

Design Research on the City of the Future

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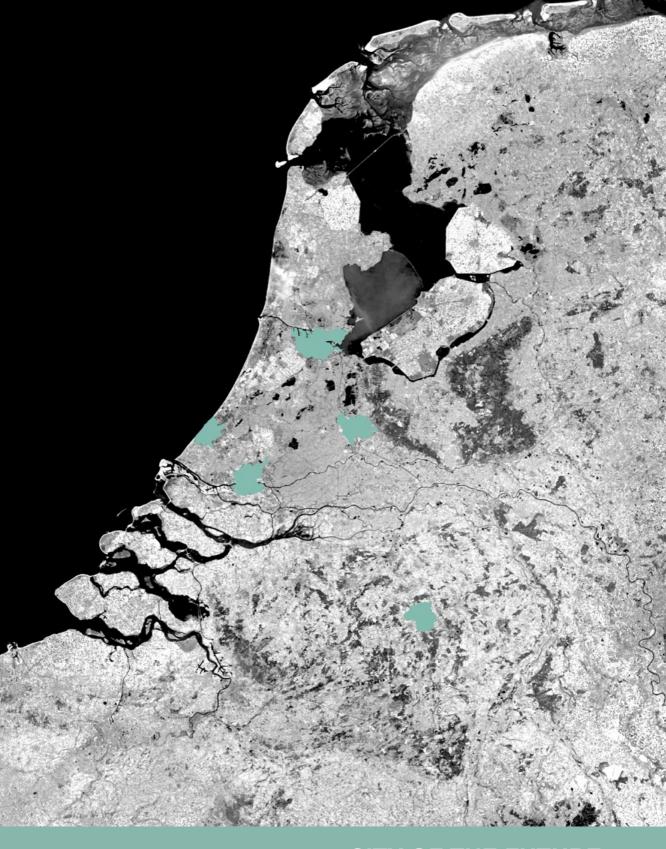
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CITY OF THE FUTURE STAD VAN DE TOEKOMST MSc II Design Studio Mobility & Public Space in the City of the Future

preface DESIGN RESEARCH ON THE CITY OF THE FUTURE

DESIGN RESEARCH ON THE CITY OF THE FUTURE

How can we design and develop a transformation area in an integral way into an attractive and future-proof urban environment? This is the the central question of the research project Stad van de Toekomst (City of the Future).

This question is motivated by urgent social as well as local tasks in the urban areas, varying from housing demand, social inclusiveness, new economy, climate adaptation, and the like, taking into account the transitions in energy, mobility, circularity and digitization. Based on future scenarios, the aim and intended results of this study are to obtain insights into the central and local questions in order to inform integral area development from systems and networks. In addition, also transitions to other spatial conditions are addressed. Such insights can have significance for the developments of a number of locations, and contribute to the policy of local and central governments.

The study was initiated from the Ministry of Infrastructure and Water Management (Min.IenW) in close coordination with the BNA (The Royal Institute of Dutch Architects), Delft University of Technology/DIMI (Delft Deltas, Infrastructures & Mobility Initiatives) and the Delta Metropolis Association. Other project partners involved are the Ministry of Internal Affairs (Min.BiZa) and the municipalities of Amsterdam, Eindhoven, The Hague, Rotterdam and Utrecht.

The five biggest cities of the Netherlands have to contend with a growing number of inhabitants. They all have to deal with compaction and expansion. Each of these five cities *Stad van de Toekomst* appointed a 1 × 1 km transformation area to be analyzed, researched and designed by two interdisciplinary teams of architects, urbanists, city planners, visionaries, engineers and sociologists – for the five cities there are in total ten multidisciplinary teams of practitioners fully involved with the project. This size of the 1 km 'window' is considered necessary because many different functions and spatial issues come together and are visible at once. These windows have in common the challenge of dealing with the existing city and, at the same time, with an urban densification assignment. They serve as test locations for new insights that

can also be used in other places where further urbanization takes place.

In Amsterdam it is about a port and business area which is already in the process of being redeveloped at this very moment. In Eindhoven this is a district defined by offices and broad roads adjacent to the main railway station. The Rotterdam site is a car-oriented office and megastore/ shopping mall area. Utrecht is about a city periphery with fragmented mono-functional areas and the site in The Hague is a fragmented area with three stations and trespassed by various railway tracks, large city roads and a motorway.

In this very realistic design brief, *Stad van de Toekomst* brings together designers, stakeholders, municipalities and academia in order to find answers on the central question for the near future where various essential transitions will most probably take place. The design teams will do this in a speculative manner, from current as well as known developments and techniques, and on the basis of explicit assumptions. In different plenary meetings all stakeholders and experts are invited to present and criticize the findings of the design teams.

DESIGN STUDY STAD VAN DE TOEKOMST

Starting point of the design study is the large system transitions that are necessary for the fundamental social tasks that we face. These system transitions concern energy supply, mobility systems, circularity of raw materials and digitalization based on ICT. De *Stad van de Toekomst* depends on the extent to which these transitions can be given a place as part of a new daily living environment. The transformation of the city from the current situation to a new situation of such complex and interlocking systems is far-reaching and yet unknown.

In addition, the system transitions have a major impact on societal tasks such as progressive urbanization, regional and urban accessibility and climate adaptation, which for instance must ensure that we can better control extreme rainfall or long-term drought.

Urbanization is the main theme of the design study. Amsterdam bursts at the seams and Eindhoven is looking for urbanity. The Hague already knows where the densification should take place and Utrecht is still looking for the right locations for densification.

The design study is not looking for classic area development solutions, but for new ways of thinking about the city, which should be based on how the different transitions can work to the advantage of the area.

MSc II DESIGN STUDIO ARCHITECTURE & URBAN DESIGN

The MSc II design studio Architecture & Urban Design at the Faculty of Architecture & the Built Environment, Delft University of Technology, is tightly connected to the *Stad van de Toekomst* research and design project. In this ten weeks master design course, students in architecture, urbanism and landscape architecture work together in the examination of the urban space as architectural space and the architectural space as urban space. In this experimental design project, based on the same assignment given by *Stad van de Toekomst*, students and staff are interested on one hand to the urban intervention in the built environment and its effect on architecture, and at the other hand to the architectural treatment of the city and its effect on urbanism. The close interrelation between urbanism and architecture is the main assumption of this course.

The framework of the *Stad van de Toekomst* research design study is directly projected, compressed and applied to this ten weeks master course. This intensive study program kicked off with a two day workshop forming scenarios for the five cities. A study trip to Boston, MA, provided the students with a background and feeling of large metropolitan city developments and transformations. In addition, some very interesting interactions with colleagues at MIT and Harvard universities and a fantastic presentation at the City Hall on the urban challenges of Boston, contributed to enrich the knowledge about urban strategies and operations in relation to the future of the city.

Next to it, all students had the opportunity to interact with one or more multidisciplinary teams of practitioners working on the *Stad van de Toekomst* project. This gave the students interesting insights on how practice is dealing with the same real life issues they were facing while analyzing and designing. Furthermore, the students visited the 'locale ateliers', workshop meetings where the design teams were given the chance to directly ask questions and present issues to the different parties and experts per city — a unique opportunity for both the design teams and the students to be this close on experts of all levels while being in the middle of a design process. Last but not least, the students attended the plenary sessions where all different stakeholders and the students could discuss the process of dealing with the challenges of the *Stad van de Toekomst*.

This book shows the results of the studio work done by 29 students from eleven different nationalities.

-Roberto Cavallo & Joran Kuijper, July 2018