











28th October 2020

### **MEMORANDUM POST-CORONA-CITIES**

# Providing sustainable and resilient development of cities and regions

Conclusions of a workshop organized by several initiatives which are addressing the sustainable transformation of city districts, municipalities and regions into a "Zukunftsstadt" – City of the Future – as sponsored by the German Federal Ministry of Education and Research (BMBF)

The coronavirus crisis has many wide-ranging impacts on the development of cities and regions. In June 2020 multiple accompanying research projects of the German Federal Ministry of Education and Research in the area of sustainable city and regional development took on the initiative to start a discussion with projects funded by the BMBF along with model cities and regions about the possible developmental trends and impacts of the coronavirus pandemic.

Included on the agenda for discussion were topics related to city and regional planning which have been clearly affected due to the pandemic as well as their interactions to each other. The coronavirus crisis is being seen as a challenge of critical proportions on the one hand while also offering a window of opportunity for initiating sustainable transformations in cities and regions on the other. At the same time, the crisis has implications for research on the future of cities and regions.

#### The Post-Corona City - Perspectives and challenges for city and regional development

The impact of the coronavirus pandemic on urban and regional development raises many questions. How urgent is the adaptation of existing targets and concepts? What underlying opportunities are offered by the crisis for the transformation of urban and regional spaces? The BMBF-funded projects directly address these topics as part of their everyday work. They react in part to the fact that the priorities of city development have changed and that given the experience gathered from the pandemic so far there is indeed a need for testing new solutions. From the research and practice perspective it is clear that a number of issues which have long been set on the agenda of sustainable development must now, more than ever, be addressed. In many cases, the coronavirus crisis has proven to be an accelerator of existing trends and a lever for deeper transformation.

#### Urban structures and a diversity of uses – demand for a qualitative development

Compact urban structures are considered to be a key component of sustainable urban development; they allow to use land and energy resources efficiently while also having a relatively lower incurred cost for infrastructure as well as transportation. They contribute significantly to the quality of urban life, especially when accommodating for a corresponding variety of uses and quality of the design. During the pandemic it has been observed that urban density was not disadvantageous in respect to the rate of infection. Hotspots were observed much more often in places of forced proximity (collective accommodation for fugitives, disadvantaged neighborhoods) or those characterized by precarious work conditions (such as meat factories). For these identified critical areas the solutions are more social rather than urban in character.











Trade, commercial uses, cultural institutions and gastronomy are some of the cornerstones of lively centers and businesses. The lockdown of public life and the existing restrictions have pushed many businesses to the brink of their existence. With the continuing pandemic, the vitality of inner cities and neighborhoods are deeply threatened.

During this crisis, changing patterns of work have become wider spread. This results in a greater mix of working and living environments on the one hand and the underutilization of existing central work districts on the other. Theses changing patterns of work location and working time models is likely to be an enduring change which will persist after the crisis. The opportunities presented by digitization and flexible adaptation, to for example overcome spatial barriers and ease pressure on traffic routes, will increasingly be directly experienced by the general population. These topics not only show the weaknesses which persist but are also the apparent starting points for urban and regional transformation.

#### Districts and public spaces - more valued than ever

The perception of the city and its districts has been changing thanks in part to the coronavirus crisis. The public demand related to public spaces are, at the same time, changing dynamically. Due to the pandemic, urban districts are experiencing a renaissance. Similar to rural areas there is an increasing importance being set on supporting neighborhood social relationships, providing and caring for local amenities, receiving help from neighbors to run errands and engaging with digital exchange platforms.

The lockdown has dramatically and publicly shown what value public places, open and urban green spaces and water bodies can have in residential areas. Visitors with access to public parks and gardens are able to reinvigorate themselves in the sunlight and outside air, to experience nature and escape the structural confines of a house, all while still observing social and physical distancing. Public space will therefore have to be qualitatively and quantitatively higher prioritized in the future. In addition to their recreational function, these spaces are also contributing to climate change adaptation and preserving biodiversity. The further networking and expansion of green and blue infrastructure is required. Such expansion has direct repercussions on the built environment.

The diverse demands attributed to public space are not new phenomena; the trend is however currently being reinforced. Associated with this are conflicting goals, such as the conflict between densification and concurrent open space development, for which more suitable solutions are required.

#### Local mobility and social distancing – changes in traffic patterns given the conditions of the pandemic

Walking, biking and riding public transport are considered to be the foundational modes of sustainable urban mobility. The coronavirus crisis has shown that an impetus in the area of pedestrian and bicycle traffic at the neighborhood level is needed. In order to guarantee not only that the regulations for social and physical distancing could be observed but also for traffic safety for pedestrians and cyclist, an initial group of municipalities have set up their own solutions: establishing so-called pop-up cycle paths, making temporary play streets or blocking streets in the vicinity of weekly markets in order to enable safe queuing and shopping. In some cases, discussions of pop-up pedestrian zones have started. Here the coronavirus crisis provides a window of opportunity for the redefining of space and encourages environmentally friendly mobility routines.











At the same time, the consequences of the pandemic for public transport systems are currently difficult to assess. The number of passengers has fallen sharply. A quick recovery does not appear in sight with the continuing pandemic. With more flexible opening times for schools and daycare centers and the increased prevalence of home offices, the future amount of passengers taking public transport could be more evenly distributed throughout the day.

Contrary to these developments is the use of motorized individual transportation. Car traffic was greatly reduced during the lockdown. The car however remains in the eyes of many to be a safe transportation mode which reduces the chance of a potential infection. Certain municipalities are going so far as to promote individual car use, for example through setting lower parking fees. This shows the differences in planning culture and potentials which exist between municipalities.

#### Housing policy - cooperation with changing information and needs

The coronavirus crisis is particularly evident in personal living areas. Homeschooling, childcare and home office can become a burden upon a family exactly in the cases where the living situation is not set up for it. There is a need for flexible and affordable living spaces which enable hybrid uses. Associated with this is a corresponding demand for space, real estate and building land.

So far there have been relatively minor impacts from the crisis on the housing market demand. It has to be noted however that metropolitan areas in particular have over the last years recorded considerable immigration from abroad. If Germany were to come out of the coronavirus crisis better off as compared to other countries, as was recently the case with the financial crisis, then the country's attractiveness as a place to live and work should continue to increase. This would have corresponding consequences for the housing market.

It remains to be seen as to how the crisis will impact the processes of reurbanization or suburbanization. On the one hand, the attractiveness of rural areas is given by the desire for nature, greenery and opportunities for self-actualization. On the other hand, urban districts with a complementary mix of land uses, green open space and adaptive childcare and recreational services and short transportation distances can be attractive as well. This should be used as an opportunity bring new life to stagnant rural regions without promoting new land consumption and to improve the quality of urban living.

Households with less income security and smaller apartments are in particular more directly affected by the consequences of the pandemic. The challenges are likely to become more sever if workers continue to have fewer paid work hours and unemployment continues to increase. The already existing deficit of affordable rental apartments threatens to worsen due to pandemic-related construction delays and reluctance to invest.

The consequences for (potential) inner-city residential development are unknown. Hotel and office construction projects are in certain cases currently being halted while the associated real estate market prices remain the same. This could however change with more flexible models of work and fewer business and vacation trips. Such a change could bring forth further options for increased inner city mixed development, which in turn would limit land consumption and the associated infrastructure costs.













## Urban and regional production and value creation – the coronavirus crisis as an opportunity for a local and regional circular economy

Potentials for production in urban areas could arise provided that the demand for office, commercial and hotel uses subsides and there is a decrease in commercial rents.

The coronavirus crisis has led to an increase in global spatial resistance. This has become apparent not only in relation to personal travel restrictions but also in the form of interrupted supply chains for products and goods. This in part leads to an acceleration of structural changes, for example in the automotive industry. At the same time proximity and the regional context have become more important. There is a new awareness of regional value chains and an observable increased of importance of regional networks, especially in the field of nutrition.

Exactly which potentials are offered by an increased regionalization of economic activity remains open. With the crisis certain opportunities offered by regional economies such as those related to food production and its distribution as well as the recycling of building materials and resources in a region have been increasingly focused upon. Concerns regarding the actual regional potentials, the possible markets and industries as well as environmental sustainability and actual expected benefits remain unanswered.

A key problem can be seen in the scarcity of the resource land. The development of new commercial uses is often met with skepticism and stands in stark contradiction to the goal of reducing land consumption. The land uses of energy production, agriculture and housing are already in competition with one another and their coordination requires inter-municipal cooperation. Organic farms, for example, are struggling to find available spaces for their operations and undermine clear premises of soil policy. Integrated concepts are required for the connection of city-regional strategies and cooperation schemes which strengthen regional value creation, not only in an ecologically meaningful way but also ensure an economically viable production and efficient land management.

#### Public services - new organizational forms in response to the crisis

Structures of municipal public services have proven themselves robust in the crisis. The supply of energy, heat and water, the treatment of wastewater, provision of public transport or the systems of internet communication technology, all of these demonstrated to be resilient in the face of the external threat. The operators of these services have organized critical infrastructures in a way that the supply to the population was and continues to be guaranteed. Medical care and hospital system substantiated their value in this time, though conflicts between the principles of the welfare state and commercialization in this case cannot be overlooked.

There are services of general interest which have shown to be less crisis-proof. The impacts of school and daycare closures are massively increasing the social consequences of the pandemic. Life quality has been greatly impacted by the restriction and cancelation of social, sporting as well as cultural activities. At the same time volunteering and the value of new forms of cooperation, especially in the areas of social infrastructure, have shown to be not only important but also indispensable. The individual concern during the crisis tends to result in the strengthening of civic engagement; this is especially the case in the immediate residential and living environment and is often supported by digital solutions. The current crisis is advancing the search for new organizational and financing models for essential public service provision. An increase in communication, cooperation and networking between cities and regions is required for the securing of these services —also beyond the crisis.













#### Post-coronavirus city - not only resilient, but above all else sufficient

The coronavirus pandemic is just one of the unforeseen events that have had a noticeable impact on impact on the development of cities and regions in recent years. Further impacts have come from the global financial crisis of 2008, the European migration crisis of 2015 or the ongoing climate crisis. All of these developments reveal the true vulnerability of the local community, the sometimes overlapping effects cause further social insecurity. They reinforce existing social inequalities (loss of income, unemployment, reduced quality of health, among others) and sometimes cause for a resurgence of traditional gender roles.

The question must be posed as to what sustainable city and regional development means when confronted with crises. In principle, the main aim must be to remain committed to the goals of a sustainable development (international Sustainable Development Goals, German National Sustainable Development Strategy, regional and local agendas) and limiting the effects of climate change (Paris Convention) while also dealing with the uncertainties brought along by crises. This in particular references to the realization of opportunities for supporting the required transformation.

Whereas the focus resulting from the current pandemic have been especially put on the strengthening of urban and regional resilience, the prevention of further social segregation or promoting commonalities despite maintaining the required distance, the primary problem which seems to be hardly manageable and which requires more answers is the climate crisis with the unceasing CO<sub>2</sub> emissions on the global scale. A significantly altered approach to consumption, production and mobility, which is to be centered around the premise of resource recycling and the reduction of demand for goods, is a prerequisite for the attainment of the Sustainability Goals by 2030 and the goal of carbon neutrality by 2050. A sustainable and climate-friendly city and regional development should therefore not only be resilient but should also include the sufficient development given the regional potentials. The experience of dealing with the coronavirus-crisis provides an opportunity to strategically anchor the paradigm of a sufficient development in city, regional and transport planning for economic development, among other fields.

#### Agile processes - municipal action after coronavirus

The coronavirus pandemic has (once again) made clear the importance of value-oriented, democratically legitimized and comprehensibly communicated political decisions as well as a functioning public administration. In many places the politicians and administrations have shown great responsibility which was supported by their strong level of identification with the respective municipality. Also, cities and regions with an advanced level of digitalization of administrational services have overall proven themselves to be more resilient.

Above all else the crisis reveals the importance of a capable state and municipalities. With the support of digitalization as a motor of change for sustainability, the transformative power of cities (last two reports from the German Advisory Council on Global Change) is thereby confirmed. This capacity is greater when the welfare state and municipal services serve as the basis for measuring success. Strategic action planning as well as the ability to act accordingly are both proven central for the correction of poor past decisions. An approach to deal with the scarce resource of land remains of central importance i.e. a corresponding inter- municipal soil policy.

Open, agile planning and design processes in connection with participation and deeper civic engagement are a foundation, not only for crisis management but also for the transformation to













resilient and sufficient cities and regions. In this context, the forms of cooperative and experimental city and regional development following the format provided by urban "Reallabore" (i.e. real world experiments) have proven to be useful.

#### **Further research needs**

The coronavirus crisis provides an opportunity to focus on and implement the required transformation of our economic models, lifestyles and use of land. The diverse funding initiatives of the BMBF should therefore be continued and intensified. The overall research agenda should be oriented towards the promotion of a sustainable, sufficient, climate-friendly and health-oriented urban and regional development. The central issues, though fundamentally left unchanged, need to be consistently focused on transformative practices which can recognize crises as moments of opportunity. This must consider the effects of digitization, ongoing migration movements, growing inequalities and the limitations of economic development and public finances.

Points of consideration for further research include:

- a) the qualitative development of districts, in particular when dealing with conflicting goals such as those between densification and open space development as well as the development of (relatively smaller) land and use potentials,
- b) an explicit funding of research on the future of public spaces (squares, streets, open green spaces) and the promotion of a sufficiency-oriented design; this also includes research for overarching strategies for public and private spaces, especially in relation to climate adaptation and the expansion of green-blue infrastructures,
- the further pursuit of the "Sustainable Urban Mobility" research agenda with special attention to local mobility and redistribution of space in the streetscape and/or flexible traffic areas, and further a focus on regional connectivity,
- d) the development and experimentation of flexible living concepts and structures which support neighborhood characteristics as well as corresponding architecture in cities and the countryside,
- e) the further pursuit of funding initiatives to identify the potentials and promote opportunities for a circular economy and innovative regional solutions with special consideration given to the strengthening of urban-regional resource and economic cycles including economic models beyond the neoliberal paradigm,
- f) testing of co-production arrangements for public service provision with different implementation structures which also consider the respective quality assurance requirements and existing limits of voluntary engagement in compulsory and voluntary tasks,
- g) the further development and experimenting of agile processes in cities and regions as supported by politicians, administrations, business, civil society and citizens, and finally
- h) Research as to how to best deal with the crisis-related effects of ignorance and uncertainty in relation to the pursuit of sustainable development goals.



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The present memorandum is the English translation of the German original available at: <a href="https://www.nachhaltige-zukunftsstadt.de/projekte/produkte-z/memorandum-post-corona-stadt/">https://www.nachhaltige-zukunftsstadt.de/projekte/produkte-z/memorandum-post-corona-stadt/</a>

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#### Synthese- und Vernetzungsprojekt Zukunftsstadt (SynVer\*Z)

Dr. Jens Libbe, Dr. Lena Bendlin & Robert Riechel (Deutsches Institut für Urbanistik, Difu)

#### Stadt-Land-Plus

Dr. Stephan Bartke & Karl Eckert (German Environment Agency), Katrin Fahrenkrug, Dr. Michael Melzer, Lutke Blecken & Julia Reiss (Raum & Energie), Dr. Uwe Ferber (StadtLand GmbH)

#### KomKomIn

Dr. Stephanie Bock, Jan Abt & Julia Diringer (Difu), Katrin Fahrenkrug, Dr. Michael Melzer, Lutke Blecken & Julia Reiss (Raum & Energie)

#### ReQ+

Katja Wendler, Michaela Koller (DECHEMA e.V.), Dr. Gudrun Gräbe (Fraunhofer ICT), Dr. Uwe Ferber (StadtLand GmbH)