



Digital Event-Series

» Morgenstadt – City of the Future«

Final Report

|1| Kick-Off Event »News from Morgenstadt«

The kick-off event of the digital event series »Morgenstadt - City of the Future« served as an introduction to the activities, achievements and projects of the Morgenstadt initiative for all interested parties. Under the motto »News from Morgenstadt«, all participants received a comprehensive overview of past, current and future developments and projects. In addition to the other topic- and project-specific events in the digital event series, the focus was on the holistic approach of the Morgenstadt network and its networking activities.



At the beginning of the event, the Morgenstadt Initiative was introduced by director Dr. Eva Ottendörfer. After a short review of the past events, the project highlights of 2020 were presented, of which the successful spin-off of the »Data Competence Center Cities and Regions DKSR« and the »Morgenstadt Global Smart Cities Initiative« are especially worth mentioning, as Morgenstadt coordinator Maral Koohestanian noted.

Morgenstadt researchers addressed the current situation of municipalities in the »Morgenstadt Corona Survey«. The results were presented by research coordinator Hendrik Frieling. The key findings of the survey show that city governments are more agile than previously thought. While innovation is moving forward, there are no automatic mechanisms for structural change and the funding landscape presents itself as unclear. This is seen as a clear mandate for research to address further topics and issues in this regard. The audience showed expressions of interest in continuing the survey, which will not be continued in this form for the time being due to its scope. However, individual queries within the network are planned.

The »Urban Development Initiative UDI« replicates the Morgenstadt approach in the Brainport region around Eindhoven (NL) and is therefore of particular importance in the scalability of innovations from the Morgenstadt cosmos.

|1| Kick-Off Event »News from Morgenstadt«

Another project in focus was the innovation partnership »City Center 2030+ | Future Public Space«. After the short status update, four partners were allowed to introduce themselves in a short round of introductions: BPD Immobilienentwicklung, GfK - Growth for Knowledge, CITY DECKS - liveable Cities GmbH and NAS Smart Platforms GmbH. Here, the diverse mix of young start-ups as well as established companies was noticeable and made for a varied program.



With the announcement of inclusion in the new version of next year's work program, attention turned to the presentation of Foresight processes. They are particularly suitable for testing and identifying innovations in terms of effectiveness. In addition, the focus of Morgenstadt will be on small and medium-sized cities, as well as on issues and topics related to scalability and funding advice.

The event concluded with a query to the participants on the need for (digital) exchange formats, which was confirmed by a large majority.

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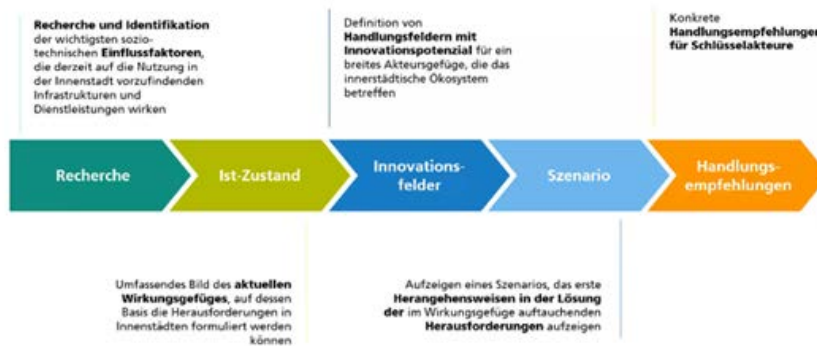
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[2] Workshop Future Public Space

Inner cities are a social melting pot and can also be a centre for innovation. Against this background, what are the requirements for future city centre development and how can the different functions of a city centre be combined in a targeted manner? Answers to these questions were provided by the Future Public Space workshop, in which Claudius Schauffler, head of the Smart Urban Environments team at Fraunhofer IAO, presented the results of a study conducted as part of the innovation partnership »City Centre 2030+ | Future Public Space«.

Aufbau und Ziel der Studie Vorgehen



The four functions of a city centre, i.e. civic, economic, transport and historical relevance, are currently usually considered in isolation from each other. In addition, tensions can be observed in areas such as commerce or mobility, which point to the necessity of redesigning inner cities. The representative study includes a survey of municipal and social needs in the period from September 2020 to February 2021.

One of the biggest factors that municipalities are currently concerned with is the issue of the need for living space - a trend that, according to the study, will become even more important in the future. 3 out of 4 citizens would like to see a change in city centres in terms of shopping and leisure facilities, as well as flexible solutions that can be actively shaped. A central message of the study: flexibility and variety will be core characteristics of the city centres of the future, so that they can be adapted to the changing needs of the population.

Moreover, silo thinking in the four different core functions of a city centre will no longer work in the long run. Instead, the integration of new thematic areas will enable interoperability and an inner-city economic fabric. By thinking of sectors together, the view can be broadened to holistic urban concepts that include the effects and synergies of partial solutions. The testing of such partial solutions in three concrete projects in Stuttgart, Leverkusen and Hanau is an important component of the innovation partnership.

|2| Workshop Future Public Space

A highlight of the workshop was the presentation of the visualisation of public space in 2030, which is also included in the study and which also takes into account citizen participation, climate resilience and digitalisation as cross-cutting functions. The interactive format also allowed participants to exchange ideas on the study results and share their own experiences with the group. Here, participants particularly emphasised the challenge of ownership in inner cities.

The presented study will be published in the coming weeks and is available free of charge for Morgenstadt partners.

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[3] Urban Data Partnership: Results and next steps

Before a city can become a »smart city«, the potential of the »data city« must first be recognised and used efficiently and sustainably. This was the intention of the third event »Urban Data Partnership: Results and Next Steps« within the digital event series »Morgenstadt - City of the Future«. As the innovation partnership »Urban Data Partnership (UDP)« is now coming to an end after its launch in autumn 2019, the workshop aimed to present results and experiences as well as discuss ideas for new topics and formats.

Dr Eva Ottendörfer, head of the Morgenstadt Initiative, led the event, in which the goals, contents and results of the UDP were first presented. Johannes Sautter emphasised the relevance of »dataisation« as the basis of digitalisation and smart city in the linking of technology and organisation. A core topic that was repeatedly emphasised during the event was the cultural change in the administration, to which the UDP contributes by creating a common understanding for structures, processes and decision-making bases in the digital transformation.



In the further course, city partners had their say and reported on their experiences in the UDP, whereby above all the exchange between the individual actors within the cities, but also between the cities, was positively emphasised. The support in strategy development in the form of workshops and training materials in the field of data and stakeholder management was considered particularly valuable.

In the final part of the event, which consisted of a Q&A session and a workshop on further steps of the UDP, participants developed and evaluated ideas on existing and new topics and formats on a concept board. A central discussion here was the question of what challenges the cities see in the area of municipal digitalisation. On the one hand, it was argued that a lack of know-how in the city administration is often a problem, while on the other hand, it was argued that expertise is available in the administration as well as in the civil population and that there is a lack of capacity to deal with the challenge of the flood of data in addition to existing social and environmental problems. There was consensus that motivated employees are an important prerequisite for municipal digitalisation, whereby support from the management level is indispensable.

|3| Urban Data Partnership: Results and next steps

In the workshop, the future of the UDP was discussed in the form of a continuation, possibly also in a specification for individual sectors such as mobility. Among other things, the involvement of citizens in data governance and the ethical handling of data were raised as important new topics.



Suggestions for new formats consisted of thematic focus groups and modules with a thematic focus and according to the respective level of knowledge of the cities. Furthermore, initiatives for collecting data with subsequent joint use, e.g. in the form of a hackathon, were proposed. Based on the evaluation of the results from the workshop as well as the discussion, an offer for a continuation of the UDP will now be compiled.

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|4| MGI: Integrated Planning for Resilient Cities

In general, current concepts of integrated planning for climate resilient cities combine the use of technology and the participation of citizens. The way in which the combination of these two important elements in the transformation of cities towards smart cities and climate resilience is assessed and implemented in practice was the topic of the webinar »Integrated Planning for Resilient Cities - Tools and Approaches« of the Morgenstadt Global Smart Cities Initiative (MGI) as part of the digital event series »Morgenstadt - City of the Future«.



International experts presented their experiences with data-driven approaches and the use of ICT tools as well as co-creative and participatory processes, emphasising that the use of technologies such as sensors, GIS or Digital Twins must always be reconciled with the specific local, cultural and social contexts of the respective city. Dr. Francesca Spagnoli from the European Network of Living Labs (ENoLL) presented on this point the concept of Living Labs, which sees citizens at the centre of the innovation process supported by ICT tools and the basic building blocks of their work in social innovation, industrial demonstration and open science in a transnational framework through action-oriented task forces.

An important function of ICT tools in informing and involving the population was impressively demonstrated by Leyla Kern from the High-Performance Computing Center Stuttgart (HLRS) in a live demonstration of the visualisation of a Digital Twin of Stuttgart. In addition to the other diverse functions such as evaluation and prediction, the promotion of interdisciplinary collaboration was also addressed.

The implementation was illustrated by the examples of two use cases. Dr Christiane Gebhardt and Dr Haris Piplas from Drees & Sommer Switzerland presented the combination of centralised top-down technologies and decentralised bottom-up approaches in the »Smart City 4.0 Ecosystem Platform Jakarta«. The second use case was the presentation of the resilience strategy of the city of Milan by Ilaria Giuliani from the city's Resilience Department, whose implementation includes new quality standards for buildings, conversion of concrete areas into green spaces and concepts such as school oases.

|4| MGI: Integrated Planning for Resilient Cities

Between the individual keynote presentations, participants had the opportunity to ask questions, discuss the issues raised and exchange views on technologies and approaches. Workshops and interviews with citizens and stakeholders were named as popular formats for co-creation. The question of which method or approach has proven most effective so far was discussed and answered by saying that every city has different planning needs and therefore requires a combination of different approaches and a »learning by doing« mentality.

The next MGI webinar is planned for October 2021 on climate change adaptation in urban water management.

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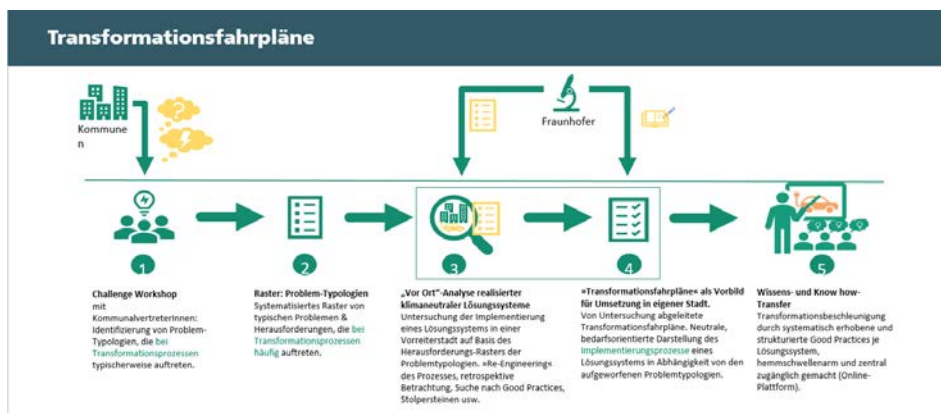
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[5] Innovation Programme Climate-neutral Cities

The fifth event of the digital event series of the Morgenstadt Network on »Innovation Programme Climate Neutral Cities« and the project »Urban Transformation Paths Climate Neutrality« of the Morgenstadt Network in the context of municipal climate protection projects at interfaces within the administration, carried out in a cooperation of the Fraunhofer Institutes ISE, IMW and IAO.

After a short introduction, Hendrik Frieling and Gerhard Stryi-Hipp, Head of the Smart City Section at Fraunhofer ISE, introduced the participants to the research project. For this purpose, they explained the background as well as the individual components of the project, which are represented by the creation of a climate assessment tool (Municipal Climate Index), the identification of problem typologies and transformation roadmaps of different urban systems as well as an open platform for knowledge exchange for municipalities (Climate Neutral Transformation Platform). A project outline for the UTC project was submitted in March 2021 as part of the National Climate Protection Initiative together with the participating municipalities of Cologne, Spandau district, Kaiserslautern and Neumünster. The workshop thus provided a platform for the exemplary testing of the project modules and served to network with other municipalities.



In the second part of the workshop, the methodology of identifying problem typologies was tested together with the participants on the example topic »Climate protection activities at interfaces in the administration« under the leadership of Urban Kaiser, head of the Innovation Acceptance Group at the Fraunhofer IMW and Dr. Christine Richter, research assistant in the Innovation Acceptance Group at the Fraunhofer IMW. For this purpose, the participants were transferred to a digital board in which they had to describe, for example, the greatest challenges or the most important actors within municipal climate protection. Using the example of municipal climate protection in the administration, it became apparent that above all a lack of financial and personnel resources, a lack of obligations within the specialised departments as well as a lack of holistic prioritisation of the topic and the perspective of climate protection measures as a municipal »additional task« represent the greatest challenges in the area of climate protection. At the same time, the aforementioned lack of initiative and willingness leads to less innovation and continues to make climate protection appear as a task outside of the normal daily administrative routine.

[5] Innovation Programme Climate-neutral Cities

Following this, various recommendations for action from previous Fraunhofer IAO publications on promoting innovation within municipal administration were explained. Among other things, internal strategies and open innovation processes in consultation with non-administrative actors are crucial for the innovative capacity of municipalities.



In this context, Rebecca Nell (Fraunhofer IAO) and Alexandra Idler (City of Mannheim) presented the joint project »SMARTilience«. In order to address the aforementioned problem of coordination within the administration, a municipal governance model for climate-resilient urban development is being developed, which will be applied in the two model cities of Mannheim and Halle until 2022. Various governance tools are to support municipalities in their decision-making when selecting climate resilience measures.

Some of the participating municipal representatives also expressed their interest in participating as associated partner municipalities in the further exchange within the framework of the ICNS and in initiating new project projects. Interested municipalities are invited to contact Hendrik Frieling if they are interested in participating.

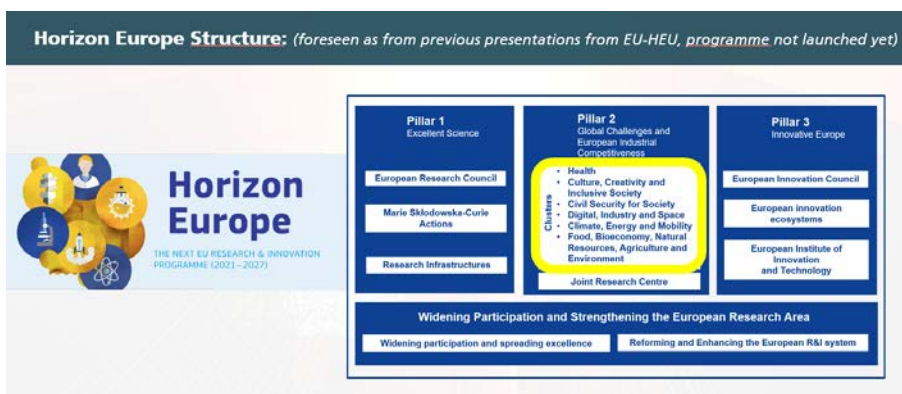
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|6| Horizon Europe & National Funding Programmes

The sixth event of the digital event series of the Morgenstadt network dealt with cooperation opportunities within the European funding programme »Horizon Europe« as well as national funding programmes. Participants were able to exchange ideas on two different project calls at European and national level.

In the first part of the event, Hendrik Frieling, Research Coordinator of the Morgenstadt Network, gave a short introduction to the format and aims of the event. This was followed by an introduction to the funding programme »Horizon Europe« and the European funding line »Circular Cities and Regions Initiative« by Trinidad Fernández López, member of the Urban Economy Innovation team.



After a further presentation of the two national funding lines »Future Inner City Hesse« and »Digital Shopping City Bavaria« by Claudius Schaufler, head of the Smart Urban Environments teams at Fraunhofer IAO, the participants could decide to divide into workshops on one specific funding line each. The participants were then divided into the corresponding workshop groups and transferred to a digital board on which the respective results were recorded. The workshops served as an opportunity for the participants to familiarise themselves with current funding lines and to evaluate cooperation possibilities.

The first workshop on the European funding line »Circular Cities and Regions Initiative« was led by Trinidad Fernández López and Hendrik Frieling. Based on the funding line mentioned above, the participants discussed different transformation possibilities of urban systems in terms of circular concepts, with the aim of reducing resource consumption and CO2 emissions of urban systems or regions. In this context, for example, the transformation of production systems in terms of the »cradle to cradle« principle - i.e. the recycling of already used resources of a product after previous use - was mentioned.

As the greatest challenge for circular approaches within urban city systems or regions, the participants identified above all the far-reaching and holistic implementation of circular approaches, in that all relevant actors of an urban system, such as political decision-makers, local companies and citizens, must develop a common understanding and goal and be activated for implementation.

|6| Horizon Europe & National Funding Programmes

The workshop »Future Inner City Hessen« was led by Claudius Schaufler and dealt with the goal of increasing the attractiveness and quality of life of Hessian city centres based on the framework conditions of the funding line.



Förderprogramm: Zukunft Innenstadt Hessen

HESSEN

Ziel

- Innenstädten den Neustart aus der Corona-Pandemie heraus ermöglichen
- Innenstädte als Orte der Begegnung, der Bewegung und Kommunikation neu definieren.
- Fokus auf den Klimawandel und soziale Einrichtungen
- Entwicklung kreativer Ansätze und Experimentierräume für die Zukunft der Innenstädte

Antragsmodalitäten

- Frist: 30.09.21 für das Förderjahr 2022
- Antragsberechtigte: Städte, Gemeinden, Privatpersonen
- Fördervolumen: 12,25 Mio €
- 80-90% Förderung pro Kommune (maximal 225.000€ je Kommune)

Based on this, the participants of the workshop discussed, among other things, various factors influencing the attractiveness of city centres and defined the most important starting points for them. For the participants, these included, above all, the creation of sustainable mobility concepts, increased access to information for citizens, active maintenance of green and blue infrastructures, as well as approaches of interim use and conversion for testing new formats in public space.

Interested municipalities, companies and research partners are invited to contact the workshop leaders if they are interested in cooperating within the framework of one of the funding programmes.

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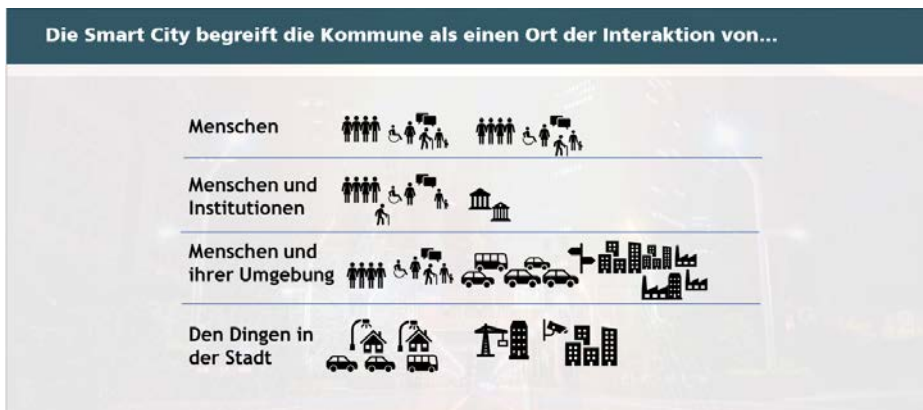
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[7] Workshop Small- & Medium-sized Towns

In the context of climate resilience and urban data management, small and medium-sized cities in particular face similar challenges time and again. What is often missing is the exchange with like-minded people, an important aspect for successful municipal innovation.

The open exchange of experiences with representatives from small and medium-sized cities was therefore the focus of the workshop of the same name, which was moderated by Maral Koohestanian, network coordinator of the Morgenstadt Initiative at Fraunhofer IAO. The discussion was stimulated by Annika Henze-Sakowsky from Fraunhofer IOSB-INA, who referred to numerous practical approaches to digitisation in medium-sized cities from the Reallabor Lemgo Digital in her keynote speech. The aim of the reallab is to transfer smart city applications from large metropolises to small and medium-sized towns and to create a local ecosystem for innovations with the exemplary implementation in Lemgo.



The joint testing of practical solutions involves the city administration as well as the city population and the municipal utilities. An important finding is that small and medium-sized cities have different needs than large cities and that the low-threshold feasibility of individual technologies in particular offers great added value. In addition, such reallabs make it possible to think about the later application of technologies and responsibilities at an early stage.

Both in the presentation and in the interactive part of the workshop, the importance of a culture of error as a municipal innovation driver and cooperation with local partners was pointed out. This is supported by the city's self-image as a designer and interdepartmental cooperation, coupled with a dose of pragmatism.

[7] Workshop Small- & Medium-sized Towns

Among other things, the participants discussed their own understanding and expectations of intermunicipal exchange. Current and future challenges were also addressed (see graphic). In practical terms, the question of how interested small and medium-sized towns can find out about information and best practices relevant to them nationwide - still a weak point - was also addressed.



Overall, the desire for tailor-made information and networking offers for small and medium-sized towns was confirmed by the participants. This is important feedback, because the Morgenstadt Initiative plans to focus more on the needs of this target group in the future. So it is worthwhile to stay in touch with us!

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|8| Presentation of DKSR

The digital event series concluded with the presentation of the Data Competence Centre for Cities and Regions (DKSR) followed by an internal workshop. DKSR is a spin-off from Morgenstadt and offers cities and regions data-based solutions on the way to a citizen-centred, healthy and CO2-neutral smart city. Dr. Eva Ottendörfer, Head of the Morgenstadt Initiative led the event. DKSR was presented by CEO Dr.-Ing. Alanus von Radecki.

With the aim of unifying different systems and data sources, the open source data platform in combination with consulting and training forms the basis for the implementation of diverse smart city use cases. In the Morgenstadt Urban Data Community (UDC), which was presented by community manager Hendrik Frieling, use cases are developed together with the city partners, piloted in individual cities and transferred to other cities.



Unser Leistungsangebot

Beratung	Plattform	Community
<p>Beratung zu urbanem Datenmanagement</p> <ul style="list-style-type: none"> ✓ Strategisches Datenmanagement ✓ Technologie-Beratung ✓ Spezifische Überprüfung Ihrer Data Governance ("Data Readiness") 	<p>Neutrale Open Source Datenplattform</p> <ul style="list-style-type: none"> ✓ Aufsetzen, Hosting & Betrieb der offenen Plattform ✓ Erschließen & Nutzen von Datenquellen ✓ Service & Support 	<p>Morgenstadt Urban Data Community (UDC)</p> <ul style="list-style-type: none"> ✓ Wissensaustausch & Best Practice ✓ Gemeinsame Datenmodelle & konkrete Anwendungen ✓ Innovationspartnerschaften

17.06.2021 DKSR - Unsere Zukunft mit Urbanen Daten gestalten

The UDC consists of a network of users and is open to all cities, regions and municipal companies; it is coordinated by Fraunhofer IAO and receives professional and technical support from DKSR. This enables the rapid scaling of digital solutions, partnerships and synergies between cities, as well as the exchange of knowledge on best practices and expertise.

|8| Presentation des DKSR

Following the general part, Philipp Lämmel from Fraunhofer FOKUS presented the Morgenstadt study »An overview of urban data platforms« based on DIN SPEC 91357, which is available for download here. Particularly relevant in this context, one result of the study is the fact that the majority of currently available platforms are proprietary closed source solutions, which offers great potential for open source providers.

Die Ziele der Morgenstadt Urban Data Community



- Beschleunigung und Verbreitung digitaler Lösungen in Städten und Regionen
- Verankerung von Open Source und Datensouveränität in der Morgenstadt
- Gemeinsame Entwicklung von Use-Cases

Skalierung
Digitaler
Lösungen



- Synergieentwicklung & Vernetzung zwischen Städten fördern
- Gemeinsame Bewältigung von Herausforderungen im Bereich urbane Daten
- Gemeinsame Position zu aktuellen Trends und Entwicklungen im Bereich Urbane Daten

Starke
Partnerschaften



- Best Practice Austausch & Verbreitung
- Informationsmanagement
- Weiterbildung kommunaler Mitarbeiter*innen
- Wissenschaftliche Begleitung und Zugang zu Expertenwissen aus dem Morgenstadt Netzwerk

Wissens-
austausch



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