around a third of all companies have internal waiting lists.

The data on rent levels provided few surprises: for the total, privately financed housing stock, the average level of rents excluding heating and other additional costs demanded by the very large housing companies is €7.04/m², while that for re-rented flats is €8.59/m². With regard to rent increases in

the privately financed segment, during the reporting period between 2019 and 2021, more than half of all flats had their rents increased. In these cases, the share of rent increases up to the average local reference rent according to Section 558 of the German Civil Code is significantly higher than the share of rent increases following modernisation measures according to Section 559 of the German Civil Code.

More information on private housing companies in Germany will shortly be published in a BBSR online publication. The main results of the ExWoSt project will soon be available on the BBSR website.

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📄 www.bbsr.bund.de > Forschung > Programme > ExWoSt
> Privatwirtschaftliche Unternehmen und ihre Wohnungsbestände in Deutschland [in German]

How the architecture of children's hospitals can reduce stress and anxiety

by Guido Hagel

According to the results of a study published by the BBSR, a family-supportive architecture of children's hospitals positively impacts the psychosocial health of children, adolescents and their parents.

In a controlled trial, researchers at the Technical University of Munich (TUM), together with the research and design office Kopvol architecture & psychology, investigated patients and their parents in the wards of children's hospitals in Freiburg and Munich. According to the study, the more patients and parents experienced the hospital architecture as personal, family-supportive and stimulating, the lower the psychosomatic stress was on parents and the less stress and anxiety was felt by children and adolescents. Spaces that provide families with a sense of familiarity and routine enable closeness and at the same time offer opportunities for retreat, have proved to be as important as age-oriented spaces and areas for playing and exercise.

According to the study, the REN cluster (REN = Raum für Entwicklung und Normalität, "space enabling development and normality") of the new "Kinder- und Jugendklinik Freiburg" (children's and youth hospital in Freiburg) is an example of contemporary hospital architecture that is tailored to the needs of children and adolescents and their

parents. In this case, the "space enabling development and normality" is the hospital's central lounge – a generous and open design flooded with daylight. With its communal areas and areas of retreat, it combines provides for play, exercise, meeting, eating and learning and thus recreates normality within the daily life of the hospital.

"The highly innovative research work makes an important contribution to converting the belief in an architecture that supports healing into realistic and evidence-based planning," says Dr. Robert Kaltenbrunner, head of the Department of Housing and Building at the BBSR. Accordingly, the study is particularly aimed at architects, builders and hospital managers.

The German Federal Ministry for Housing, Urban Development and Building and the BBSR have funded the study with the "Zukunft Bau" innovation programme, focusing on research and development projects that refer to buildings and help to cope with current and future challenges in the construction sector.

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📖 BBSR-Online-Publikation 76/2024 [in German]



Insight into the REN cluster of the new "Kinder- und Jugendklinik Freiburg" when entering the wards

Source: © Concept and interior design of the REN cluster: Kopvol architecture & psychology, © Architecture of "Kinder- und Jugendklinik Freiburg": Albert Wimmer ZT-GmbH & Architects Collective ZT-GmbH. © Photo by David Matthiessen.



Lollipop benches in the multifunctional areas of the REN cluster in the new "Kinder- und Jugendklinik Freiburg"

Source: © Concept and interior design of the REN cluster: Kopvol architecture & psychology, © Architecture of "Kinder- und Jugendklinik Freiburg": Albert Wimmer ZT-GmbH & Architects Collective ZT-GmbH. © Photo by David Matthiessen.

EXPO 2025 – BBSR co-organises German-Japanese conference

by Dr Olaf Böttcher

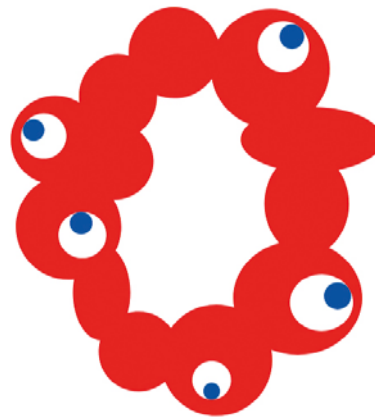
From 13 April to 13 October 2025, the countries of the world will meet under the tagline "Designing Future Society for Our Lives" at the EXPO 2025 in Japan (Osaka). Germany will also participate with its own pavilion focusing on the circular economy, i.e. the development of our lives and economies towards closed cycles.

The circular economy is a model of economic production and consumption in which existing materials and products remain in the value chain for as long as possible so that their life cycle is extended.

The construction industry is a central element on the way to a sustainable society. Japan and Germany have been successfully cooperating in this area for many years, both at national level (Ministry for Land, Infrastructure, Transport and Tourism MLIT and Federal Ministry for Housing, Urban Development and Building BMWSB) and at the level of governmental agencies (Building Research Institute BRI, National Institute for Land and Infrastructure Management NILIM and BBSR). All these are reasons enough to address the importance of the construction industry and to raise public awareness of it in a joint event in the context of the EXPO 2025.

The BBSR presented the idea of a German-Japanese conference to the Japanese cooperation partners for the first time last year and met with their general approval. They asked the BBSR to develop a thematic and organisational concept for such an event. In the meantime, the BBSR has drawn up a detailed concept for preparing and implementing the joint conference, presented it to the participating Japanese institutions in June 2024 and again received their consent and support.

In organising the event, all parties involved agreed to address the much-needed change in the use of limited global resources. The necessary change of views and the related transformation of processes and decisions is not solely a global challenge to the construction sector, but one that can only be solved by international cooperation.



OSAKA, KANSAI, JAPAN

EXPO
2025

EXPO 2025 logo

Source: expo2025.or.jp

The ongoing cooperation project to develop a Japanese database for assessing the environmental impact of building products, in which the BBSR is strongly supporting the Japanese partners, is an excellent example of such a successful cooperation and therefore shall be a main focus of the planned German-Japanese conference.

In order to not only prepare for it, but also to intensify cooperation when developing the Japanese database, the BRI has sent a Japanese scientist, Shotaro Yagi, to the BBSR in Berlin for about seven weeks. He is also a member of the Japanese Zero Carbon Building Promotion Council, which was commissioned by the MLIT to work on the environmental impact of buildings in Japan.

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"Much has already happened, but there still remains much to do"

an Interview with Svenja Binz

Architect and urban designer Svenja Binz researches at the BBSR on how buildings and cities adapt to climate change. In this interview, she talks about a lack of risk awareness among property owners, the necessary adaptation measures in existing and new buildings and how municipalities can make even better provisions in the future.

Summertime also means heat, thunderstorms, heavy rain and floods. How well prepared are building owners for extreme weather?

Svenja Binz: Climate change will increase building damage. Unfortunately, many residential and non-residential buildings are inadequately protected against flooding and heat. Many owners underestimate the dangers of extreme weather events. A small stream can quickly swell during heavy rain and endanger buildings. Planners and architects are required to design robust buildings and properties in the early planning phases.

Heat and drought have so far been hardly considered in adaptation measures. Urban areas, where it is very warm, even at night, are particularly affected due to their dense development. Long-lasting periods of high air temperatures impair our well-being and keep us awake at night. They are especially dangerous for vulnerable groups like children, older or sick people. Prolonged heat also affects the building fabric and may result in damage to materials and the facade.

Is there a lack of risk awareness?

To put it simply: yes. However, the resulting damage from increasingly extreme weather events is raising owners' awareness of the risks. Figures from insurers show that the damage caused by extreme weather is immense because buildings in Germany are still inadequately protected. It is problematic when homeowners trust that the public sector will help out in the event of major damage to uninsured properties. At the same time, policyholders must be able to rely on insurance companies in the event of a claim. Tangible assets can be replaced, but the consequences of extreme weather can be extremely dangerous. People drown in flooded basements, because doors can no longer be opened,

or they suffer an electric shock due to submerged electrical cables.

How can owners prepare themselves?

To limit flooding, drainage systems and gutters should be regularly cleaned and maintained, backflow valves must be integrated in waste pipes and emergency overflows be installed on flat roofs. As much rainwater as possible should be able to seep away within the boundary of the property. On steep sites, it is important to direct the water past the building, but without endangering neighbouring properties. New buildings should not be built on floodplains. Measures like roof and facade greening, an appropriate orientation and building footprint, an appropriate positioning and dimensioning of windows, and light-coloured surfaces may protect against heat. The building users themselves also play an important role, for example, through sufficient ventilation and using shading elements in case of heat.

Are existing buildings more vulnerable than new buildings?

I cannot answer this categorically as many factors are involved. Post-1870 buildings with solid walls offer good thermal protection, while the thermal protection in buildings using large precast concrete panel systems tend to be less suitable. Flats on the top floor are particularly vulnerable to excess heat. Challenges to existing buildings may be regulations for the protection of historical buildings and the structural stability of buildings following refits, but they can be tackled by many innovative building technologies. The majority of buildings can be refurbished and valuable resources conserved, which is in many cases less harmful to the climate than a new building. The German government is currently promoting climate change mitigation and energy efficiency measures, for example on the building envelope. I would support the combination of these measures with climate adaptation measures, to save money and valuable resources, to maximise synergy effects and avoid maladaptation.



Source: private

Is sufficient consideration given to climate change adaptation in new construction projects?

Building standards have been raised to better protect buildings and users from natural hazards. For example, the requirement to provide evidence of measures to provide summer thermal protection, that came in with the Energy Conservation Ordinance in the early 2000s. Standards in terms of dealing with precipitation on properties have also been established in recent years. However, the degree of future climate change is often not explicitly considered, which will become a problem for those buildings in the future. At the BBSR, we are currently running several research projects dealing with deficits and options to revise building standards and regulations. We identified the following deficits: building standards and regulations are often based on outdated climate data, local or building-specific peculiarities are insufficiently taken into account, so-called "climate change factors" are missing and model-based climate change forecasts are not considered.

What are future topics in the field of climate adaptation?

Summer thermal protection measures will become even more important in the future and for example, will include external shading elements, night ventilation, roof and facade greening and the planting of nearby trees to provide shade. As various climate change effects come together, it will be particularly important in the future to store precipitation and use it later for irrigation, i.e. we have to face the facts of simultaneously having both "too much" and "not enough" water. In addition, it will be important to improve how we resolve conflicting goals, recognise synergy effects at an early stage and react accordingly.

What does this mean in practice?

For existing buildings, one possibility could be to extend the roof space, thus reacting to the lack of living space without using more urban space. In doing so, building owners should provide for sufficient thermal protection and take shading, noise reduction and natural ventilation into account. Especially nature-based solutions, such as building greening and reversing or preventing surface sealing, are suitable measures that can provide some protection against heat and flooding. At the same time, nature-based solutions create positive synergy effects, i.e. evaporative cooling improves the local microclimate in neighbourhoods, green retention areas promote biodiversity and relieve the sewerage system in case of heavy rainfall.

How will cities, towns and villages be affected when adapting their infrastructure to climate change?

The new Federal Climate Adaptation Act obliges municipalities and districts to develop an integrated concept on how to adapt to climate change. Many municipalities have already given priority to climate impacts but are uncertain how to consider adaptation measures in their development planning. They often struggle with a lack of human and financial resources to accelerate and implement adaptation measures, because they have to deal with a large number of other issues and planning objectives

What options do municipalities have?

Municipalities can adopt measures such as establishing green areas, open spaces or fresh and cold air corridors in order to maintain natural cooling functions and contribute to heavy rainfall prevention. Areas can also be used multifunctionally, e.g. a rain retention basin can be used as a skate park, or roof areas for urban gardening can be used as a roof terrace or similar. What is important is that municipalities know what the appropriate measures are and then implement them. Apart from the traditional development planning instruments, municipalities may use informal approaches like climate adaptation concepts and integrated urban development concepts. They can draw up local building regulations or conclude urban development agreements with private service providers.

Municipalities may also claim subsidies for adaptation to climate change or set up their own schemes, for example to support building greening. Already today, there are many possibilities. They do not only require technical expertise but also brave and creative solutions, which already exist in many places.

Much has already happened, but there is still much to do. It is important that we keep an eye on possible conflicts with other planning goals, e.g. in terms of construction costs, accessibility and climate protection. Example: More and more building technology installed due to more construction requirements may have a negative impact on greenhouse gas emissions, which can be tackled by already existing simple, robust and sufficiency-oriented solutions.

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Day of urban development promotion 2025

Klara Geywitz, Federal Minister of Housing, Urban Development and Building, together with the federal states, the German Association of Cities and the German Association of Towns and Municipalities, is once again calling on cities and municipalities to take part in the Day of Urban Development Promotion on 10 May 2025 with high-profile campaigns and to present current projects. On this day, events will be held throughout Germany under the motto 'Vibrant places, strong communities' to show how urban development funding works on the ground.

The Day of Urban Development Promotion has been held annually since 2015. All cities and municipalities in Germany that are currently developing areas with urban development funding can take part. Last year, around 500 towns and municipalities took advantage of the nationwide day of action with around 680 events.

In addition to the municipalities participating in the programme, institutions and organisations, associations, professional associations, redevelopment agencies, cultural workers, property owners and retailers are also invited to take part in the Day of Urban Development Promotion with their own events and campaigns.

Further information and the opportunity to register can be found on the event website: <https://www.tag-der-staedtebauforderung.de/startseite> [in German]



More information can be found at
www.bbsr.bund.de [in German]