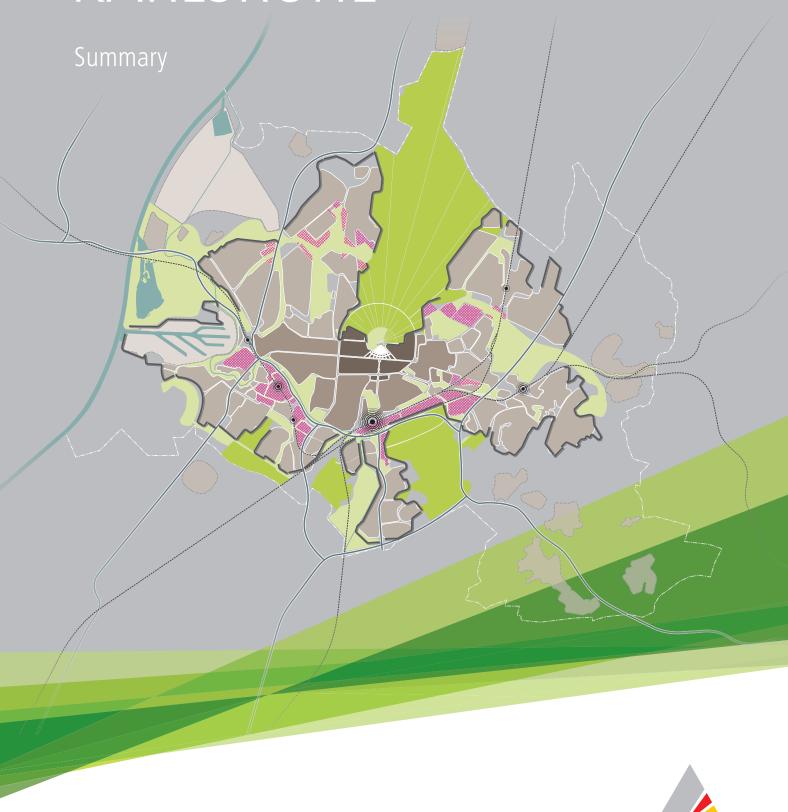
SPATIAL AGENDA KARLSRUHE



Karlsruhe

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Rathausdruckerei Karlsruhe

Its fan-shaped layout and radial vistas single Karlsruhe out as the archetypal planned city. And yet, faced with planning the planned city's future, meeting present and future challenges clearly supersedes the pursuit of an absolutist ideal.

Karlsruhe is thriving. By 2015, the city had 315,000 residents, trending upwards. Development sites are scarce and designated with great restraint as part of a resource-efficient development policy to protect valuable natural spaces and actively address climate change. Social changes exert a further major influence on the design of our cities. Urban planners and decision-makers face a panoply of small and large-scale plans and invididual projects. Together, these challenges present the city with new issues requiring specific answers.

Coherent and politically endorsed, Karlsruhe's landmark Spatial Agenda lays the foundations for the city's future development. It is the result of a long and intensive planning process with significant input from experts within the city administration joining forces with external specialists. The process was reinforced by continous engagement with elected members and a broad public. My hope is that this fruitful collaboration and the discourse established between the city administration, elected members and citizens will continue. I am banking on it.

Dr Frank Mentrup Mayor



The Spatial Agenda describes strategic goals to chart the city's spatial development. These include raising the quality of the urban environment, safeguarding quality of life and living conditions as well as future-proof work environments for generations to come, enhancing the city's specific qualities, protecting climate-relevant landscape spaces, and promoting responsible and socially equitable growth.

Planners, elected members, select committees and the general public agreed on seven drivers: "distinct outlines", "green addresses", "core strength", "more housing", "cool quarters", "dynamic cordon", "urban proximity". As a result, the city is committed to:

- a prudent land use allocation which prevents sprawl, protects greenfield land and preserves natural landscapes;
- a green city with the governing principle of synergy between city and landscape written into its DNA;
- caring for a city centre as a place of identification, which provides all the benefits of a European city;
- a lively, livable city, which offers a sense of well-being for many and provides varied and socially equitable living spaces;
- a climate adaptation policy whereby necessary measures are implemented throughout all plans and projects;
- a forward-looking city which is economically varied, competitive, and open to technological innovation; and
- a networked city, which recognises mobility as a fundamental need and provides resource-efficient mobility options.

Achieving these objectives is key to the future of Karlsruhe and its people. Support from all sides is essential.

Michael Obert Deputy Mayor

INTRODUCTION

THE SPATIAL AGENDA AS A ROBUST STRUCTURE AND LAUNCH PAD FOR SPECIFIC PLANS

The Karlsruhe Spatial Agenda is a comprehensive plan for the entire city and its future spatial development, jointly developed and supported by citizens, select committees and administration. It was adopted by the council at the end of 2016 and thereby gained binding status. The Spatial Agenda defines parameters for future planning decisions and provides guidance for planning practice. It covers the range from abstract visions to specific plans. Administration and elected members refer to the Spatial Agenda in making objectives and decisions fully transparent.



Exhibition in the old meat market hall in 2015, Image: Monika Müller-Gmelin, Urban Planning Department

THE PROCESS

The Spatial Agenda is the result of an intensive discussion over a number of years, involving an innovative consultation process.

- The Karlsruhe Spatial Agenda process was officially launched at the "10 questions for Karlsruhe" exhibition in the Prinz-Max-Palais in summer 2013.
- Three interdisciplinary design teams Team berchtoldkrass + STUDIO. URBANE STRATEGIEN + URBAN CATALYST STUDIO, Team West 8 + Verkehrplus und Team Machleidt + Sinai + SHP elaborated framework concepts during a planning workshop from January to June 2014. More than 200 residents took part in the workshop, which benefited from a continuous expert support.
- The workshop was followed by a period of reflection, during which the city planning office process group, Karlsruhe Institute of Technology (KIT) and other experts drew up the draft Spatial Agenda. Guided walks and cycle rides were organised for interested members of the public.

- The draft Spatial Agenda was presented at the exhibition "Die Stadt neu denken" (Rethinking the city) hosted in the old meat market of the former abbatoir on the occasion of the city anniversary in June and July 2015. More than 1,700 people visited the exhibition.
- Following the exhibition, the Urban Planning
 Department took the lead in further refining the draft
 Spatial Agenda together with KIT, external specialist
 planners and other city offices.
- Elected members followed project progress. Interim findings were presented at various select committee proceedings, and debated with a broad public at two so-called "update events".
- After adoption by the city council, the Spatial Agenda was presented to the general public at the final event on 15 December.

The number and range of stakeholders included from the outset of the process was unprecedented. The resulting openness and transparency fed citizens' and elected members' support for city-wide urban and spatial planning measures.



Results of the planning workshop, Sources: berchtoldkrass, UC STUDIO, S.US, West 8 + Verkehrplus, Machleidt + Sinai + SHP

THE PURPOSE OF THE SPATIAL AGENDA IS TO:

- guide and coordinate the city's spatial development;
- place priorities and focal points for future projects within a coherent wider context:
- provide a basis for elaborating and updating existing plans:
- formulate project guidelines and provide design competition frameworks;
- provide a framework of reference for engaging with external stakeholders such as investors;
- provide a foundation for political decision making; and
- safeguard quality assurance in planning, processes and construction.

The Spatial Agenda will gain importance in the face of the global and local challenges the city of Karlsruhe is presented with. Population growth, changes in society and climate exert a major influence on the shape of the city. Karlsruhe has long been lending priority to inward development, a policy demanding the prudent allocation of spatial resources. It also requires strategies to link quality in growth with simultaneous enhancements to open space. This brings quality of life in the city and in its neighbourhoods to the fore.

In the past years, the city has embedded first foundations in the "Integrated Urban Development Concept Karlsruhe 2020" (ISEK). This is accompanied by further plans such as the Green Network, the Climate change framework, and the Transport development plan. The Spatial Agenda builds on these foundations. It describes strategic targets which chart the way ahead for the city's spatial development as well as describing specific projects and visions.

The spatial framework highlights three very different avenues of approach. The seven drivers set out the foundations and point to the direction of development in the next 20 years. The described proposals should be seen as tasks for Karlsruhe to plan from the current point of view and put into practice soon. The focus areas explore ways in which projects can be implemented in important key areas and identify possible synergies and interdependencies as well as conflicts with other proposals.

THE CITY KEY TASKS

- Karlsruhe needs new, good quality homes within its existing boundaries
- The ongoing development of existing neighbourhoods must conform to a socially equitable urban society
- Existing trading estates must be transformed and improved in order to ensure future-proof employment
- Karlsruhe's open space must be enhanced and improved
- Karlsruhe must be a city of short distances: wellconnected transport systems must ensure access to all its central facilities within five minutes.
- The city's internal and external contours must become more apparent. The inner city must be enhanced and reinforced in terms of its design, retail offer, employment, housing, adaptation to climate change, open space, quality of place and transport.

DRIVERS

STEERING FUTURE DEVELOPMENT ON URBAN SOCIETY'S KEY TOPICS

The seven drivers strikingly sum up the overall thrust of the city's future development. They arose out of a process of engaging with Karlsruhe's specific context and qualities, inspired by the ideas of the three teams taking part in the planning workshop.

The drivers capture the key issues at stake for Karlsruhe's future and set out clear objectives which play to the city's strengths. These include the key issues of housing, employment, climate and transport as well as reinforcing identity and adopting an unequivocal stance with regard to the city's design culture and future development.



Karlsruhe draft spatial framework 2015, Drivers. Source: Professor Markus Neppl, KIT



Karlsruhe draft Spatial Agenda 2015, Drivers. Source: Professor Markus Neppl, KIT



Distinct outlines, Source: MESS

DISTINCT OUTLINES

THE LEITMOTIE OF URBAN SPATIAL DEVELOPMENT

"Distinct outlines" clearly spell out to those arriving where Karlruhe really begins. Karlsruhe has mapped out a line separating the inner city from its surroundings, thereby articulating a leitmotif for its urban development:

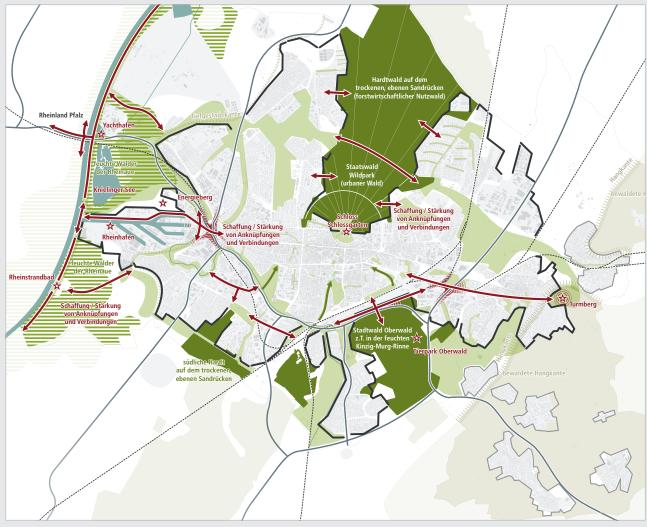
- Surrounding landscape is dedicated to recreation, agriculture, forestry and nature conservation. Karlsruhe's key development potential lies in the inner city and is set to be developed to a high standard.
- The design of buildings and landscape helps urban gateways and approaches provide a strong sense of orientation.
- Clear design principles make edges between neighbourhoods distinctly visible, where potential urban extension sites are located.

Developing and improving the design quality of interstitial areas between independent neighbourhoods is a key step. Clear outlines help improve land use on many development sites. Interstitial areas can be home to spaces for living and working as well as leisure areas. Inner urban gateways, such as at the railway station,

tend to be located at the conclusion of spatial corridors extending into the city from the outer edge.

OBJECTIVES

- Create building and landscape elements to define distinct spatial outlines and mark the urban-rural threshhold.
- Restrain Karlsruhe's growth to areas within the outline
- Functionally and aesthetically enhance points of transition between urban districts
- Lend key entrances to the city and approach corridors a unique appearance



Green addresses, Source: MESS

GREEN ADDRESSES

THE CITY IN THE LANDSCAPE

The cultivated landscape surrounding the city and the green spaces within it contribute to Karlsruhe's outstanding quality of life. Two landscape spaces hold the key to future urban development: the Hardt forest and the Rhine. The Hardt and Oberwald forests extend tendrils deep into the inner city, providing residents with access to the countryside.

Enhancing the role of these landscape features as urban recreational space in tune with the requirements of forestry and agriculture is a key task. This applies particularly to the part of the Hardt forest closest to the city.

The Landschaftspark Rhein project sees a venerable idea of connecting Karlsruhe to the Rhine being put into practice. The regional open space concept's central nodes focus on the Maxau Estate and the Rheinpark Rappenwört, which itself faces comprehensive remodelling and development around the Bellenkopf-Rappenwört flood retention areas.

What is missing, is the built-up connection between the city and the Rhine. The Rhine docks harbour long term development potential. Karlsruhe's meeting with the Rhine will only be possible by means of an improved connection between the city and the great river.

OBJECTIVES

City and forest coexist, Karlsruhe meets the Rhine:

- The Rheinpark continues to develop, providing new recreational and experiential space. New routes provide access from the city to the Rhine, especially via the Rhine docks.
- Further recreational areas and linkages between urban neighbourhoods are configured in the Hardt and Oberwald forests.
- The landscape sets the scene for improved links between social, economic and environmental concerns.



Core Strength, Source: MESS

CORE STRENGTH

MORE KARI SRUHE FOR KARI SRUHE

Not only should Karlsruhe stay the attractive centre of an economically vigorous region, but its attractivity should further increase. For this to happen, Karlsruhe's centre must unlock new urban development potential to the south and finally breach the barrier posed by the Kriegsstraße.

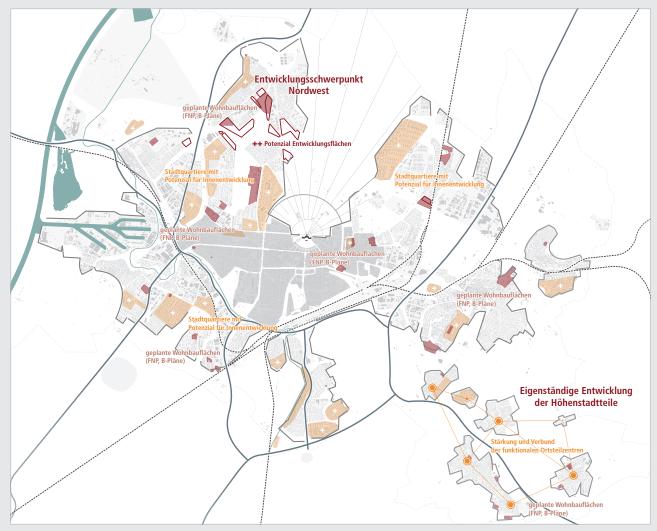
A broad urban corridor incompassing the new Staatstheater, the Festival Square and the northern entrance to the Zoo offers the inner city scope for further growth, culminating at its southern vertex with the attractions of the main station. Karlsruhe main station presents development potentials unsurpassed anywhere in Germany. This urban gateway offers landmark potential.

But elsewhere too, Karlsruhe must live up to its metropolitan character, particularly with regard to the burgeoning service sector, and especially along its main urban thoroughfares. Kaiserstraße/Durlacher Allee and Kriegsstraße, the two east-west routes, should be viewed as "tomorrow's boulevards". This is where new urban qualities can evolve.

OBJECTIVES

Pursue the concept of the inner city as the dense, diverse and representative heart of Karlsruhe:

- Extend an inner urban corridor south and cross over the Kriegsstraße
- Reinforce "tomorrow's boulevards" as representative elements for metropolitan developments and uses
- Develop the station guarter as an urban gateway and as an address for trade and service industries
- Strengthen the inner city as a place of identity and integration, as a public attraction, and as a location for retail, business, culture and housing.



More housing, Source: MESS

MORE HOUSING

KARI SRUHF GROWS WITH INNER VALUES

Karlsruhe is growing and needs space to live in the heart of the city. Developing these areas is a task presenting opportunities and challenges. Creating the new presents a chance to improve the old. With this in mind, regenerating older neighbourhoods and enhancing and extending existing districts takes centre stage. This approach will deliver many improvements for Karlsruhe as a whole, especially for neighbourhoods north of the city centre.

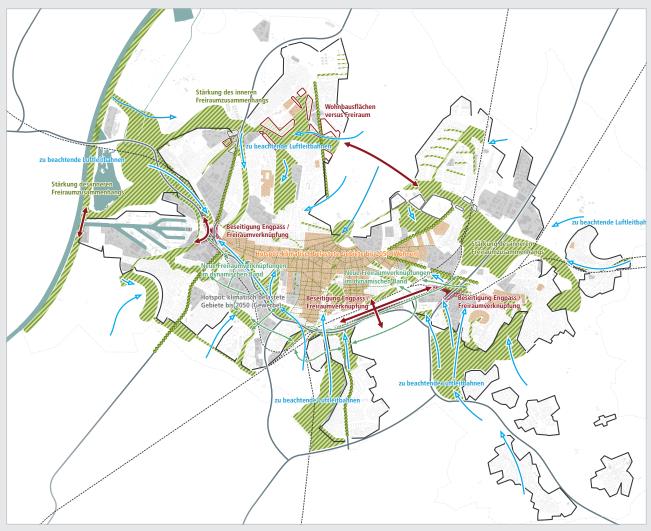
The area between Nordstadt, Nordweststadt and Neureut harbours the greatest potential for new residential development, but it also suffers the most severe shortcomings in terms of urban design. A coordinated redevelopment paves the way for creating strong, new neighbourhoods.

Karlsruhe's most heterogeneous area, Oststadt is shaped by industrial heritage, higher education institutions, student living, the technology park and the old abattoir. Its dormant opportunities for housing and employment can best be activated by developing a shared identity for the entire neighbourhood.

OBJECTIVES

Create neighbourhoods with vibrant adjacencies and provide innovative solutions for population growth:

- Adapt existing neighbourhoods to modern requirements for housing and open space.
- Foster gentle further development in existing neighbourhoods, especially with regard to climate adaptation.
- Capitalise on quality of place for open space, infratructure and mobility.
- Develop new and existing areas around the airfield and in Neureut along with urban open space.
- Pursue the "Oststadt plus" neighbourhood and laboratory concept for a lively mix of research, technology and residential space.



Cool districts, Source: MESS

COOL DISTRICTS

LOCAL CLIMATE ADAPTATION

The projected increase in the frequency of hot periods presents a particular challenge to Karlsruhe's urban development and its planning.

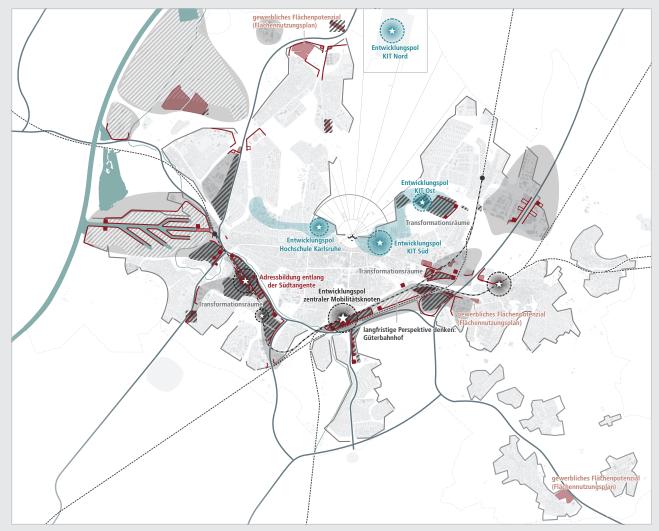
Sufficient areas for cooling in urban neighbourhoods are especially important. As a result, the merits of development and the preservation of green and open areas must be weighed up with great care. Creating open space networks and greening street space contributes decisively to reduced warming. Streets, squares and undeveloped areas are all open spaces which act as cooling elements within the city. New building must not create further heat islands.

Future urban development must find new energy sources. Coal and oil use for space heating and traffic will diminish in the long term. In a post-fossil-fuel age, areas currently crucial to the city's energy supply will assume a new role. They should be earmarked as prospective renewable energy production areas.

OBJECTIVES

Adaptation to climate change must be tailor-made:

- Provide cooling and shade in the public realm and in open space, pay attention to climate adaptation in new areas and extensions to existing neighbourhoods and implement complementary measures in open space.
- Safeguard cold air channels and connect open spaces in order to reinforce the inner Green Network.
- Include innovative means of climate adaptation in new development.
- Consider new means of energy supply for a postfossil-fuel age.



Dynamic cordon, Source: MESS

DYNAMIC CORDON

CONNECTIONS AND GROWTH POINTS FOR COMMERCE

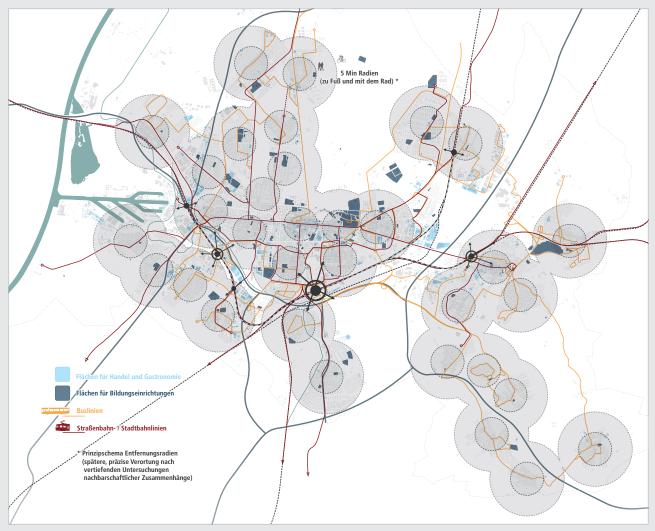
Karlsruhe's future growth potential lies where major infrastructure, trading estates and unused open space coalesce to form an ill-defined space. Trading estates and zones for service industries are Karlsruhe's economic backbone and should be stimulated for growth and transformation.

The area along the southern by-pass and the railway forms a cohesive structure, offering space and good access for research and commerce to flourish. The ingredients are all there and just need bringing together to develop: the southern by-pass and urban approaches, rail and tram lines, transport stops with growth potential, sites for business and open space, all waiting to be forged into a coherent network.

There is plenty of room for unexpected innovation. What is lacking, are connections and ignition points to kickstart the transformative process and generate new centres of growth at transport nodes.

OBJECTIVES

- Actively develop existing sites and reserves, and create development potential, also with regard to climate adaptation.
- Develop growth potential at urban gateways and transport nodes.
- Explore the light rail network as a driver for the future, including multi-modal nodes and links to the tram network.
- Identify and equip niches in buildings and spaces to help foster small businesses and start-ups.
- Join forces with the region to create addresses and focus points for research, production and logistics.



Urban proximity, Source: MESS

URBAN PROXIMITY NEW ACCESS ROUTES

Karlsruhe is one of Germany's mobility capitals. Few other cities offer as many networked transport options. This asset must be further developed. Karlsruhe is exploring new avenues: access and connectivity set new standards for quality of life and provide new input for neighbourhood development.

Everybody should benefit from quick access to every day facilities, preferably on foot or by bicycle. Where this is not possible, new connections or facilities must be provided at established transport nodes. This principle also applies the other way around. Areas which are easily accessible from the main station, the motorway or the market square are particularly well suitable for further development.

OBJECTIVES

The development of transport systems and the city as a whole is measured in terms of accessibility:

- Footpath and cycle lane networks are developed in order to facilitate covering daily needs.
- Light rail and trams stops are linked to footpath and cycle lane networks and other forms of mobility such as car sharing. The design of transport nodes fosters exchange and meeting.
- Local amenities and social infrastructure in local neighbourhoods are linked to central connectivity nodes and create new meeting points in the quarter.
- Utilize stimuli emanating from connectivity nodes for neighbourhood development.

PLANS

DEFINING KARLSRUHE'S OUTLINE

BRIEF AND RATIONALE

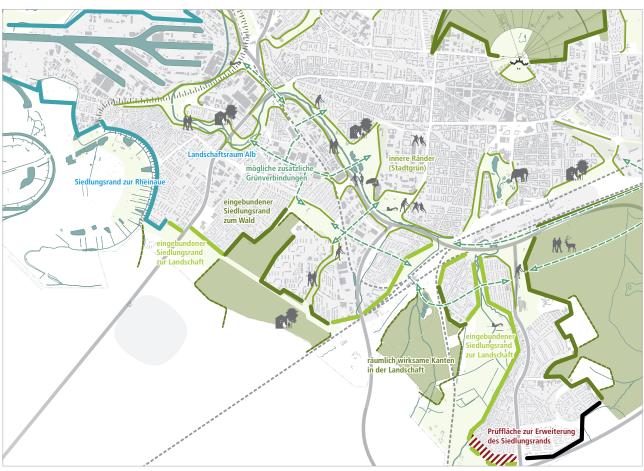
Karlsruhe's "distinct outlines" were one of the most important project outcomes, shaping and upholding the urban-rural threshold. Distinct outlines define boundaries and lend them urban and landscape qualities. This applies to internal transitions between open space and urban space and to the city's outer rural perimeter. Currently, the city's boundaries – external and internal – are not always clearly legible. Where Karlsruhe should draw its boundaries is questionable. The outline helps direct the city's growth inwards. The challenge is to balance the demands of open space design and nature conservation with the need for new, accessible peripheral settlement areas.

OBJECTIVES

The city itself gains a more distinct visual profile within the countryside. Defining its outline and developing a design handbook directs growth inwards and assigns urban addresses to the inside and rural addresses to the outside. Open spaces in the shape of previously residual areas along inner urban edges gain qualities of their

- Define the urban outline and direct growth inward.
- Lend shape to perimeters, within and without.
- Trace additional development sites, primarily for housing.
- Weave city and countryside together.

EXCERPT OF OUTLINE MAP



Overview inner and outer outlines (south-west sector), Source: MESS, after Parks Department / Urban Planning Department.

STAGING URBAN GATEWAYS

BRIEF AND RATIONALE

Urban gateways are central elements within Karlsruhe's outline, extending a welcome, providing connectivity between transport networks as well as a variety of central facilities. Gateways mark urban-rural transition points. Their design can inspire important development nearby. The plan is to identify the functions to be allocated to urban gateways and explore how they should be designed and further developed. The benefits urban gateways offer are taken into account in their design.

To date, urban gateways have been ill-defined, often languishing in the interstices between the inner city and outlying neighbourhoods. Improving their design supports the move towards distinct urban edges and helps show where the city commences. On the other hand, enhancing urban gateways can also stimulate important urban development, such as by the main station or at the "Grünwinkel". This is especially relevant where commercial and residential areas meet.

OBJECTIVES

Urban entrances are developed and given spatial definition to reinforce the identity of the city and its neighbourhoods. The purpose of development is to create pronounced urban spaces and yet also to retain and enhance the spatial qualities of the landscape. The cues for developing urban gateways are taken from local specifics. Their development ties in with the design of urban landmarks and rural qualities as well as providing space for specific uses.

- Define representative, urban, functional or rural addresses.
- Improve the liveability of the city and its neighbourhoods.
- Develop urban silhouette and appearance in response to local specifics.
- Reciprocally improve urban and rural quality of place.

OVERVIEW OF URBAN GATEWAYS



Overview of urban gateways, Source: MESS, after Urban Planning Department, Dr. Kristin Barbey

REINFORCING OPEN SPACE

BRIEF AND RATIONALE

The Karlsruhe Green Network and the Karlsruhe 2015 Open space development plan embody a concept of open space planning to be further developed and intensified in accordance with the outcomes of the Spatial Agenda debate and the demands presented by climate change. Thematic focal points of this work will include the urban Green Network, flexibility for future leisure and recreation needs, and requirements for urban design and the urban environment. A particular emphasis will be placed on the further development of neighbourhood open spaces.

The pressing demand for new development sites weighs down on existing neighbourhoods and the countryside around Karlsruhe alike. This requires specially formulated planning solutions and innovative components. Urban green spaces take centre stage. Boundaries between developed urban areas and the surrounding landscape require clearer definition. Balancing the limited free spaces with the multiple functions they sustain demands holistic solutions. The key issue for all stakeholders engaging in urban development will be to meet the challenges of climate change.

OBJECTIVES

The Karlsruhe Green Network develops and gains further strength. In the long term, well-connected open spaces enhance quality of life in the city and fulfill varied urban needs such as respite, biodiversity, balancing the climate and land use. The Karlsruhe 2030 Open space development plan drafted by the Parks and Gardens' Department in 2016 sets out the framework for future development and the outline measures it requires:

- Continuously develop the green network based on links between open space in the countryside and in the urban setting.
- Integrate recreational uses and suitable types of agriculture and forestry.
- Balance the impact of new development by enhancing urban green spaces and peripheral areas.
- Improve urban open and green space by way of making a contribution to climate adaptation and the improved quality of life in dense neighbourhoods.

KARLSRUHE 2030 OPEN SPACE DEVELOPMENT PLAN

