

Governing Social Infrastructure in New Urban Quarters: Youth, Ageing, and Socio-Spatial Asymmetries in Germany

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Abstract

This article examines how German metropolitan municipalities plan and allocate social infrastructure for youth and older adults in large newly built urban quarters. Focusing on projects in the outskirts, it combines governance analysis with mobile spatial methods in a multi-sited study of Berlin, Hamburg, and Munich. The findings reveal a structural asymmetry in socio-spatial governance: Youth-related infrastructure is institutionally embedded in welfare legislation and planning routines, while senior-related provision remains fragmented and weakly anchored. Across the cases, the everyday functioning of social infrastructure is shaped less by formal planning standards than by access to space, sectoral routines, and governance arrangements. The article argues that understanding social infrastructure as a relational and processual resource is essential for explaining divergent social outcomes in similarly-built environments.

Keywords

ageing; Germany; social infrastructure; socio-spatial governance; suburbanisation; youth

1. Introduction

1.1. Research Question

Young families are usually regarded as the core target group for residential developments on the urban fringe as starting a family constitutes a key reason for moving house (Bertram et al., 2026; England, 1993; Keil, 2018). Against this backdrop, the strong emphasis on child- and youth-oriented social infrastructure in newly developed suburban quarters appears, at first glance, largely self-evident. However, demographic change and ageing populations have shifted the attention in planning. Children leaving the parental home also constitute significant moments that may prompt residential relocation (Bertram et al., 2026; Münter,

2014), and an increasing proportion of older single-person households changes the resident population's infrastructure needs.

This article therefore argues that existing urban research does not sufficiently examine why, in planning practice, infrastructure aimed at children and young people in the outskirts of conurbations is systematically given higher priority than services geared towards older people. Within the youth sector, kindergartens and schools play a dominant role compared with other youth-related facilities. The article thus addresses a research gap concerning the limited understanding of the administrative motivations and institutional frameworks that shape the governance mechanisms for cross-sectoral social infrastructure.

Rather than attributing these patterns solely to differences in societal discourse, the analysis foregrounds the planning practices of metropolitan administrations. It is precisely in these contexts that urban policy debates on demographic change, ageing, and the healthy city (Marsch, 2025; Woods, 2025) tend to be treated in relatively deterritorialised and programmatic terms, while kindergartens and schools as core elements of child and youth provision are framed as spatially-fixed requirements within neighbourhood-based development processes. This asymmetry points to underlying administrative rationalities rather than merely divergent policy priorities.

At the core of this asymmetry lies the question of location and real estate. Social infrastructure depends on immobile assets to be secured, developed, and operated within specific property markets. The following discussion therefore focuses on patterns of real estate allocation that underpin social infrastructure provision at the metropolitan fringe. In an environment characterised by increasingly complex governance constellations, infrastructure provision is no longer the exclusive domain of the (local) state. Forward-looking infrastructure planning thus involves (often informally and strategically) identifying potentially relevant real estate actors who may enable the provision of spaces for socio-cultural use. The following question then becomes highly relevant: How do administrative actors navigate these property-economic constraints when shaping collaborative governance arrangements?

1.2. Research Framework and Hypotheses

To highlight the diverse demands placed on social infrastructure in newly emerging quarters in the 21st century, this article adopts a perspective that considers both the institutional logics of planning and everyday spatial experiences of people living there. Based on an analysis of governance practices in Berlin, Hamburg, and Munich, the article examines how social infrastructure for young people and senior citizens is planned and implemented in large-scale German urban development projects and why the respective mechanisms differ significantly, even though both types address central needs of key target groups. The complexity of those mechanisms that play out in the development of the largest new quarters on the outskirts of the biggest German cities helps to explain the sectoral governance logics, institutional frameworks, and planning processes behind the contemporary production of socio-cultural infrastructure.

The study is based on the observation that the spatial provision of social services is a result of complex collaboration practices involving various departments of municipal administrations and reflecting how civil servants conceive of the needs of the future residents. We aim at drawing a multifaceted picture of the reality of how social infrastructure is realised. Using the example of important, yet distinct, areas of social

policy, the article examines in detail how the responsible stakeholders deal with dilemmas and uncertainties, and how they aim at ensuring that infrastructure of sufficient quality is in place at an appropriate time. It puts an emphasis on the local level. Educational institutions such as schools (or universities), which are deliberately planned on a strongly supra-local basis, are intentionally excluded from this analysis as they are planned according to entirely different principles. The article illustrates how the legal framework governing provision entitlements translates into the actions of the stakeholders, as well as what other principles they employ to equip neighbourhoods as sensibly as possible, given manifold uncertainties in forecasting, numerous changes in long-term development processes, and competition for land and services.

Our hypotheses are:

- The traditional approach to planning social infrastructure based on the setting of quantitative provision standards and catchment area sizes has lost much of its significance compared with post-war modernism and remains confined to a number of cases in which they are legally binding.
- The otherwise observable decoupling of infrastructure planning from these standards leads to significant coordination challenges and fuzzy governance arrangements, which make the early and comprehensive provision of social infrastructure in the planning of large new residential developments very difficult.
- Youth is systematically given greater consideration than the elderly in socio-infrastructure planning of new residential areas because central facilities for young people (schools, kindergartens) represent infrastructure elements that can be directly or indirectly provided by local authorities and/or benchmarks. In contrast, services for senior citizens (usually understood as those beyond the retirement age of 65) tend to be planned and provided by specialist authorities and agencies that have only loose links with local planning authorities.
- In particular, the establishment and spatial distribution of healthcare facilities are governed by mechanisms that are not integrated into spatial planning, reducing the planning influence of local authorities. Furthermore, the relevant legislation in Germany—laid down in the so-called Social Code Books (SGBs)—stipulates that facilities for children and young people must be located largely on the basis of socio-spatial criteria, whereas this is less the case for the corresponding infrastructure for older people.

The empirical findings of this study demonstrate that youth-related infrastructure, supported by comparatively clear legal frameworks, can be more readily integrated into planning processes, whereas support for senior-oriented infrastructure remains more fragmented. The latter is embedded in heterogeneous and partly market-based systems of provision, including health care, retail-oriented services, and care-related housing, which limit direct administrative steering. This asymmetry does not reflect differing levels of social relevance or even create a contradiction between youth and seniors, but rather reveals structural differences in governance capacity across sectors.

1.3. Structure of the Article

The next section develops the theoretical framework, drawing together relational perspectives on infrastructure, practice-oriented accounts of everyday urban life, and scholarship on governance and spatial provision. It chooses its perspective deliberately by using the German administrative frame to contextualise theoretical discussions. For impact-driven research, this provides the lens through which the subsequent

empirical analyses are interpreted. The third section outlines the methodological design, emphasising the multi-sited nature of the research and the combination of actor-focused workshops with mobile methods. This mixed-methods approach allows for capturing both institutional rationalities and situated spatial practices that typically remain fragmented across planning documents, codified welfare governance, and on-the-ground experiences.

The fourth section is the empirical core of the article. It brings the different sites into a collated dialogue, tracing how spatial availability, organisational logics, and user needs interact in the production of youth- and senior-related infrastructure. Rather than presenting the cities as isolated snapshots, this section highlights transversal patterns, tensions, and spatial contingencies that only become visible through a multi-locational and mobile engagement with the field. The fifth section integrates these findings into a broader discussion, demonstrating how planning instruments, welfare arrangements, and everyday uses co-produce infrastructural possibilities and limits in newly built quarters. It synthesises the key contributions of the study, reflects on implications for planning and urban governance, and identifies avenues for future research on the socio-spatial formation of urban infrastructure.

2. The Changing Modes of Social Infrastructure Planning in Germany

2.1. *Historical Background*

With the emergence of the modern welfare state, infrastructure planning in the context of urban expansion underwent radical change in Germany. Whereas previously, in the context of industrial urbanisation—which was characterised by a rather liberalist approach and influenced by the police state—the state’s role had been limited to ensuring the basic functionality of new urban quarters, as enshrined in the earliest textbooks and manuals on urban planning (Baumeister, 1876; Stübben, 1890), from the interwar period onwards the state assumed a considerable number of new responsibilities, such as those relating to social and housing policy. In the context of the emergence of modernist urban planning and architecture, hierarchical and functional structures for growing cities—conceived systematically for the first time—assigned facilities for the supply of goods and services, as well as for the reproduction of urban sub-units (Perry, 1929; Schöning & Borchard, 1992; van Laak, 2017). Discrete infrastructure was organised into tiered centres, and the “basic school unit” and “settlement cells” emerged as “neighbourhoods.” The principles of urban expansion built upon this—which shaped post-war modernism internationally and, in particular, in both parts of Germany, with the construction of large-scale social housing estates (in the West) and complex housing developments (East)—saw in this welfare-state tradition the state’s responsibility for providing infrastructure—which, as a public good, could not be adequately supplied by the private sector. Whilst, for example, large sections of the retail sector remained in private hands—for which the task was simply to plan suitable centres—sophisticated catalogues containing guidelines and reference values were developed. Based on a projected population structure in a new development, these catalogues specified per-capita space requirements for education, health, culture, open spaces, and much more. These were regarded as quality benchmarks for the provision of facilities in urban quarters and were translated within cities into concrete mechanisms for determining needs by defining appropriate facilities and their sizes, site requirements, catchment areas, and forms of operation. Working in conjunction with specialised planning authorities responsible for their respective policy areas, district planners and urban expansion planners were thus able to put the appropriate infrastructure in place alongside the development of housing.

This logic has now fallen apart for many reasons, with the result that the traditional welfare-state model of infrastructure planning is no longer applied—and not even primarily or solely because the tasks of the welfare state have fundamentally changed in the wake of the neoliberal challenge to it. Broader societal debates on the affordability and sustainability of municipal infrastructure play an increasing role, not in the dramatic form of international debates on urban austerity (Peck, 2015), but in the public-interest claims of market-oriented infrastructure provision from a political-economic perspective (Scheller, 2017). It is true that the privatisation of many public utilities (railways, telecommunications, energy, etc.) has also placed public responsibilities in private hands. However, this has affected the neighbourhood-based infrastructure under consideration here—comprising educational, social, cultural, and healthcare facilities, as well as open spaces—only to a limited extent. The changes in these areas are more closely linked to altered demographic conditions (ageing population, reduced fertility, ethnic immigration) and the resulting shifts in needs—for example, in education and care—as well as to rising social expectations and welfare state guarantees (nursery places, school places, youth support, etc.). They are reflected in legislation—albeit very selectively—and lifestyles characterised by individualisation and similar trends (changes in leisure behaviour due to digitalisation, the declining importance of clubs, home care rather than “sending people off” to nursing homes, etc.), urban planning paradigms (de-standardisation and decoupling from strict catchment areas, etc.), changes to the operational structures of social services and their organisational forms, changes to social structures and the associated needs arising from the maturation process of neighbourhoods over time, and similar developments. Added to this are the indirect effects of neoliberal trends, such as partnership-based models of urban development organisation—within which developers sometimes take on at least the construction of infrastructure—as well as the limited capacity of local authorities to act due to budgetary and staffing problems. They, for example, make it difficult to consistently set aside land for infrastructure facilities over a longer period or to plan strategically in anticipation of urban expansion measures.

Against this backdrop, the question arises as to how, and indeed by whom, infrastructure facilities are planned today in the context of the governance of urban expansion, given the highly differentiated administrative structures and complex web of responsibilities at local and regional levels. Numerous negative examples make it clear that a departure from the rigid logic of calculating provision standards and translating these into facilities—for which land is set aside at an early stage as part of the development of the urban structures of new quarters—can significantly impair their functionality, at least in the initial phase, if not over longer periods. This is evident, for example, from the fact that in some large housing estates, even half a century after their construction, rail-based local transport links originally planned have still not been built; or that in new residential quarters, shortly before residents move in, the future residents still do not know where they will send their children to school.

2.2. Formal and Informal Aspects of the Planning of Social Infrastructure

For urban infrastructures and local amenities, the German language uses the administrative term *Wohnfolgeeinrichtungen*, literally: residential follow-up facilities. They constitute a key governance interface between demographic expectations, social policy objectives, and urban planning practice (Le Galeés, 2003; Pierre, 2011). In this context, assumed population structures, derived from household projections, age cohorts, or migration scenarios, are traditionally translated into quantitative spatial claims on land for social infrastructure via benchmarks, as explained above, that are supposed to guarantee a localised implementation of social policies. As such, benchmarks are not merely technical tools but instruments of

governance that stabilise particular imaginaries of urban life and legitimate specific allocation decisions, yet they differ significantly in terms of their legal binding force and their influence on planning decisions. From a political-economic perspective, benchmark-based planning privileges forms of social infrastructure that can be standardised, quantified, and legally defended (Miller, 2004).

Benchmarks should be understood as recommended quantitative standards that are usually proposed by experts (Jochimsen, 1966; Libbe et al., 2010; Miller, 2004). They have no legal force and, unlike limit values, do not represent a binding standard laid down in a law or regulation. However, they can be utilised to specify targets and serve as a control mechanism for comparing demand with the actual situation and for comparing cities (Blum et al., 2023). A number of new residential units will “require” a certain amount of square meters of sports facilities, as well as a certain number of kindergarten places (to take just two examples). It remains up to decision-making in the planning process and the implementation of social policies to what extent one of the two will be prioritised or if both can be realised. If a municipal body or another administrative department is able to translate its specific claim by formulating it into the form of applicable and accepted benchmarks, it may be included in the local budget, one expert claimed (B_O), thereby making the “fight” for its implementation easier.

The governance effect of benchmarks is not limited to what they measure, but also to what they exclude. Relational, informal, and preventative forms of social infrastructure, often central to everyday social reproduction, resist translation into fixed ratios. As a result, they are structurally disadvantaged within land allocation processes, particularly in large-scale new developments characterised by high land values and competitive uses.

For what concerns the role of the German planning system, its Section 1 (6) 3. of the Federal Building Code (BauGB) requires basic services to meet social and cultural needs, in particular the needs of families, young and old people, as well as people with disabilities, different impacts on women and men, as well as the needs of the educational system and of sports, leisure, and recreation.

In this context, municipalities rely on sectoral planning documents that quantify the additional demand (Blum et al., 2023; Jochimsen, 1966). Concisely, the relevant sector within administration provides benchmarks. Under Section 11 BauGB, the City Council may adopt a plan linked to an urban development contract which ultimately makes the provision of the necessary social infrastructure a prerequisite for the granting of a planning permission to a private developer.

Additionally, we have to deal with the German SGBs that codify a variety of social policy standards. The socio-spatial orientation (Keenan, 2025) of parts of the municipal administration having evolved in the last decades was taken up in them to varying degrees. Overall, the SGBs reveal a clear asymmetry: Youth services are structurally socio-spatial, whereas senior-related infrastructures rely on indirect, dispersed, and weaker regulatory foundations—an imbalance with tangible consequences for the planning and allocation of social infrastructure.

The strongest and most explicit integration can be found in SGB VIII (on Children and Youth), where multiple provisions (Sections 1, 11, 16, 78, 80) systematically align services with everyday life contexts, local resources, and neighbourhood environments. With the so-called Federal Participation Act, socio-spatial

orientation was also explicitly introduced into SGB IX. Here, the social environment is framed as a key reference for participation, although the overall logic remains strongly case-based, leading to primarily indirect implications for urban planning.

In contrast, socio-spatial steering mechanisms for older adults have remained comparatively weak. SGB XI and XII are dominated by insurance- and benefit-oriented logics. Socio-spatial approaches appear mainly in model programmes (e.g., Sections 45f, 123 SGB XI). Only Section 71 SGB XII explicitly refers to facilities for social, cultural, and educational activities of older people. As a result, legal support for neighbourhood-based prevention and participation is fragmented. Social work uses the term *fallunspezifische Hilfe* (literally: case-unspecific help) to distinguish it from individual social service for distinct persons. Indeed, their *fallunspezifische Hilfe* is socio-spatial orientation and eventually local amenities for planners.

The preceding sections have conceptualised social infrastructure as a governance-dependent and politically contested field shaped by benchmarks, property relations, and intermediary actors. Rather than treating planning instruments, non-profit providers, or mixed-use strategies as isolated variables, we developed an integrated analytical lens that foregrounds how social infrastructure is produced through social policy systems, urban development governance, and everyday spatial practices. At the same time, the section resonates with political-economic perspectives that highlight the changing role of land, property relations, and calculability in shaping urban development trajectories and allocation decisions (Harvey, 1989). From this viewpoint, social infrastructure provision is not merely a question of technical planning or social work, but a contested outcome of governance arrangements operating under conditions of land scarcity, fiscal pressure, and growth-oriented urban strategies. Sectoral logics and institutional configurations systematically privilege certain forms of provision while marginalising others (Peck, 2015). Building on this theoretical framing, the subsequent empirical analysis examines how these governance dynamics materialise in everyday planning practices and spatial arrangements within large newly built urban quarters.

3. Methods

Research on governance processes that shape the spatial allocation of social infrastructure requires a mixed-methods approach. This study combines (a) a general orientation building on quantitative information about new-build quarters, (b) conventional qualitative social-science methods like expert interviews and focus group discussions, (c) mobile spatial research methods, and (d) an analysis of administrative regulations, most notably the German SGBs; their discussion structured both the preparation and interpretation of the empirical material (see above).

Firstly, there are quantitative findings from the New Suburbanity research group. Structured desktop research was triangulated on the basis of a standardised questionnaire (on all new, larger quarters in all the bigger German cities). Among other things, types of urban expansion, scale and density, building typologies, open space and access structures, and social and functional mix were recorded. We used data on social infrastructure provision here.

Key findings are based on statements from expert interviews, the central qualitative survey method for tapping into context-specific, experience-based knowledge in governance and planning processes (Döringer, 2021; von Soest, 2023). Expert interviews were carried out with municipal administrative personnel in

Berlin, Hamburg, and Munich from different departments responsible for the allocation of infrastructure (not for shaping them in terms of content) and the planning of new residential areas themselves. A series of three focus group discussions (Johnson, 2021) was conducted between November 2024 and January 2026, one in each city; transcripts having undergone structured content analysis (Kuckartz, 2012; Mayring, 2020; Sheydayi & Dadashpoor, 2023). We understand expert knowledge as perspective-bound, contextual knowledge to be analysed reflexively (Johnson, 2021; Schreier, 2012). For this reason, interview sources are ordered by relevance, not by alphabet (the letters were designated randomly). The location is still traceable in the interview statements anonymised for this text (by letters HH [for Hamburg], B [for Berlin], M [for Munich]). For each focus group discussion, 10–15 participants from administration and up to five external experts, i.e., scholars (e.g., members of the research group) or specialised practitioners (housing, welfare), were invited to provide interdisciplinary debates. Given the differences in governance structures, planning procedures, and stages of development in the metropolises under study, we are drawing on the expertise of both internal experts—from the public sector and the service sector—and external experts—from academia (von Soest, 2023). The main reason for taking a closer look at Germany's three largest municipalities is simple: Their local authorities are also the largest and, consequently, the most sophisticated and specialised in terms of local government; they therefore have the greatest need to establish a specific system of governance in order to manage their urban development.

For the location analysis, the article draws on mobile methods that specifically expand on classic instruments of qualitative empiricism (Burckhardt, 2019; Naumann & Strüver, 2025). Based on the assumption that spatial perception is always a physically situated and movement-based cognitive process (Burckhardt, 2019), our location analyses were designed as systematic go-alongs. Where the location of the workshop (Hamburg) allowed, we carried out these go-alongs on the same day as the workshop; otherwise, on some other day in 2023 and 2024. The physical presence of the researchers, when being on location—even if it's a planned, not yet built one—is understood as constitutive for the understanding of spatial allocation logics (Naumann & Strüver, 2025). In the interest of this deepened understanding, various groups of participants from the research group regularly visited the relevant areas of the cities in question. Empirically, we take advantage of the fact that large new residential developments in Berlin, Hamburg, and Munich are located in proximity to older large housing estates, allowing for collated observation of historical and current developments.

Nominal surveys (present/not present) are supplemented by jotting and headnoting (Eckhardt, 2025). Mobile methods extend classical tools such as urban surveys and site analysis by systematically capturing embodied and situated spatial experience (Burckhardt, 2019; Naumann & Strüver, 2025). Visibility, accessibility, walkability, locational advantages, construction quality, and spatial centrality can thus be analysed in situ and linked to subjective experiences of use. Subjective perceptions of accessibility are therefore not merely illustrative but constitute a methodologically legitimate component of structural spatial analysis. Two examples from the research: The emerging role of ground-floor uses was always a subject of reflection and discussion in the research group (e.g., the possibility of collecting that circumstance as data), in the locational analyses in situ, and on the agenda of the group discussions.

4. Facilities for the New Outskirts

4.1. New Residential Areas and Follow-Up Facilities?

We now turn to the empirical question of what shall happen in new quarters beyond housing. As outlined above, the research group underlying this study examined all suburban development projects with more than 500 housing units (Altrock, 2022), focusing on greenfield developments at the metropolitan fringe (Bornmann et al., 2026). Purely residential areas have become rare (5%). The vast majority of projects include housing-related infrastructure (61%), while 29% explicitly aim at mixed-use quarters whose infrastructural functions are expected to exceed local demand (all numbers: Bornmann et al., 2026). Prominent examples include the planned university campus in Hamburg-Oberbillwerder, alongside the—here not further examined—creation of work spaces (see Figure 1)

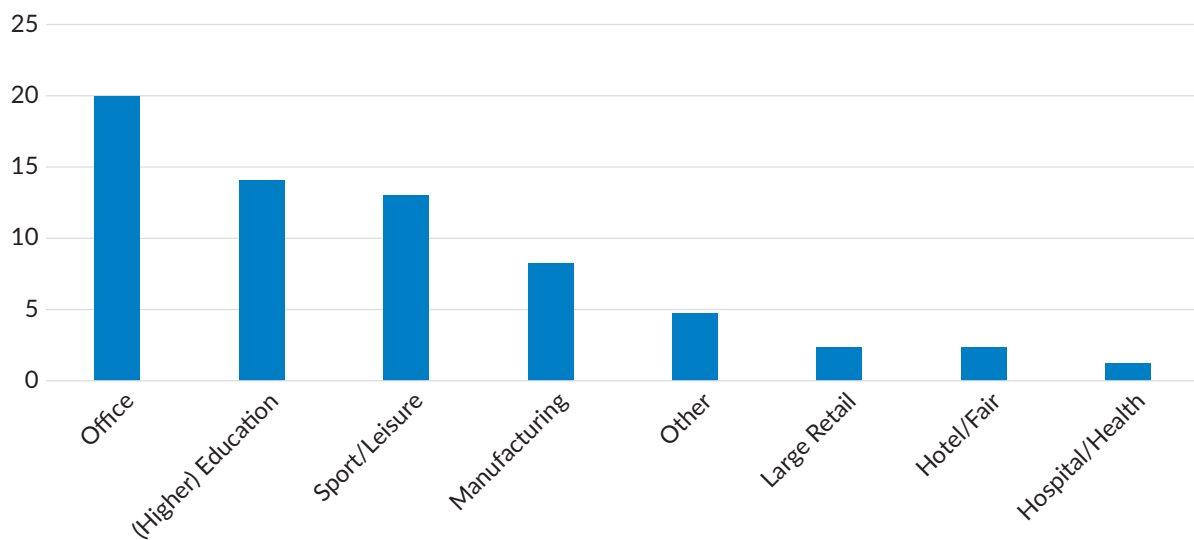


Figure 1. Mixed-use items in suburban development projects with more than 500 housing units. Source: Own compilation based on data from Bornmann et al. (2026).

A closer look at basic infrastructure provision reveals a differentiated picture. School construction (59%) is almost as prevalent as the integration of local food retail (62%). Youth facilities (38%) and senior facilities (34%) appear at similarly moderate levels, even though, as shown above, governance arrangements in the youth sector are institutionally easier to implement than in the senior sector. This underlines the analytical value of including both sectors, even though the empirical density is considerably higher for youth-related infrastructure (see Figure 2). Unsurprisingly, kindergartens dominate by far (93%). In larger new quarters, they have become such a standard component of contemporary German residential development that they can largely be taken as a given in the remainder of the analysis. Accordingly, kindergartens serve here primarily as an illustrative case for distinguishing necessary from sufficient conditions of urban infrastructure governance.

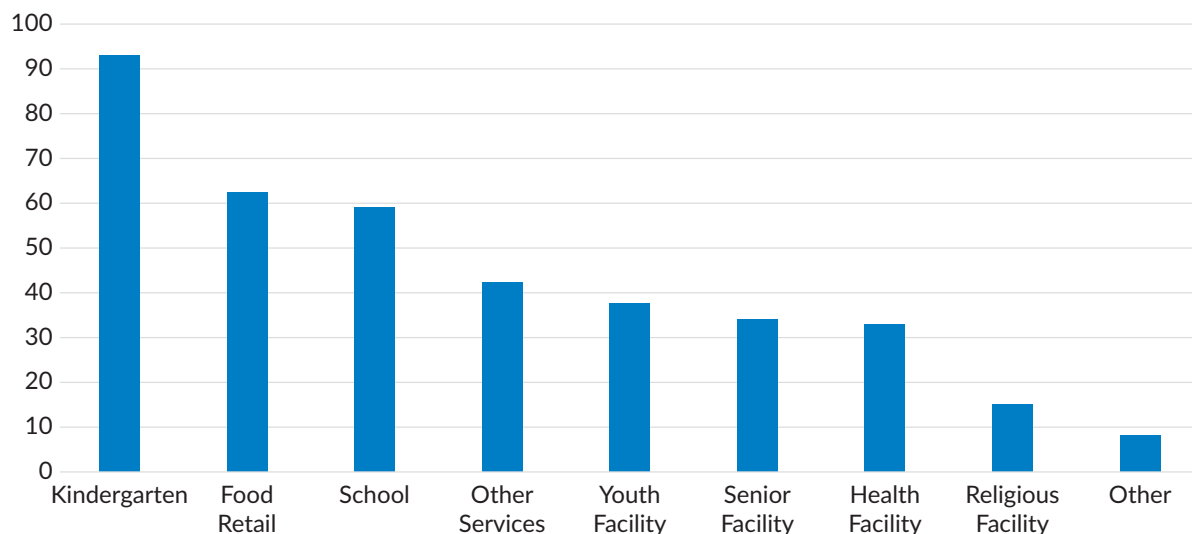


Figure 2. Follow-up facilities in suburban development projects with more than 500 housing units. Source: Own compilation based on data from Bornmann et al. (2026).

Branding and imaging of new quarters often suggest that, beyond kindergartens, community-oriented and urban social infrastructure constitutes the most prominent feature of new social infrastructure. In urban design terms, this typically refers to small spaces such as ground-floor units or multifunctional rooms. They are relatively prominent (Figure 3), yet their comparatively low spatial requirements mean that their implementation usually occurs at the level of individual sites, often as a component of a specific third place (Mattern, 2014). In planning processes, they tend to be integrated later than the infrastructural elements

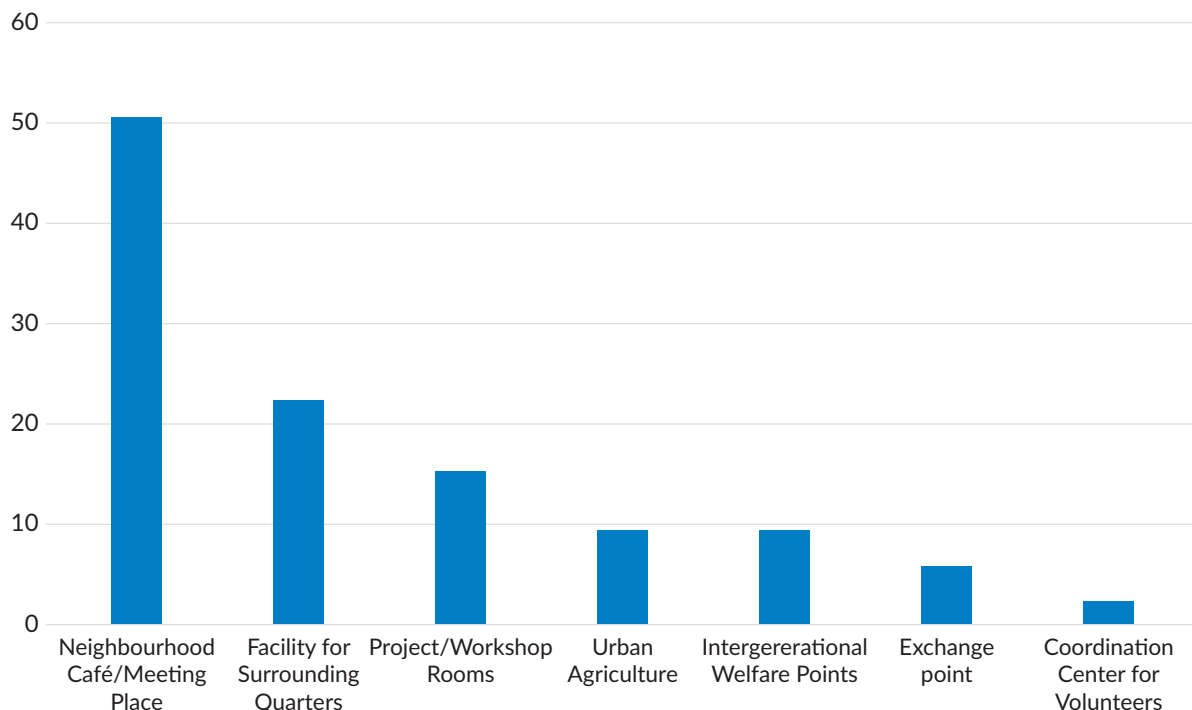


Figure 3. Facilities for a third place or community-oriented use suburban development projects with more than 500 housing units. Source: Own compilation based on data from Bornmann et al. (2026).

listed in Figure 2 and often reflect the initial ambition to establish any target-group-specific or cross-cutting third place at all. They can be seen as add-ons, e.g., like a corner café in a building.

The creation of urban and green public spaces is a core element of contemporary neighbourhood visions, as demonstrated by Bornmann et al. (2026) in this thematic issue. Around two-thirds of the quarters feature either central squares or green corridors (67% each), while nearly half (49%) extend these into networks of public spaces beyond the quarters themselves. Social infrastructure is distributed across neighbourhoods in ways that create focal points without neglecting the distinct functional logics of different infrastructure sectors. How Germany's largest cities address this challenge in their largest new quarter developments is the question to which the following section turns.

4.2. Providing Youth-Oriented Services

A key finding from the focus group workshops is that opportunities for the establishment of services for adolescents primarily emerge where organisations working in that field have access to their own or reliably usable spaces. Ownership, long-term leases, or contractually secured uses enable low-threshold, flexible, and even spontaneous use (M_Z, B_S). This responsiveness is essential, as needs arise at short notice and target groups change rapidly. Organisations possess extensive experiential knowledge regarding spatial requirements; quantitative standards can at best define minimum thresholds (B_N, B_B). More decisive is the ability to spatially bundle different activities in adaptable spaces (HH_A, M_Z).

Youth-related infrastructure is considerably less programmable than educational infrastructure. While kindergarten and school provision is clearly defined in planning terms, youth work under Section 11 SGB VIII remains open and adaptable. Spaces derive their meaning from the activities taking place within them; changes in programming can quickly increase or diminish their relevance for young people (M_K). This explains the comparatively fuzzy character of youth infrastructure beyond schools and kindergartens (B_R, B_B). Moreover, usage regimes differ: Facilities attached to schools or public institutions are often perceived by their users as a form of control (HH_O), creating a demand for spaces with varying degrees of autonomy, appropriation, and social regulation (M_K).

Beyond indoor spaces, open spaces and parks play a central role (M_H, B_M, M_S). They function as informal spaces for appropriation, often used temporarily and unofficially. Such places typically evolve through social practices rather than deliberate design. These functions are often substituted by designated youth spaces such as skate parks, which are recognisable from the outset and used both locally and citywide (M_H, B_M, M_S).

This refers to a structural tension: Whilst young people's use of space is flexible and difficult to plan for, socio-pedagogical support requires long-term administrative preparation (M_Z, M_H, M_W). Young people are intensive users of open space, move independently, and rely on both outdoor and indoor settings (M_S, M_F, M_Z, HH_S, B_N). For many, particularly those in crowded housing or with migrant backgrounds, such spaces function as a "second living room" (M_Z, M_K). Pure open-space solutions are therefore insufficient; proximity to facilities or temporary structural additions to buildings is often required. Overall, youth-related infrastructure proves most effective when characterised by functional openness, social integration, and rapid adaptability rather than rigid standards.

4.3. Urban Health, Countering Isolation, and Comparable Issues of an Ageing Society

Population ageing poses growing challenges for urban and neighbourhood planning (Münter, 2014). Senior-friendly infrastructure is gaining importance in light of rising care needs, post-Covid effects, risks of loneliness, and increasing care work (Bertram et al., 2026; Potz & Scheffler, 2023). Health and care systems follow market-based allocation logics that frequently generate spatial inequalities, for example between socioeconomically strong and weak neighbourhoods (Brokow-Loga & Eckardt, 2021; Klinenberg, 2018; Scheller, 2017). As senior-related infrastructure in Germany is institutionally organised distinctly, we address only selected aspects.

We structure senior-related infrastructure along three dimensions. First, neighbourhood-oriented services function as prerequisites for social participation and help prevent isolation (B_K). Second, we stress care issues as collective social resources rather than purely private responsibilities, contributing fundamentally to social stability (HH_A). Third, with declining mobility, the neighbourhood gains importance as the central sphere of everyday life, integrating care, social interaction, and daily routines (B_L).

In Germany, key day-to-day requirements for age-friendly infrastructure are provided as part of the retail sector, rather than as part of other social infrastructure. Pharmacies, for instance, operate as independent market actors and their location follows retail-oriented principles (Stark et al., 2012). Urban planning can, at best, create favourable spatial conditions, such as providing suitable commercial units in new quarters (B_M), without exerting direct control. At the same time, health-related issues are becoming more relevant for integrated neighbourhood development. Climate adaptation, open-space design, and local mobility significantly affect health outcomes, particularly for older people and vulnerable groups (Marsch, 2025).

Compared to youth-related socio-spatial services, work with older people can be conceptualised as non-case-specific, neighbourhood-oriented infrastructure. However, beyond SGB VIII, Germany lacks consistent socio-spatial guidelines for this field. Loneliness has emerged as a key challenge, particularly in large cities, and seems to have been intensified by the Covid-19 pandemic (Brokow-Loga & Eckardt, 2021; Krüger, 2020; Potz & Scheffler, 2023). Volunteering remains important but insufficient to address complex social and psychological needs (B_K). With advancing age, mobility decreases, and participation increasingly depends on accessible, nearby meeting places (HH_E). This creates a planning task to provide small-scale, walkable, and emotionally accessible spaces such as neighbourhood meeting points or professionally supported third places (B_L). Berlin, for example, has expanded funding, strengthened existing facilities, and made use of rented retail spaces for this purpose. Senior-oriented infrastructure therefore requires spatially flexible locations that enable encounters, counselling, prevention, and, where necessary, care services. Comprehensive accessibility is more decisive than quantitative provision, as even short distances can become barriers (B_K). Digital mapping tools, such as those utilised by the Berlin Senior Citizens' Network, further reveal that many services operate in third places and resist strict systematisation (B_L, B_K).

Overall, senior-friendly neighbourhood development depends on hybrid concepts that integrate housing, social interaction, care, and local amenities (Klinenberg, 2018). Independent meeting places for older people and intergenerational neighbourhood centres fulfil complementary functions: The former provide target-group-specific support, while the latter foster multifunctionality and social mixing. Together, they form the basis of a socio-spatial infrastructure that enables participation and counteracts isolation in later life.

5. Discussion

Social infrastructure in new urban quarters extends far beyond the provision of housing-related follow-up facilities. It cannot be reduced either to the basic services provided by the public sector, such as kindergartens and schools, or solely to the fulfilment of quantitative standards. Rather, neighbourhood-based social infrastructure constitutes a central instrument for translating “urbanity” from a masterplan into a built environment: to put life between the buildings, to reframe Gehl’s (2016) dictum. Social infrastructure takes the form of a place-specific and relational mix of services addressing different target groups, most prominently children, young people, and older adults. From a planning point of view, it is not worthwhile to prioritise one target group over another. The demands of many target groups will have to be considered, and ultimately stricter and less strict means to meet demands will have to be applied. Stricter demands are represented by individual entitlements and met by infrastructure facilities (like a kindergarten). Beyond those, other demands are taken care of by the welfare state system in the form of non-individual helping structures and are more weakly embedded into the municipal administration. Approaches to link the demands of different generations may, however, be fruitful when planning infrastructural facilities, especially when they are designed to make age groups meet in a dialogic manner (Freutel-Funke & Wanka, 2024). Whether from a disciplinary point of view of education or planning science, the allocation of social infrastructure therefore exceeds classical sectoral boundaries and must be understood as a complex mode of governance.

At the same time, infrastructure sectors rarely decide on their allocation mechanisms in a fully strategic or explicit manner. In most cases, allocation decisions are implicit, shaped by pre-existing spatial and institutional conditions. Site development often takes place in a path-dependent environment—whether this concerns a concrete property, a long-established location, or a budgetary title that has historically covered rental costs for youth work under Sections 11, 13, or 16 SGB VIII and is channelled to non-profit providers (Bauer et al., 2012). The providers frequently operate in the same neighbourhoods over long periods, even if addresses change. Besides taking urban governance arrangements into account, they look for sites as retailers, not as planners. Therefore, it is necessary to understand how they can be integrated into allocative governance schemes.

5.1. Time: Phasing, Anticipation, and Institutional Lag

Temporal dynamics emerge as a central yet often underestimated dimension of social infrastructure governance in new urban quarters. Planning and administrative practice frequently respond to temporal uncertainty through interim uses or transitional arrangements. The gradual build-out of new quarters and the corresponding evolution of infrastructure needs are generally treated as a manageable challenge. Empirically, however, temporal mismatches repeatedly surface. In family-oriented new-build quarters, it can appear economically and socially rational to locate social infrastructure temporarily in ground-floor retail units of early construction phases. These are spaces that are unlikely to attract viable commercial uses until the population of the quarter reaches a critical mass. Yet, by the time such commercial demand materialises, demographic pressures for family-oriented infrastructure may already have subsided.

Such arrangements depend crucially on property owners’ temporal horizons. Municipal housing companies and cooperatives—whose business models typically prioritise long-term stock stabilisation over short-term returns—are particularly well positioned to accommodate temporally shifting uses of ground floors. This echoes a key insight from urban regeneration: The adaptive reuse of commercially zoned spaces for

socio-infrastructureal purposes marked a formative moment in the development of integrated neighbourhood planning (Krüger, 2019). Since the 1970s, numerous kindergartens have operated as *Kinderläden* (Kinder = Children; Läden = Shops), embedding social infrastructure directly into everyday urban spaces. What initially emerged as a pragmatic response later became an intentional strategy of cautious urban renewal, strengthening ground-floor activation as a collateral effect of socio-infrastructureal provision.

From a governance perspective, we must therefore understand time as a condition of institutional capacity. Planning systems are required to anticipate uneven and non-linear processes of social reproduction. Institutional lag reveals the limits of bureaucratic temporality and highlights the need for flexible and adaptive governance mechanisms. Early-phase provision, temporary yet reliable spatial arrangements, and anticipatory programming emerge as key strategies to mitigate temporal mismatches.

5.2. Place: Location, Accessibility, and Steering

Spatial conditions are equally decisive for the everyday functioning of social infrastructure. Across the analysed cases, access to suitable and adaptable premises emerged as a key determinant of whether services could operate in a low-threshold, inclusive, and responsive manner. Location within the urban fabric, visibility in public space, and proximity to everyday routines all shape patterns of use and accessibility.

In planning practice, the spatial clustering of social infrastructure such as the “neighbourhood house” (*Nachbarschaftshaus*, cf. Böcker, 2010) plays an important role: an entire building dedicated to community-oriented uses, acting as a third place. In new-build quarters, such spaces often exist initially as architectural shells whose programming aligns over time through neighbourhood management processes, procedural instruments largely inherited from urban regeneration, again (Krüger, 2019; Walther, 2008). This approach aligns urban design with flexible allocation practices across administrative sectors.

A second, though currently less prevalent, type of cluster is the educational landscape (Coelen et al., 2019). Its limited presence in contemporary new-build quarters reflects pressures toward standardised school construction. Mobility hubs constitute a further emerging type, combining large infrastructureal structures with small-scale services and public activation. Although frequently included in master plans, their transformation into genuine socio-infrastructureal clusters remains uncertain (Krüger & Altröck, 2023).

Importantly, we shall not understand clustering solely by looking only at a single plot. It is useful as an urban design practice, too. Where central infrastructure buildings generate public meeting points, complementary uses can emerge in small-scale ground-floor units. Non-profit providers act as commercial tenants (Bauer et al., 2012), enabling allocation mechanisms often inaccessible to municipal administrations. Services beyond schools and kindergartens, particularly senior-oriented, cultural, educational, and neighbourhood libraries, benefit from such proximity. This spatial logic connects everyday administrative practice in Germany with regard to *Wohnfolgeeinrichtungen* to international debates on social infrastructure (Klinenberg, 2018; Latham & Layton, 2019; Mattern, 2014). Our findings underscore the relational character of space. Space is not a neutral container for services but a contested resource shaped by property relations, land values, and planning priorities. Control over space and its stabilisation over time is thus central to explaining optional societal outcomes in new quarters.

5.3. The Role of Benchmarks

Benchmarks still play a powerful role in legitimising social infrastructure provision within planning and administrative processes. In German municipalities, they translate demographic projections into spatial requirements and budgetary commitments. Their strength lies in administrative clarity and legal defensibility, particularly for basic infrastructure like schools and kindergartens (HH_S, B_B, B_S, M_B).

From a governance perspective, benchmarks function as selective visibility devices. They privilege needs that can be quantified while marginalising those that resist standardisation. The challenge is not to abandon them but to critically reflect on their limits and complement them with qualitative, process-oriented assessments of needs for services. Increasingly, benchmarks have become objects of negotiation rather than fixed standards (Krüger, 2025), reflecting demographic change and spatial variation across territories (Blum et al., 2023; Libbe et al., 2010). Crucially, these negotiations are anchored not in social but in planning law as explained above. Site-specific urban development contracts, for instance, give cities the capacity to ensure the provision of socio-infrastructure services beyond minimum legal requirements.

6. Conclusion

The analysis of three metropolitan regions' administration practices demonstrates that sectoral logics, institutional routines, and property-economic availability decisively shape which allocation mechanisms are applied and how flexibly they can be translated into urban development processes. The analysis shows that socio-spatial requirements become operationally relevant only through a complex process of translating them into spatial categories. It is the physical localisation within the quarter—through urban design—that renders needs addressable and governance decisions observable.

Effective governance thus requires an understanding of both sector-specific logics and property-related allocation patterns. This entails recognising actors in their dual roles as service providers and as tenants (e.g., of ground-floor shops) as well as landlords (e.g., of third places). Non-profit welfare organisations and housing companies function simultaneously as operators, lessors, and civil-society actors demanding space.

Despite divergent legal frameworks, youth and senior infrastructure exhibit structural analogies, particularly regarding encounter-based, leisure, and preventative services beyond case-specific assistance. Low-threshold spaces and flexible uses emerge as central prerequisites for participation across target groups. While youth infrastructure benefits from stronger institutional anchoring under SGB VIII, senior-oriented provision remains more weakly codified (Table 1).

For new urban quarters, the findings underscore that the integration of urban design, benchmark logics, and governance structures is essential. Time, location, and institutional responsibility (measured by benchmarks) constitute necessary but not sufficient conditions. Integrating intermediary actors, welfare organisations, and municipal administrations into spatial development processes is key to the fine-grained management required to move beyond minimum standards.

Table 1. Different dimensions of youth-oriented and senior-oriented infrastructure planning.

Dimension	Youth	Seniors
Legal Basis	Clear (SGB VIII)	Fragmented (multiple SGBs)
Steering Competence	High (municipal responsibility)	Low (often market-based)
Flexibility	High	Medium
Spatial Logic	Multifunctional rooms (e.g., in educational landscapes or youth clubs)	Hybrid: care, health, encounter
Actor Constellations	Structured (often already in networks by Section 78 SGB VIII)	Heterogeneous, care & health-dominated

Although the specifics of German regulation are not directly transferable, the German case contributes to international debates by illustrating how to systematically engage with the socio-infrastructureal “software” while planning the urban “hardware.” What German administration conceptualises as case-unspecific work in social departments and follow-ups in the planning departments corresponds closely to what international literature describes as third places. This translation renders German social law analytically productive for global discussions on social infrastructure and urban planning.

The analysis further demonstrates that senior-oriented infrastructure encompasses a broad spectrum of mobility, local supply, loneliness prevention, health services, and care provision. Its concrete manifestation at the neighbourhood level is less the outcome of abstract need profiles than the result of spatial accessibility, real-estate availability, and the governance capacities of specific actor constellations (see Table 1). The fact that senior-related needs are addressed less explicitly in planning processes thus points not to a lack of societal relevance, but rather to the absence of coherent regulatory frameworks that can be operationalised within spatial planning. These could be benchmarks—as long as a quantitatively based regulation leaves necessary flexibility for welfare actors.

Social infrastructure in new-build neighbourhoods thus requires a consistent approach that aligns legal frameworks, real-estate realities, and social work’s rationales (Krüger, 2025). While youth-related infrastructure is comparatively easier to integrate into planning processes due to clearer regulatory mandates and institutional responsibilities, senior-oriented infrastructure must largely be structured through spatial availability and intermediary actors, particularly those rooted in organised welfare provision (Table 1). Both fields benefit from flexible, low-threshold, and spatially well-embedded formats that systematically connect urban design as “hardware” with the “software” of social work. Achieving this in new urban quarters presupposes a locally embedded form of governance (Figure 4) that may explicitly draw on instruments and procedures developed in urban regeneration and adapt them to the planning of new urban quarters.

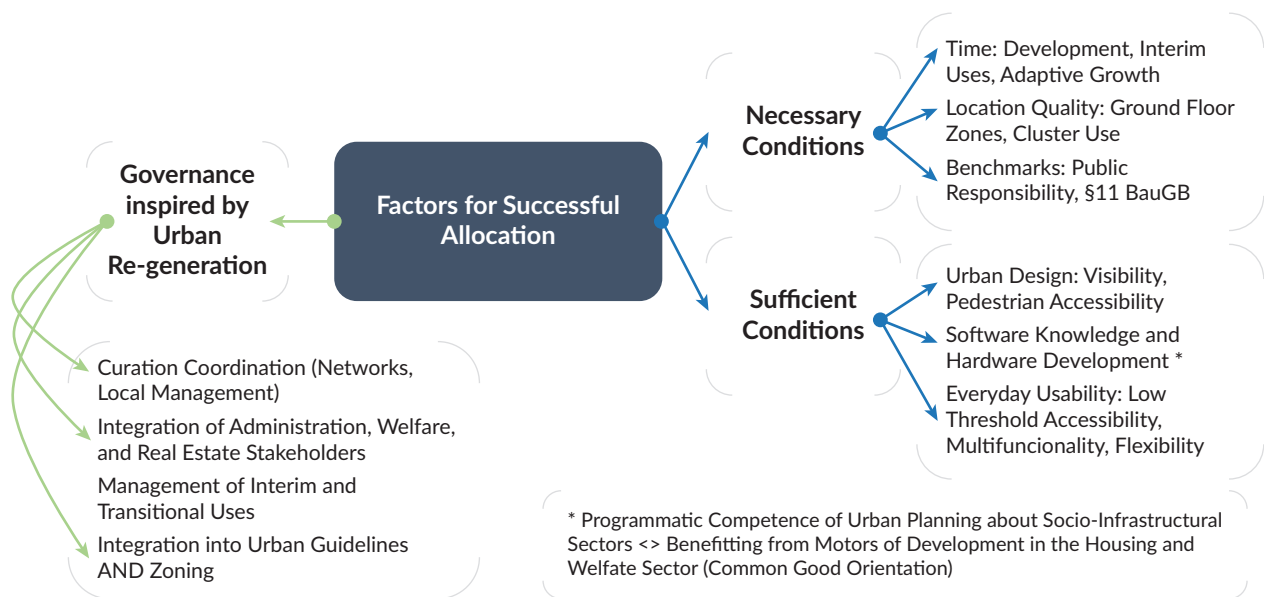


Figure 4. Conditions for an allocation of punctiform social infrastructure.

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Conflict of Interests

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