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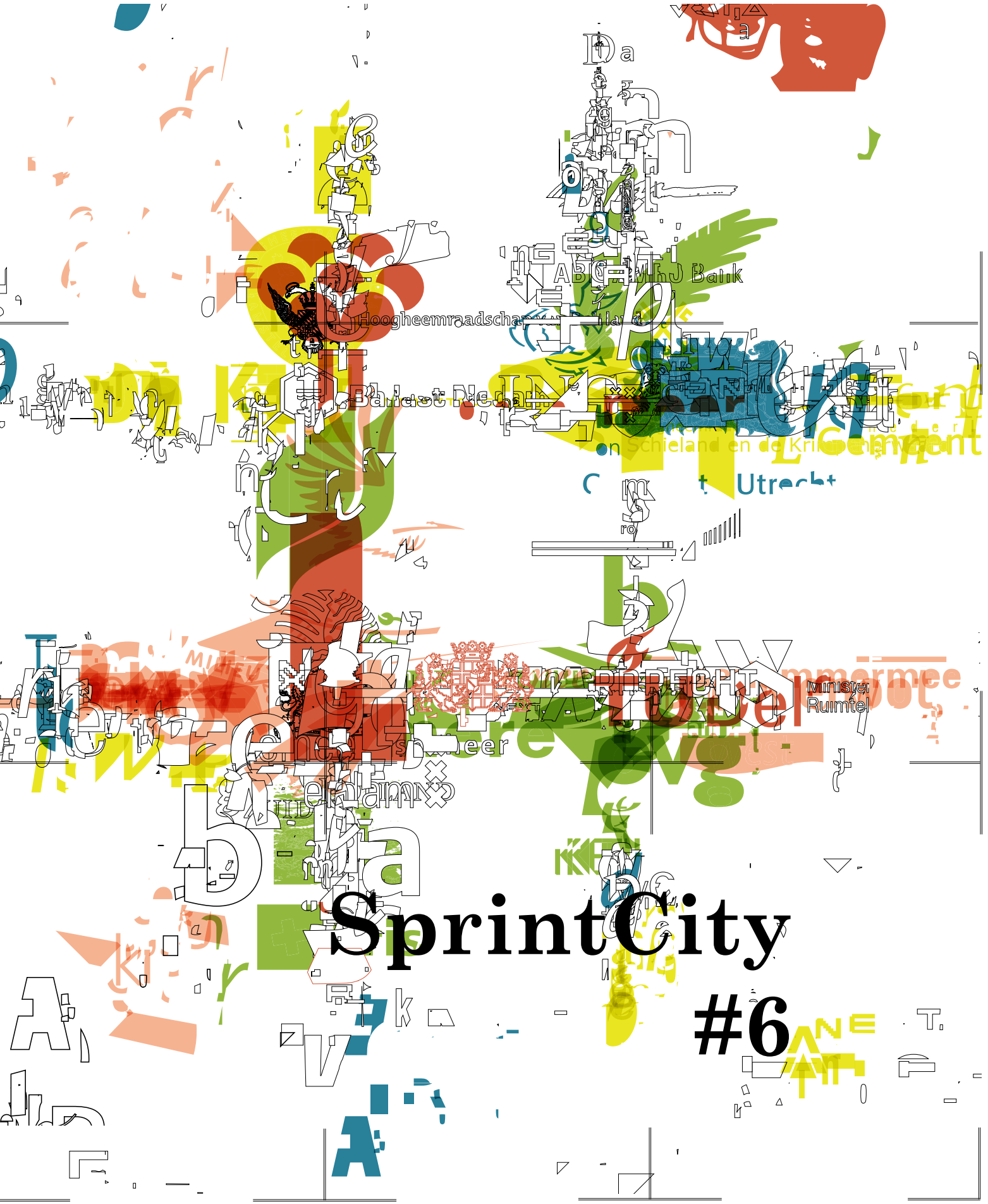
UPDATE

N°6 — 03|2014



SprintCity #6

INITIATIVE

PARTNERS

SprintCity is an initiative of the Deltametropolis Association. The project is developed in collaboration with the project partners TU Delft and Movares.
The knowledge partners and investors provide the necessary information, data and financial resources for SprintCity.

EU NL DELTA METROPOOL

CPS TU Delft Movares

STAKEHOLDERS

NEXT GENERATION INFRASTRUCTURES

provincie :: Utrecht

Provincie Noord-Holland

Ministerie van Infrastructuur en Milieu

KNOWLEDGE PARTNERS

PUBLIC AUTHORITIES

Ministry of Infrastructure & Environment
Public Transport Agency Randstad
StedenbaanPlus

Province of Zuid-Holland
Province of Gelderland
Province of Noord-Holland
Province of Noord-Brabant
Province of Utrecht
Province of Flevoland

Region of Amsterdam
Region of Arnhem-Nijmegen
Region of BrabantStad
Region of Drechtsteden
Region of Haaglanden
Region of Holland-Rijnland
Region of Utrecht

Departments of spatial planning, traffic & transport and housing of many municipalities in Noord-Holland, Utrecht, Zuid-Holland, Noord-Brabant and Gelderland.

KNOWLEDGE PARTNERS

KNOWLEDGE INSTITUTIONS

Curtin University Perth/RMIT Melbourne
Delft University of Technology (Urbanism/TPM)
Radboud University Nijmegen (Planning)
University of Amsterdam (Planning)
University of Applied Sciences Rotterdam (Spatial Planning)
Utrecht University (Geography)
VU University Amsterdam (Geography)
Wageningen University (Geography)
KU Leuven
Artesis University College Antwerp

PRIVATE ORGANISATIONS

AFFR
ANWB
APPM consultants
Connexxion
Goudappel Coffeng
Molster Stedenbouw
Movares
MTR corporation (Hong Kong)
NS Reizigers
NS Poort
TNO
Perkins+Will (Atlanta)
ProRail
Schiphol Group

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18.03.2014

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SPRINTSTAD

PREFACE

The SprintCity project was initiated by the Deltametropolis Association at the end of 2009 to investigate the opportunities for successful transit-oriented development (TOD) in the Dutch metropolitan region. It creates a bridge between science and practice. During the last four years, hundreds of station areas have been investigated, research methods and tools developed, and strategies for transit corridors unraveled together with stakeholders. This document is the sixth and final edition of the SprintCity Update.

In the preceding five updates, we familiarized you with the principles of the project, the lineup of project partners, the inventory of station areas, the development of planning support tool SprintCity and other TOD-related events and publications. Update SprintCity #6 gives insight into the progress made in 2013, and provides a preview of 2014.

The intensive collaboration with the province of Noord-Holland has resulted in new typologies for more than 60 station areas, a comparative butterfly model, and corridor overviews that correspond to challenges related to housing, working and landscape (to name but a few). The launch of the publication *Make Space! Working on the development of station areas in Noord-Holland* not only marked the broad dissemination of the research results, but also the political backing and support for Transit-Oriented Development in Noord-Holland. TOD now constitutes official policy (pages 8-9). The station typologies and the butterfly model were later adapted to other corridors, such as in the City region of Rotterdam, Stedenbaan Plus (the corridor between Haarlem and Dordrecht Zuid) and in the Ruhr Area in Germany (pages 12-13).

In order to understand the new forms of coordination, planning and decision-making that are necessary at the level of the corridor, two corridors in Noord-Holland were simulated in planning support tool SprintCity: the Zaan Corridor and the Zuid-Kennemerland Corridor. Several different scenarios were played out during sessions with researchers, municipal officials and administrators (pages 16-19).

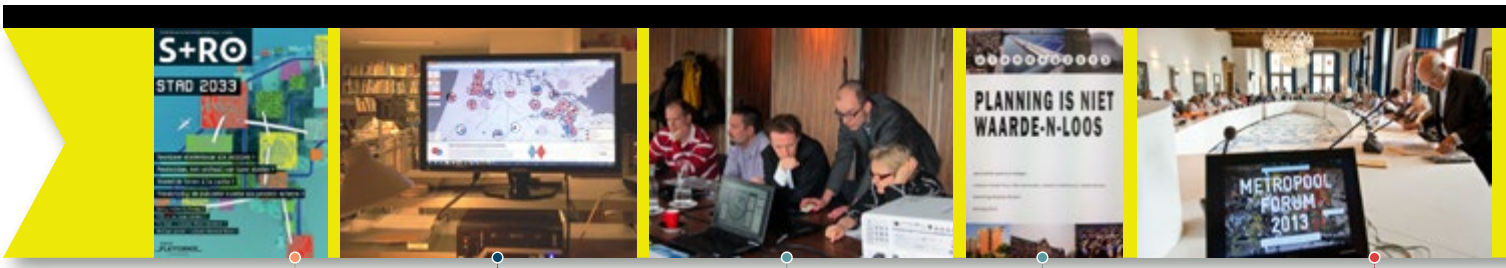
The planning support tool also underwent further development. Since the beginning of 2013, version 2.0 has been used, and the underlying data and mechanisms were once again checked and improved upon. Particularly the new interface of the transport company and the new functionalities for the province/region player have greatly improved the learning experience. With the launch of an English version (SprintCity), the planning support tool can now also be used globally. Initial preparation to make this a reality have already started (page 20). As of mid 2014, SprintCity will become open-source, enabling other parties to use and contribute to the further development of the software.

The Deltametropolis Association is always looking for new collaborations at different levels (policymakers, researchers, graduate students) to enhance the development of TOD strategies. We are currently looking for partners in BrabantStad who are interested in engaging in an international partnership at the corridor level. For more information, see page 25 of this Update.

18.03.2014

PUBLICATIONS

EVENTS/ MEETINGS



SprintCity is mentioned in an article about Urban Planning Games in the magazine Urbano (Metropolitan Redevelopment Authority)

Article 'TOD in the Lowlands' published in magazine S+RO, about the application of the SprintCity planning support tool in a corridor of the province of Utrecht with Bertus Cornelissen (Prov. Utrecht), Bastiaan Janssen (BRU) and Bart Brenninkmeijer (Movares)

3 Participation in the workshop Atelier Stad case: corridor RandstadRail The Hague-Rotterdam

4 TOD meeting BRU in Utrecht

4 Workshop #1 about TOD 'Knooppuntenlegenda' Ministry of Infrastructure and Environment

19 Workshop #2 about TOD 'Knooppuntenlegenda' Ministry of Infrastructure and Environment

9 Task force Mobility and Space at VDM

10 Meeting TOD -expert team with the province of Noord-Holland, in Haarlem

12 Start BNA community of practice 'designing TOD', in Amsterdam

22 Kickoff meeting Zaan corridor approach and SprintCity with with the province of Noord-Holland and municipalities, in Haarlem

29 Expert team TOD 'Nodes and Chains' in The Hague

13 Task force Mobility en Space at VDM

19 StedenbaanPlus, Workshop Spatial Development 'working with station typologies'

6 Task force Mobility en Space at VDM

8 Workshop about TOD with Public Transport office Randstad case study 'The Old Line', at Kpvv Utrecht

30 Kickoff Task force Space Zuid-Kennemerland, organized by the province and the municipality of Haarlem in collaboration with Grontmij and Venhoeven CS

30 Meeting about bike accessibility organized by StedenbaanPlus

22 Networking meeting and workshop about the adaptation of promising station typologies in the StedenbaanPlus station areas in Rotterdam

3 Task force Mobility and Space at VDM

4 Workshop Connecting living environments and station typologies, with StedenbaanPlus and the provincie of Zuid-Holland

6 Workshop station Laan van NOI, in The Hague

19 Metropolis forum organized by VDM, in Delft

nov/ dec 2012 | jan 2013 | feb 2013 | mar 2013 | apr 2013 | may 2013 | jun 2013

23 Simulation session SprintCity in Flanders, Belgium with KU Leuven, NMBS, De Lijn, urban planners, Arcadis and Grontmij

10 Launching SprintCity Update #5 (in English)

29 'Changing TOD policies' Movinnio Congress, Day of Traffic and Mobility in Houten

23 Dynamics in Rail Corridos CVS 2012 in Amsterdam

17 Presentation SprintCity planning support tool at the urban planning department of the state of São Paulo, in Brazil

1 Presentation SprintCity planning support tool at the Institute of Architects from Brazil in Rio de Janeiro (IAB-RJ), in Brazil

31 Launching SprintCity planning support tool version 2.0

Launching prototype TOD information system 'iNode', graduation project of Ernst Kuilder (University of Wageningen) at the Ministry of Infrastructure and Environment, DRO Amsterdam, municipality Haarlemmermeer and City Region Arnhem-Nijmegen

12 TOD-opportunities' maps and the positioning of the Station Oss in the rail network in collaboration with APPM

19 Simulation session of SprintCity Zaan corridor with PNH, NS and civil servants in collaboration with Movares and TU Delft

24 SprintCity planning support tool presented at Rail congress of the city Turnhout, in Vlaanderen

16 SprintCity planning support tool tested for the first time at a Maptable with touch screen

23 Paper presentation and demonstration of SprintCity at the Plan Day (Plandag) 2013, in Antwerp

31 Presentation SprintCity during the iTOD users' group, at the UvA

13 Simulation session of SprintCity at the Artesis university college Antwerp, Belgium with researchers, transport operators and spatial planners

21 Presentation of TOD-typologies and SprintCity for traffic and trasport officials at the province of Noord-Holland, in Den Helder

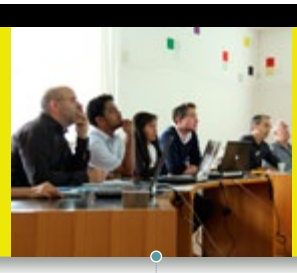
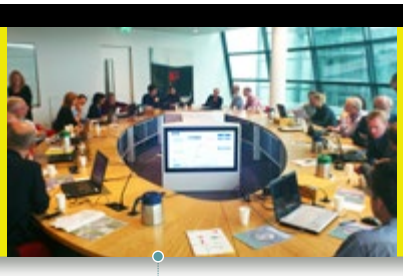
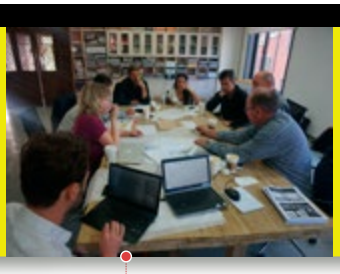
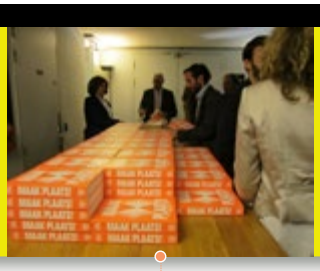
27

in samenwerking met:

Movares · TUDelft · Provincie Noord-Holland · Stadsregio Rotterdam · Wageningen Universiteit Maatschappijwetenschappen · appm management consultants · Ministerie van Infrastructuur en Milieu · Gemeente Amsterdam Dienst Ruimtelijke Ordening · MOVINNIO · artesis · BNA

PLANNING SUPPORT TOOL

PRESENTATIONS

Article about the application of TOD-typologies published in the magazine S+RO, with the theme Transit-Oriented Development (TOD)

Publication of the poster 'Station typologies and challenges in the Old Line', in the Stedenbaan Monitor 2013

27 Launching of the book Make Space! TOD in Noord-Holland, at the conference with the same name in Amsterdam, in collaboration with the province of Noord-Holland and APPM

Article in scientific magazine Environment and Planning B, about the mechanisms behind TOD and the development of SprintCity, in collaboration with Jan Duffhues (municipality of Amsterdam) and Igor Mayer (TU Delft)

Workbook#1 "TOD counter" in collaboration with CRA

3-4 Discussions about station typologies Blaak, Wilhelminaplein / Kop van Zuid, in collaboration with the City Region of Rotterdam

4 Task force Mobility and Space at VDM

24 Knowledge exchange SprintCity and projects Euro Immo Star (development company of the NMBS), in Brussels

19 Knowledge exchange SprintCity and project Euro Immo Star (development company of the NMBS), at VDM

19 Excursion and knowledge gathering P+R, with Movinnio and Annemieke Molster

29 Workshop about TOD in the City Region of Rotterdam with experts and project leaders

23-27 Workweek 'The Sino-Dutch Approach', about, among other themes, TOD in Beijing, China, organized by Venhoeven CS and the Incentive Fund for the Creative Industry

1 Symposium "Switching or Staying?", with OKRA, in Delft

2 Knowledge exchange StedenbaanPlus, in Rotterdam

Kickoff European research development of corridors Schelde Landschapspark and BrabantStad, with Euro Immo Star

8-24 Discussions about station typologies Rotterdam Central Station, Zuidplein, Vijfsluizen, Kralingse Zoom, Rotterdam-The Hague Airport, Schiedam Centrum, Rotterdam Alexander in collaboration with the City Region of Rotterdam

12 Task force Mobility & Space, Innovation Relay, RAI

10 Information meeting for designers, about the BNA Community of Practice 'Designing TOD', with NS and municipalities of the Zaan corridor

27 Workshop TOD, organized by Andrew Switzer, UvA

jul 2013 | aug 2013 | sep 2013 | oct 2013 | nov 2013 | dec 2013 | 2014

1 Presentation SprintCity at TOD workshop, organized by the province Vlaams Brabant, in Leuven

Demonstration of SprintCity op ISAGA conference 2013 at the KTH Stockholm

22 Demonstration of SprintCity for the provincial executive of Noord-Holland T. Talsma

20 Simulation session of SprintCity with researchers of Fields of View, in Delhi en Bangalore, India

12 Simulation session of SprintCity Task force Space Zuid-Kennemerland, with the province of Noord-Holland, NS and and civil servants, in Haarlem in collaboration with Movares en TU Delft

1 Launching of the English version of SprintCity

28 Simulation session of SprintCity with aldermen of the municipalities in the Zaan corridor, NS and provincial executive Talsma

23 Demonstration of SprintCity for the curator of the Beijing Design Week, Lei Yang, at VDM

15 Simulation session of SprintCity with master students of Geomatics, TUDelft

Launching open source version of SprintCity planning support tool

18 Presentation 'state of the art' TOD, at the Ministry of Infrastructure and Environment

18 Presentation at Symposium TOD in the Netherlands, at the UvA

16 Presentation of station typologies, applied at German stations, with Maxwan, at Zukunftsforum in Essen

3 Presentation in the Administrative Conference StedenbaanPlus

28 Presentation about innovations in TOD at the Movinnio symposium, Day of Traffic and Mobility, in Houten

18 Presentation about station typologies in the City region of Rotterdam in collaboration with the City Region of Rotterdam

Presentation of the results Task force Space Zuid-Kennemerland in Haarlem in collaboration with Grontmij en Venhoeven CS

MAKE SPACE!

I

III

In collaboration with the Province of Noord-Holland and APPM, the Deltametroplis Association has investigated more than 60 station areas in Noord- Holland. The result of this collaboration is the publication *Make Space! Working on the development of station areas in Noord-Holland* which was presented at a conference in Amsterdam on the 27th of November 2013. The graphic design for the publication was carried out by Alfons Hooikaas and Florian Mewes.

A new vision for spatial development in Noord Holland is presented in the book. The main focus is on making better use of the existing urban area and infrastructure. The publication brings together previous studies, combining existing knowledge and data to visualize and demonstrate the opportunities for public transport nodes in Noord-Holland. All station areas have been compared with each other using the butterfly model (page 10) and positioned in the network of the province, which consists of several corridors.

Make Space! serves as basis and inspiration for further development of transit-oriented strategies in Noord-Holland.

II

Ten Principles

The ten principles together express the opportunities for an integral policy for housing, working, services and recreation, in combination with good accessibility. These ten principles are crucial in developing a transit-oriented development strategy: not only for Noord-Holland, but also for other parts of the Netherlands.

1. FREQUENCY INCREASE AND SPATIAL DEVELOPMENT ARE MUTUALLY REINFORCING
2. REALISE AT LEAST 50% OF TE NEWLY-BUILT HOMES WITHIN THE CATCHMENT AREAS OF STATIONS
3. PRIORITISE EXISTING LAND USE PLANS WITHIN THE URBAN GROWTH BOUNDARY AROUND STATIONS
4. ALIGN THE URBAN GROWTH BOUNDARY WITH THE TRANSIT-ORIENTED DEVELOPMENT STRATEGY
5. REDUCE THE NUMBER OF VACANT OFFICES IN AREAS THAT ARE NOT MULTIMODAL ACCESSIBLE
6. FOCUS ON THE QUALITY OF WORKING ENVIRONMENTS IN THE MOST ACCESSIBLE LOCATIONS
7. LOCATE REGIONAL FACILITIES PREFERABLY AT MULTIMODAL, ACCESSIBLE LOCATIONS
8. A SMOOTHER TRANSFER BETWEEN MODES OF TRANSPORT
9. DEVELOP NODES AS 'GATEWAYS' TO THE COUNTRYSIDE
10. MAKE SPACE!

IV

CORRIDORS

Corridors

The ideal level at which to coordinate transit-oriented development is the corridor level; a combination of a regional railway line and the land surrounding the stations along that line. At this level, it is possible to coordinate daily activities and movement patterns, and to fully optimise the accessibility, sustainability and agglomeration benefits. At the administrative level, the corridor also represents the most logical, workable unit.

There are various types of corridors: residential corridors, mixed corridors and destination corridors. Depending on the type of corridor, the degree of control and need for coordination varies. Residential corridors are mainly concerned with housing plans and improving the transfer between transport modes. Destination corridors are also concerned with these issues, but additionally focus on services, workplaces and their distance from and to the station (proximity).

In the 'ideal corridor', living, working and services are evenly distributed, allowing the network to be utilised efficiently during both peak and off-peak

I

II

NEW SPATIAL PLANNING

hours. Mixed use creates a lively area throughout the whole day. When stations within a corridor reinforce, rather than compete with, one another, then a daily urban system is created where the stations along the railway line together form a complete city.

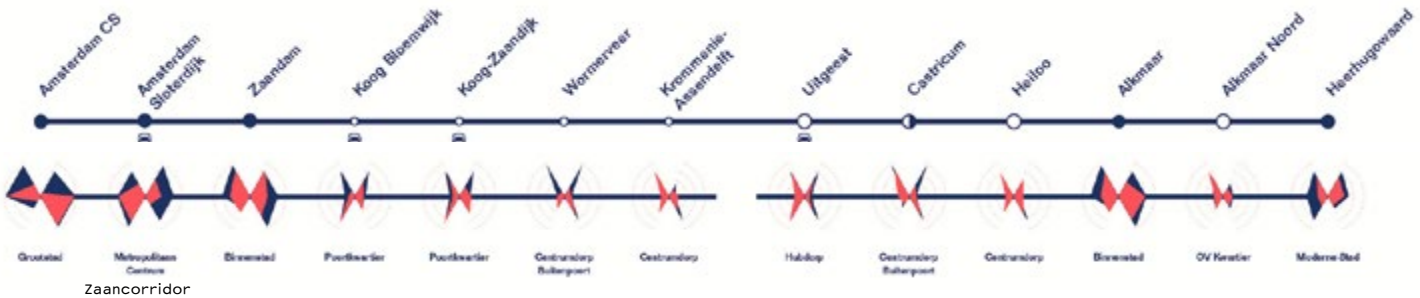
Eight corridors have been specified in the province of Noord-Holland. These corridors either start or end at the Ring of Amsterdam, at Amsterdam Central station or at Amsterdam South station. For each corridor, the existing plans, challenges and opportunities have been laid out and linked to the demand for housing and working places in that area.

As a case study, APPM has developed a practical process and organisational proposal for the Zaan Corridor. At the same time, the Deltametropolis Association developed a simulation of the Zaan Corridor for the SprintCity planning support tool.

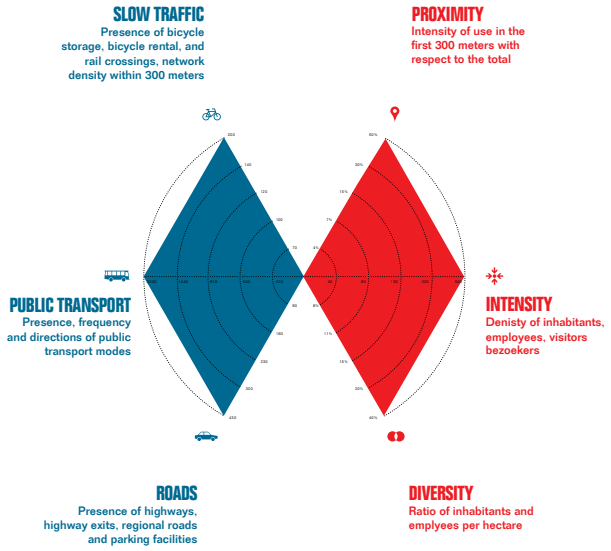
From research to policy

On the 8th of October 2013, Provincial Executives of the province of Noord Holland publically embraced the lessons from the Make Space! publication by agreeing to apply the ten principles from the book to guide their policies. The Zaan Corridor was thereby appointed as a pilot location. Together with the local authorities, transport operators, real estate developers and housing corporations along the Zaan Corridor, the Provincial Executives want to make an intention agreement and prepare a programme of implementation.

Several hard copies are still available. Download the pdf with an english summary (pages 224 - 231) at www.deltametropool.nl/nl/maak_plaats



BUTTERFLY MODEL



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the left wing, and the 'place value' on the right wing.

The position of the node in the public transportation network, the road network and the slow traffic network is decisive for the node value of the station in the butterfly model. The density of inhabitants, employees and visitors, the degree of functional diversity and its proximity (i.e. to what degree is the station itself a center in its surroundings?) is decisive for the place value of the station.

The butterfly functions best when both wings are in balance with each other. For this, the centre of the wings are particularly strongly related and directly proportional to each other. The position in the public transport network and the intensity of residents, workers and visitors should ideally all be in balance.

Twelve Station Typologies

The relationship between node and place offers different opportunities for new developments: a Sprinter (local service) station, situated in the centre of a village, will offer different options than an Intercity (express service) station that lies close to a

III

A node is a place where different modes of transportation meet and where a variety of urban activities take place. Improving the integration between the network and the urban space in a node can reap several benefits. To gain a better understanding of this, the so-called butterfly model has been developed by the Deltametropolis Association in association with the province of Noord-Holland. This model is based on three distinctive features for the node (network) and three distinctive features for the place (physical space). The butterfly model was first applied and developed for the publication *Make Space! Working on the development of station areas in Noord-Holland*, and has since been applied to projects for StedenbaanPlus, the City Region of Rotterdam and the Ruhr area (Germany). The model provides an opportunity to work with the stakeholders (e.g. the province, municipalities, transport companies and developers) to discuss the direction of new projects, give a clear overview of the corridors and to compare station areas with each other.

The butterfly model positions six characteristics in relation to each other: with the 'node value' on

II

highway exit on the outskirts of a city.

A diverse variety of locations where the value of node and place are in balance, combined with the desired market demand for residential and working environments will provide the types (taxonomy) of 'butterflies' that have a real chance of success. They demonstrate which developments will also fit in the Dutch context, and to the qualitative market demand in the region. Each type of butterfly represents a specific station typology: a place where living, working and services converge in a certain way. The variation of typologies along a railway line or in a railway network can contribute to improving functionality because the nodes can develop alongside each other, ensuring that they complement, rather than compete with each other.

The twelve typologies reflect ideal situations. In reality, many station areas still have far to go before they can achieve these promising typologies. The difference between the butterfly representing the current situation and the one representing the promising situation directly indicates the task that is at hand.

IV

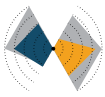
DOWNTOWN

Downtown

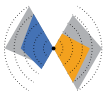
Very lively centre around a public transport node

Current versus promising situation for the Downtown typology:

Amsterdam Centraal



Den Haag HS



Rotterdam Blaak

Utrecht Centraal

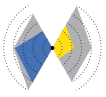
I

METROPOLITAN CENTRE

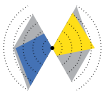
Metropolitan Centre

The most accessible places in Randstad Holland

Current versus promising situation for the Metropolitan Centre typology:

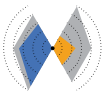


Amsterdam Sloterdijk



Amsterdam Bijlmer Arena

Den Haag Laan van NOI

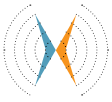


Schiedam Centrum

Rotterdam Alexander

II

HUB VILLAGE



Hub Village

Multimodal accessible village centre

Current versus promising situation for the Hub Village typology:

Breukelen

Driehuis

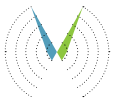
Halfweg–Zwanenburg

Uitgeest

Design collages: Alfons Hooikaas

III

LANDSCAPE GATEWAY



Landscape Gateway

Gateway to the landscape
(always in addition to one of the other typologies)

Current versus promising situation for the Landscape Gateway typology:

Amsterdam RAI

Castricum

Haarlem Spaarnwoude

Voorschoten

Zandvoort aan Zee

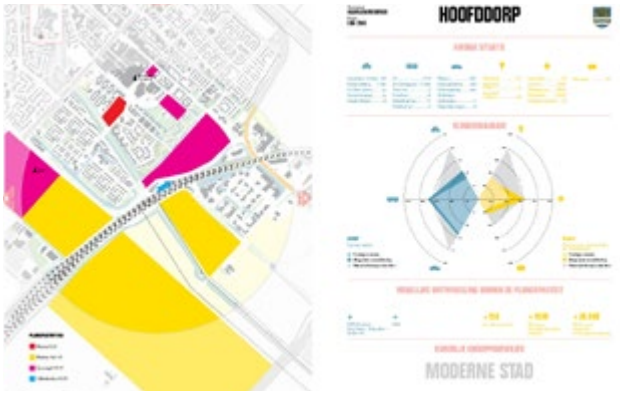
IV

THE BUTTERFLY MODEL APPLIED

I

Province of Noord-Holland

The butterfly model was first developed in the publication Make Space! For each of the 64 nodes in the province of Noord-Holland, a most promising station typology was determined, based on the market demand for living and working areas in its corridor. Besides the current situation, it was also investigated which changes could happen within the existing plan areas if they are developed according to the characteristics of the most promising typology.



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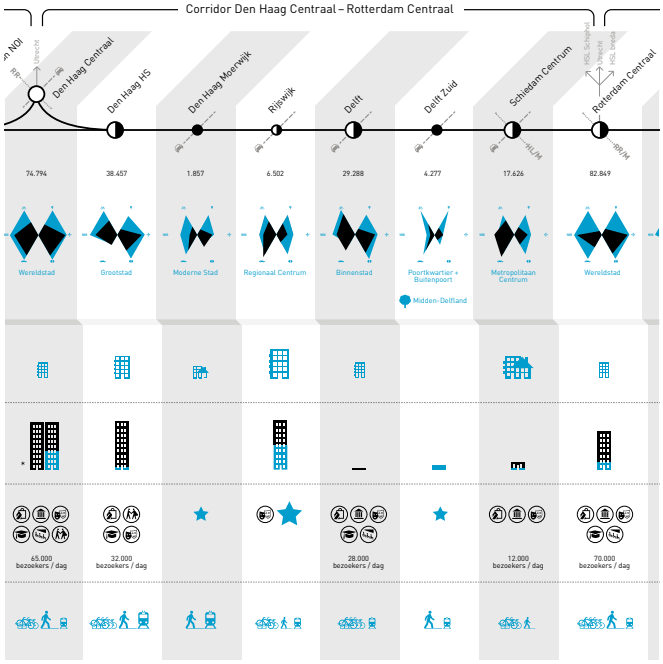


Part of the poster in the Stedenbaanplus 2013 monitor, design: Zinnebeeld

III

StedenbaanPlus

In order to better understand the dynamics of the 'Old Line' (Haarlem – Dordrecht Zuid), the current situation of each station was portrayed based on the butterfly model. Additionally, the most promising typology was defined for each station. This exercise immediately revealed the challenges that lie ahead for each station. A list of action points was then devised for each station along the following categories: living, working, services, mobility and landscape.

The station typologies are intended to help clarify the task at hand in conversations between municipalities and regions, as well as to facilitate the coordination of opportunities in a transit corridor and its development. During the process, the method was discussed with several municipalities. The feedback shows that the typologies proved to be a helpful tool for naming qualities and opportunities. The promising typologies clearly demonstrate the ambitions, and a number of station areas had ambitions that were much greater than estimated. This indicates that bigger steps still need to be made in the right direction.

Download the poster at http://www.stedenbaanplus.nl/content/monitor-stedenbaan

City Region of Rotterdam

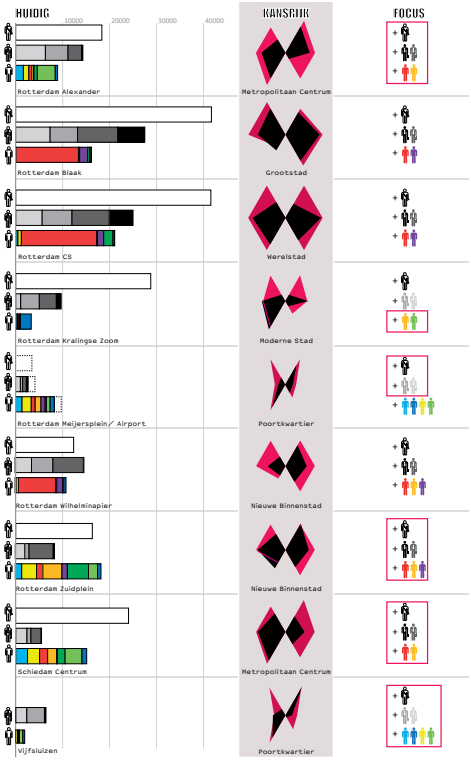
In collaboration with the City Region of Rotterdam, nine regional transit nodes were chosen and analysed with the butterfly model. The relation between these nodes and the existing programmes for housing, work and services were thereby made visible for the Rotterdam City Region.

The drawing up of the station typologies has enabled a clear depiction of the differences of transit nodes in the city region. Based on the analysis and various discussions with stakeholders, the 'best case' typology was defined for each station area. The connection between the butterfly model and existing research on housing, work and services in de Rotterdam region has led to different action points for each station. These actions will be taken as a starting point for future discussions concerning the areas.

Download the booklet: 'Knooppunten in de Stadsregio Rotterdam' via www.deltametropool.nl/nl/knooppuntontwikkeling_vlindermodel

I

CITY REGION OF ROTTERDAM



II

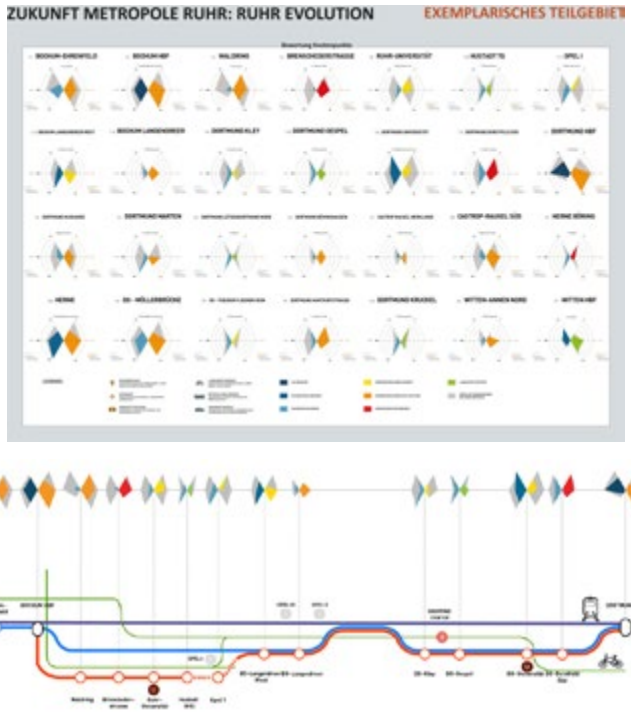
Ruhr Area

Maxwan urbanists & architects, LOLA Landscape Architects and Goudappel Coffeng worked together with Thomas Sieverts and Paul Gerretsen on the 'Ideenwettbewerb Zukunft Metropole Ruhr'. This idea competition is the basis for a spatial structure plan for the entire Ruhr area, which will require the strengthening of the cooperation between the municipalities that started working together around the IBA Emscher Park and the European Capital of Culture in 2010.

From the analysis, it became clear that the large number of stations and rail infrastructure in the region are not being used optimally, that there is no concentration of urban services and that there are too many different rail services competing with each other. The butterfly model, the twelve station typologies and the corridor played a central role in the 'Ruhr evolution': the strategy that they produced together. It highlighted which station areas and corridors are the most promising, and which urban investments are likely to bring the highest return.

For more info, see: http://ideenwettbewerb.metropoleruhr.de/ruhrimpulse/planerteams/team-b.html

RUHR AREA



IV

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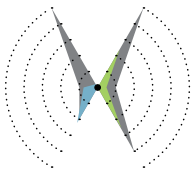

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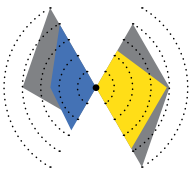

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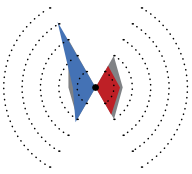

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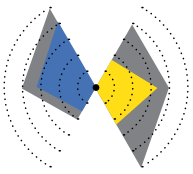

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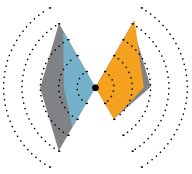

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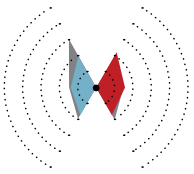

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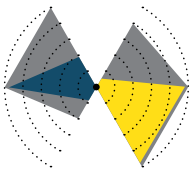

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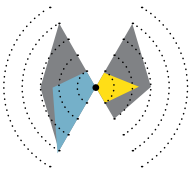

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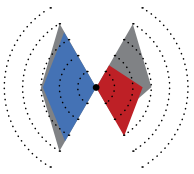

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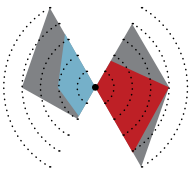

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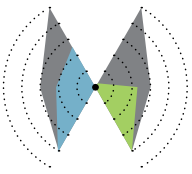

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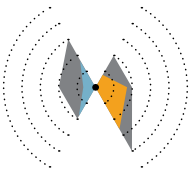

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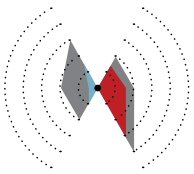

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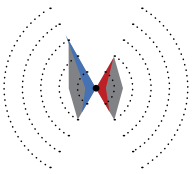

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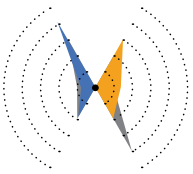

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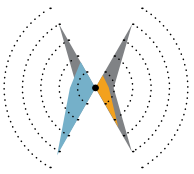

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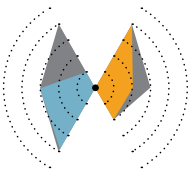

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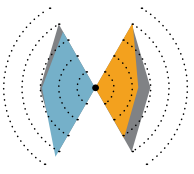

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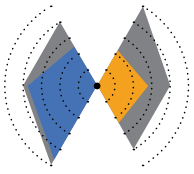

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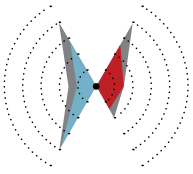

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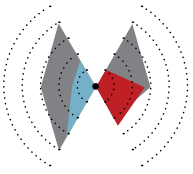

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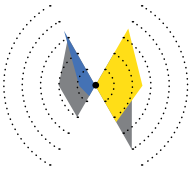

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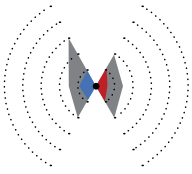

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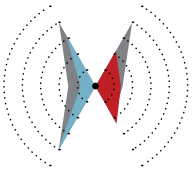

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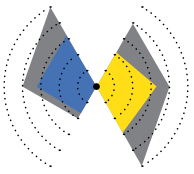

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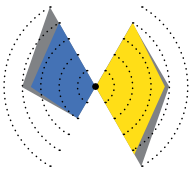

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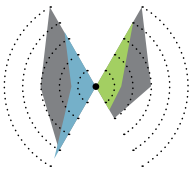

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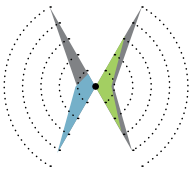

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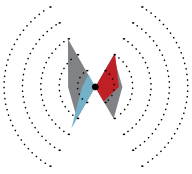

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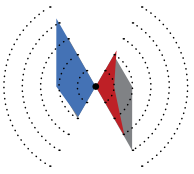

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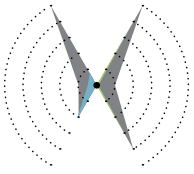

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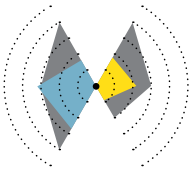

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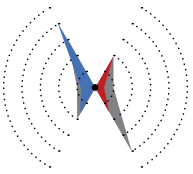

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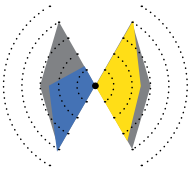

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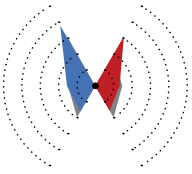

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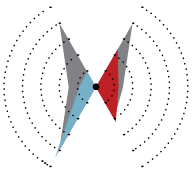

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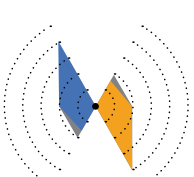

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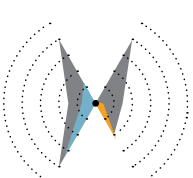

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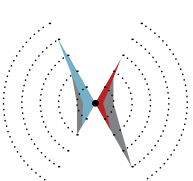

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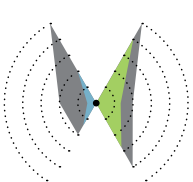


PURMEREND

PURMEREND OVERWHERE

ROTTERDAM LOMBARDIJEN

ROTTERDAM NOORD

ROTTERDAM ZUID

SANTPOORT NOORD

SANTPOORT ZUID

SASSENHEIM

UTRECHT ZUILEN

VIJFSLUIZEN

VOORHOUT

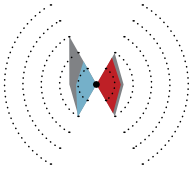
VOORSCHOTEN

WEESP

WINKELCENTRUM SCHALKWIJK

Node: High-speed/ international Express service Local service

ALMERE OOSTVAARDERS



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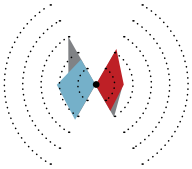

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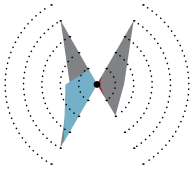

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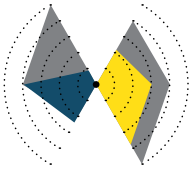

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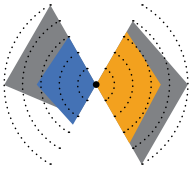

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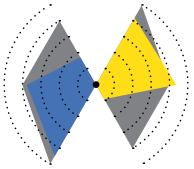

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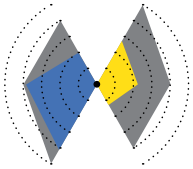

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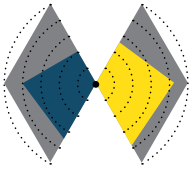

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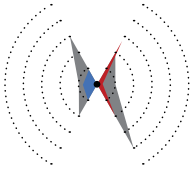

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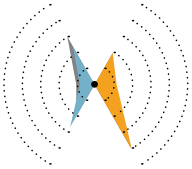

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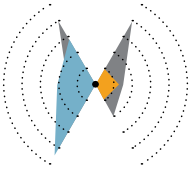

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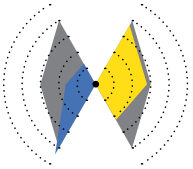

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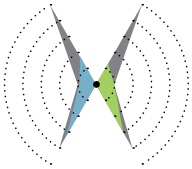

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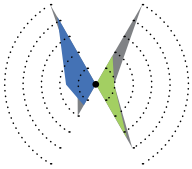

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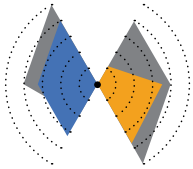

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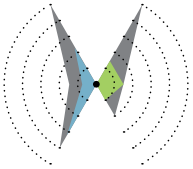

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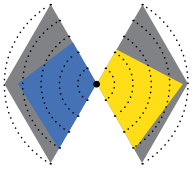

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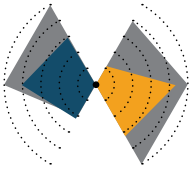

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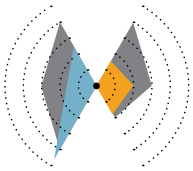

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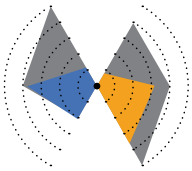

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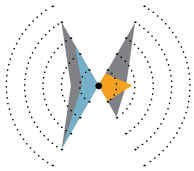

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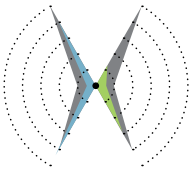

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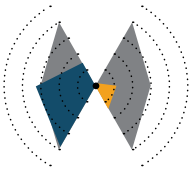

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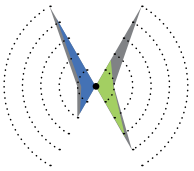

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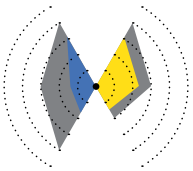

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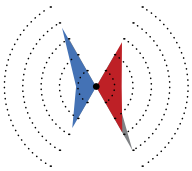

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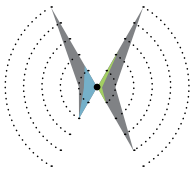

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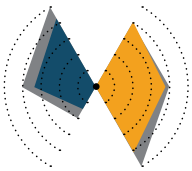
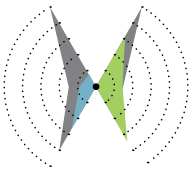


HILVERSUM NOORD



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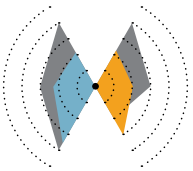

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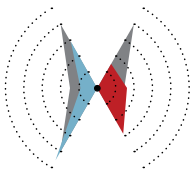

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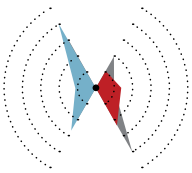

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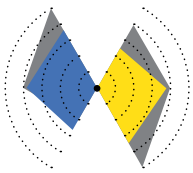

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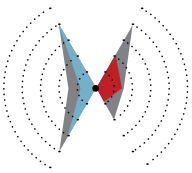

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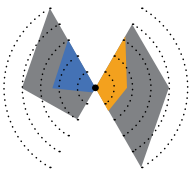

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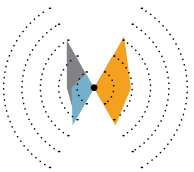

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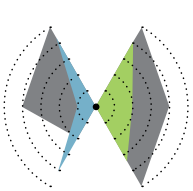

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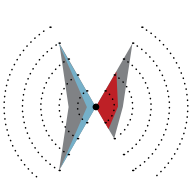

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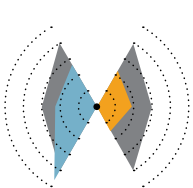
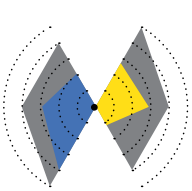


ROTTERDAM ALEXANDER



ROTTERDAM BLAAK

ROTTERDAM CENTRAAL

SCHAGEN

SCHIEDAM CENTRUM

SCHIPHOL

UITGEEST

UTRECHT CENTRAAL

UTRECHT OVERVECHT

WORMERVEER

ZAANDAM

ZAANDAM KOGERVELD

ZANDVOORT AAN ZEE

ZUIDPLEIN

ZWIJNDRECHT

Place: Destination: mainly work and amenities | Mixed: living, work and amenities | Residential: mainly living | Proximity of natural and recreational areas

SPRINTCITY 2.0 IN THE ZAAN CORRIDOR

I

SIMULATION SESSIONS

Zaan Corridor

The Zaan Corridor was the first corridor developed in the 2.0 version of SprintCity. It is considered a promising corridor in the province of Noord-Holland, in which there is much potential for space and mobility to reinforce each other. The government wants to invest in increasing the frequency levels on this route (PHS). This improves accessibility and offers new opportunities for spatial development. But frequency increases on the track will only be profitable if there are enough activities around the stations to generate travellers. SprintCity in the Zaan Corridor has helped to provide new insights on existing opportunities along this corridor and to enhance the cooperation between the different stakeholders.

In the simulation of the Zaan Corridor a comparison was made, for the first time, between a laboratory session (business-as-usual), a session with municipal officials and provincial executives.

Results of the laboratory session

In this business-as-usual simulation, plans were not coordinated but realised based on the existing situation, with densities that can already be found in the station areas. In the business-as-usual scenario, the public transport player adhered to the objectives of the PHS programme for increased frequency, increasing the number of intercity and sprinter trains on the corridor from 4 to 6 per hour. When the business-as-usual scenario for the Zaan Corridor was entered into the SprintCity simulation, the results were negative, i.e. the plans were shown to inadequately address the market demand in the corridor. This results in moderate growth in the corridor in terms of residents, workers and travellers, where the trains remain empty and the increased frequency is not profitable.

III

Results of the sessions with municipal officials and provincial executives

The participants in the SprintCity sessions of March 19, 2013 (municipal officials) and October 28, 2013 (municipal and provincial executives) achieved considerably better results. Through discussions and adjustments during the simulation, the demand and supply surrounding the programme of

IV

In early 2013, SprintCity 2.0 was ready to be used. Version 2.0 of the planning support tool, which simulates the interaction between spatial developments around stations and increasing levels of railway use, offers four new features:

1. The role of the public transport company with a dynamic timetable. Both the frequency and the stations where sprinter and intercity trains stop can be adjusted. The aims of the public transport player are to create the most profitable timetable and to increase the amount of travelers.

2. Vacant areas in the simulation of transforming neighbourhoods, resulting in a more realistic picture.

3. The role of the province or region. This player has a coordinating role with the aim of ensuring coherence between the joint spatial development plans and achieving optimum accessibility. This player can also add regional functions to the corridor (e.g., a technical school or a hospital) and impose restrictions on certain programmes.

4. A multilingual user interface. The English version has been launched (page 20).

II

RESULTS

CORRIDOR SCALE

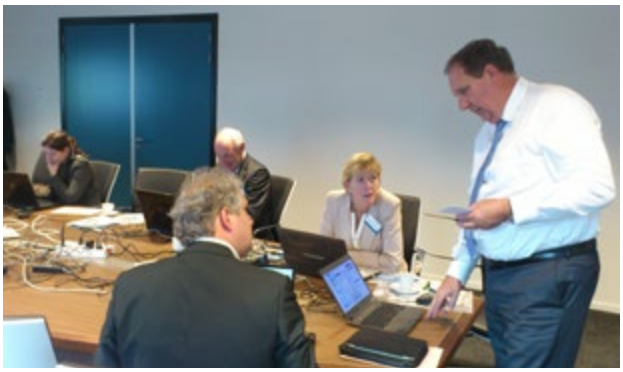
the station areas was better coordinated. By opting for higher densities in a number of places, and developing several regional facilities, the number of residents, workers and travellers grew in both sessions. The public transport player improved the accessibility of several stations by increasing the frequency, which then provided the right level of accessibility to the appropriate spatial development.

The results show that a comprehensive strategy is necessary to realise the opportunities for TOD in the Zaan Corridor. The province, municipalities and NS (the public transport company) will have to work together to ensure that the plans to increase frequency levels will take place. This demands a common vision and collaboration at the corridor scale.

Pilot projects have been started in the Zaan Corridor in collaboration with BNA, province of Noord-Holland, NS and the municipalities of Zaanstad, Castricum and Heerhugowaard. Ten design teams will develop a vision for five of the station areas in the corridor.

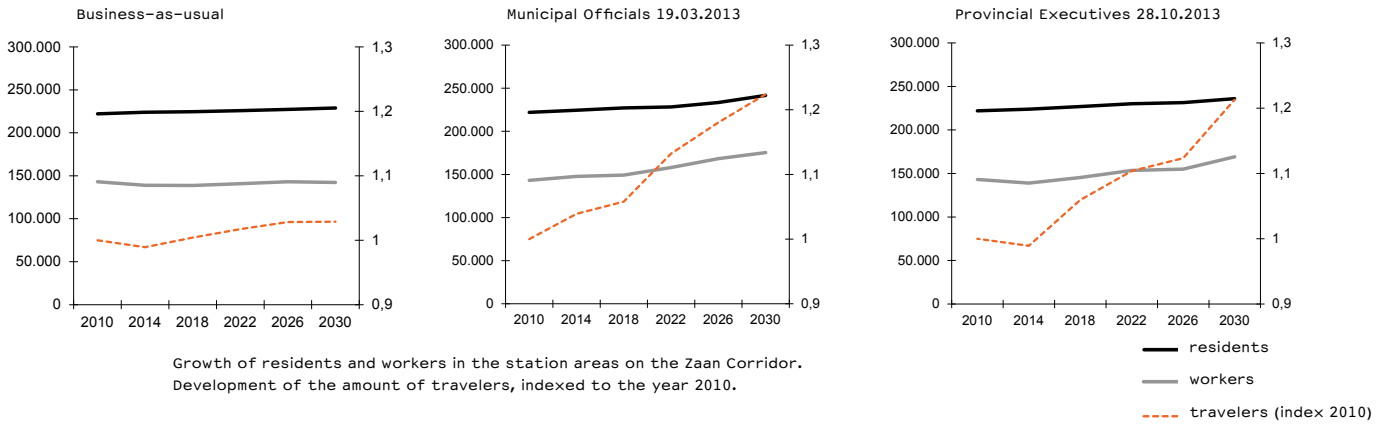
I

SIMULATION SESSIONS

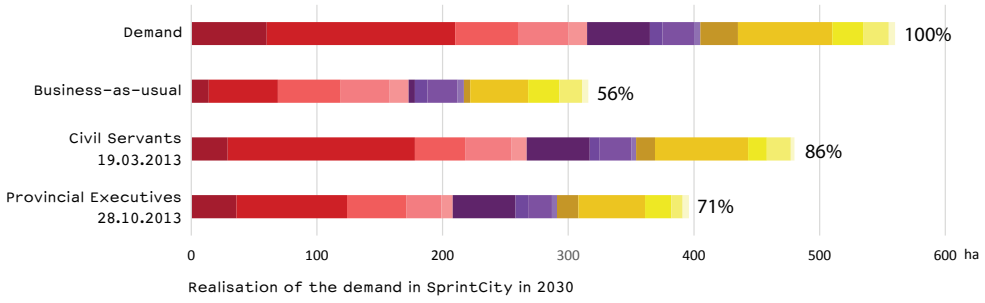


II

COMPARISON



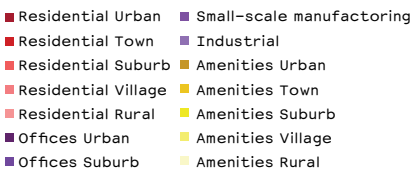
Growth of residents and workers in the station areas on the Zaan Corridor.
Development of the amount of travelers, indexed to the year 2010.



Realisation of the demand in SprintCity in 2030

III

PUBLICATIONS



Download the full reports of the game sessions at www.deltametropool.nl/nl/zaancorridor

IV

SPRINTCITY ZUID-KENNEMERLAND AND IJMOND

I

PLANNING SUPPORT TOOL

For the simulation of Zuid-Kennemerland and IJmond, two scenarios were defined. The first was based on the current plans and the current demand (business-as-usual). In the second scenario, a series of assumptions were made and new plan areas added to maximise the potential of the station areas (TOD optimal). This second scenario was played on the September 12, 2013.

For this simulation, some innovations in the planning support tool were implemented:

- Simulation of the surplus operation in the current situation: from the start of the game some stations already have too few passengers for the number of trains;
- New regional services, such as a factory outlet centre and a residential care facility;
- Simulation of the competition from the new Bus Rapid Transit (BRT) line that runs parallel to the track and is not connected to the stations;
- Adaptation of the promising station typologies as described in Make Space!

III

TASK FORCE SPACE

On February 12, 2014 the independent 'Task Force Space' of the province of Noord-Holland presented its advice *Multimodal Accessibility in the Zuid-Kennemerland corridor* for a TOD strategy in the regions of Zuid-Kennemerland and IJmond. The recommendations aim to improve accessibility in the region and strengthen city and village cores by encouraging spatial development around corresponding station areas. The consortium Grontmij, VenhoevenCS and Deltametropolis Association worked, as part of the task force, on this objective. The knowledge and insights from the publication *Make Space!* were built upon. The planning support tool SprintCity was also used in the process.

On the September 12, 2013 a simulation session was held with all the involved municipalities, the NS (public transport company) and the province of Noord-Holland.

Scenarios

II

CORRIDOR ZUID–KENNEMERLAND AND IJMOND

Results

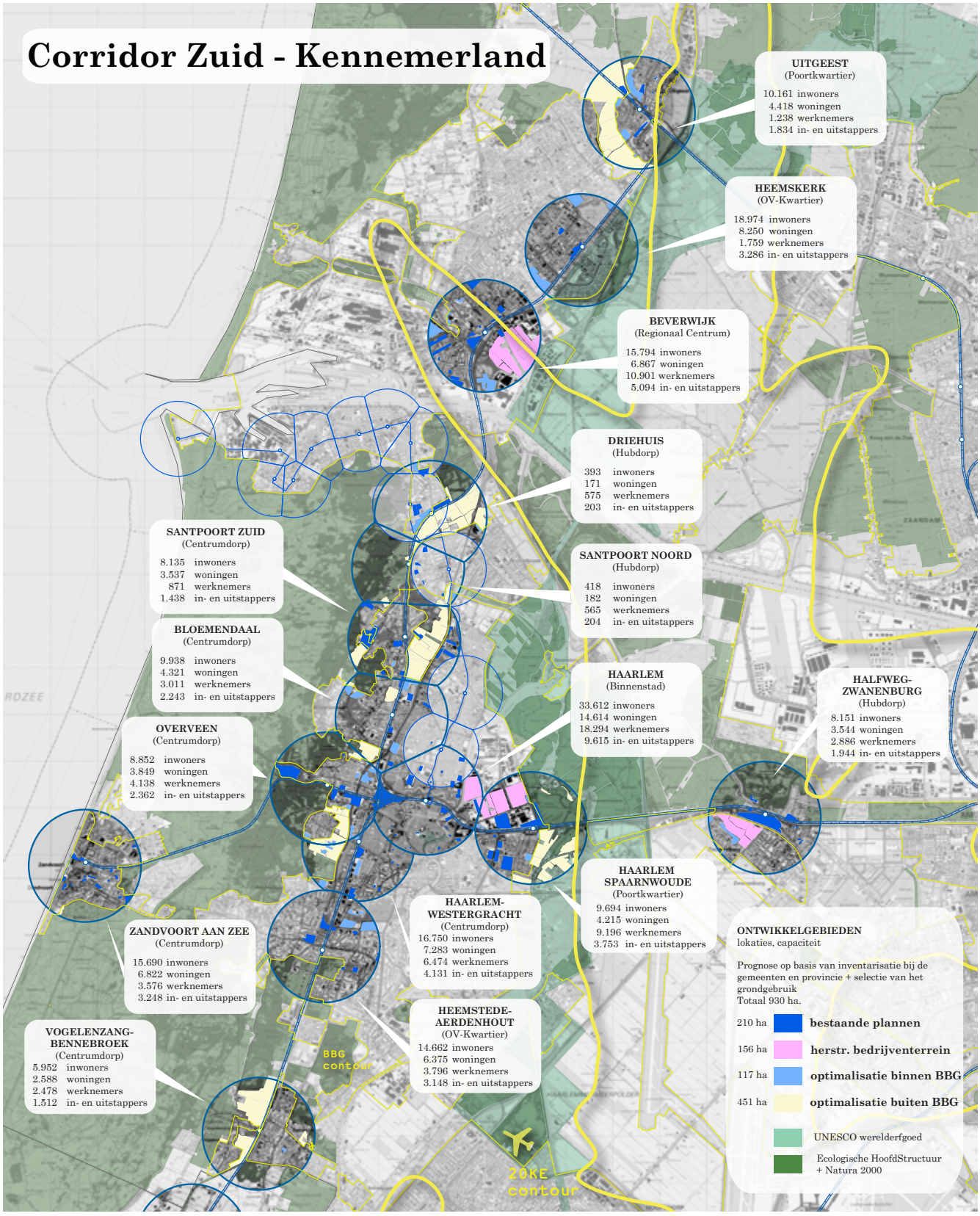
SprintCity revealed that the plans in the business-as-usual scenario may seriously affect the accessibility of Zuid-Kennemerland and IJmond, which may lead to a less attractive region. However, SprintCity also showed that there are certainly opportunities for better exploiting the station areas and creating a more profitable schedule along the corridors around Haarlem.

A more differentiated timetable, where stations situated in more urban areas are served by higher frequencies than stations in a green environment or village, has a better chance of being successful. Regional services can make a significant contribution to the vitality of station areas and a profitable schedule. Additionally, there are good opportunities to optimise the current plan capacity within the existing urban growth boundary (BBG). This can be applied to denser, mixed station areas such as Beverwijk, Haarlem and Haarlem Spaarnwoude, as well as Overveen and Halfweg-Zwanenburg.

Download the full reports of the game sessions via www.deltametropool.nl/nl/sprintstad

IV

Corridor Zuid - Kennemerland



DEMONSTRATION PLANNING SUPPPORT TOOL

SPRINTCITY INTERNATIONAL

I

ENGLISH VERSION

In 2013, the SprintCity tool was also demonstrated and discussed at several international events, including the KTH university in Stockholm, the ISAGA 2013 conference, the regional planning agency of the State of São Paulo (which included several public transport companies); the Institute of Architects and Urban Planners in Rio de Janeiro and the Beijing Design Week in 2013 (page 22). The contacts in São Paulo will soon be expanded via the municipal transport department and the University of São Paulo.

The first international SprintCity simulation session was held via Google+Hangouts in Bangalore, Delhi and Rotterdam in July 2013. A collaborative project with Fields of View and EMBARQ is currently also being set up to investigate a transport corridor in India, using the English version of the software. Furthermore, SprintCity was tested and evaluated by international MSc Geomatics students at the Delft University of Technology.

Read more about SprintCity at: www.deltametropool.nl/nl/sprintcity_international

III

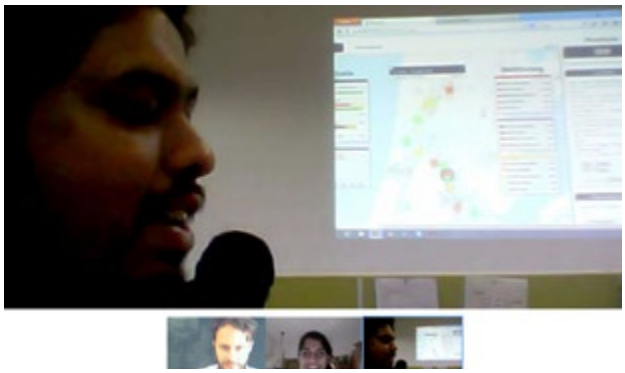
APPLICATION IN BELGIUM

SprintCity has also attracted the interest of several foreign governments, organisations and universities. In 2013, demonstrations of the planning support tool took place in various countries. Some examples of where the tool is currently being considered for use in the development of public transport corridors are shown below.

Over the past year, SprintCity has been presented several times in Flanders, including at the Railway Congress (Spoorcongres) in Turnhout, a TOD workshop in Leuven, a simulation session at the Artesis Graduate School in Antwerp and a demonstration on the Planning Day 2013 (Plandag) in Antwerp. A new collaboration project is now being started with Euro Immo Star (EIS), a subsidiary of the Belgian Railways that develops station areas. This collaboration focuses on two specific transport corridors in Flanders and the Netherlands, where balanced spatial development, frequency increase and different modes of transport are investigated at the corridor level. The existing tools ReLive (EIS) and SprintCity are being further developed for this purpose.

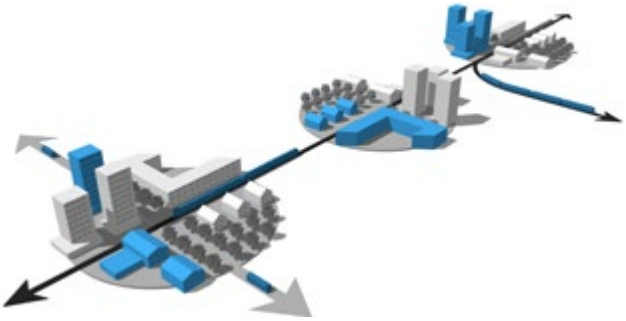
II

SPRINTCITY SESSIONS IN BANGALORE AND DELFT



IV

SPRINTCITY OPEN-SOURCE



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The planning support tool SprintCity has been a co-production from onset, where the Deltametropolis Association has worked together with the Foundation Next Generation Infrastructures, the Delft University of Technology, Faculty TBM and later with Movares. Governments and universities have always played an important role in evaluating and improving the tool. As a result SprintCity 2.0 has become user-friendly and nicely balances realism and simplicity. Given the interest from abroad for the application of SprintCity, it follows that further development of the tool can also take place in an international setting.

It was therefore decided to make SprintCity an open-source tool, available under a license yet to be determined. The chief licensee will remain NGInfra, with sub-licensees being the Deltametropolis Association and the TU Delft. This will promote the use of the tool, as well as enable its further development through third parties, which would again be freely available. By adopting this approach, a growing SprintCity Community can be created, which can continuously learn from new applications and new

II

geographical or policy contexts of Transit-oriented Development. The launch of the open-source version of the software is planned for the second half of 2014.

The following developments can be expected once the tool becomes open-source:

- Implementation of the Belgian railway network and the spatial context of the Flanders Region.
- A feature to adjust the (rail) road network during the simulation, optimising the sessions.
- Connecting SprintCity with other planning support tools, for example in the field of car usage.
- Implementation of the rail network in the spatial context of Sweden.
- Implementation of a number of corridors in India in the spatial context of cities between Bangalore, Mumbai and Delhi.
- Adjustments to the decision-making structure of the tool, to include foreign policy contexts.

III

- Additions to the types of housing, work locations and services, to apply these to foreign cities.
- Additional means of transportation, such as Bus Rapid Transit, metro and light rail.
- A data logging function to improve the analysis and presentation of the game and user data.
- Additions to the station typologies.

IV

BEIJING DESIGN WEEK 2013

TRANSIT-ORIENTED BEIJING

I

TOD IN ASIA

The integration of housing, shopping and other functions at stations is uncommon in Beijing. The existing main stations Beijing Central, West and South are isolated buildings surrounded by a large section of public space. An Asian TOD variant, as has been applied in Japan and Hong Kong, could also work in Beijing. One of the biggest spatial challenges for the city is the extreme centralisation of employment and regional facilities, which has created continuous congestion, which further deteriorates the already poor quality of air.

New concentrations of these functions into sub-centres and along public transport corridors could greatly reduce this pressure and boost investment in the periphery. By doing so, the pressure for development in the historic Hutongs in the centre could potentially also be reduced.

Read the full travelogue at:
www.deltametropool.nl/nl/beijing_design_week

III

THE SINO-DUTCH APPROACH

During the Beijing Design Week 2013, VenhoevenCS organised a workshop with twelve Dutch experts, commissioned by the Creative Industries Fund NL. Together with Chinese experts, this group of (mainly) designers formed "The Sino-Dutch Approach" on the transformation of the industrial district of Fengtai. One of the major challenges in this area is the development of the high-speed station Fengtai and its integration in the surrounding area. Merten Nefs attended these talks on behalf of the Deltametropolis Association to help work on this issue.

The new HSL Fengtai station and new metro connections definitively confirm the role of Fengtai as the gateway to Beijing. In the near future, people that travel to Beijing by high-speed train from Shenzhen and Hong Kong will arrive at Fengtai. The station area is thus a regional focal point of activities and meetings, that can function complementary to the historical centre of Beijing. The dominant peak direction travelling towards Beijing can then be reduced.

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BEIJING-WEST ⁄ CONCEPT FENGTAI STATION

IV

iNODE INFORMATION SYSTEM FOR TOD

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Information about space and mobility are, in a fragmented form, widely available on the Internet. However, more comprehensive information on TOD developments, with relevant information at the right spatial scale for the right user is still tenuous. This has prompted the creation of iNode, an online information system for Transit-oriented Development.

iNode is the graduation project of Ernst Kuilder (Wageningen University), in cooperation with the Deltametropolis Association. Over a four-month period, the specifications for the online information system for Transit-oriented Development were explored. A prototype was developed and tested by potential users in the region, province, the transport company and by other experts in a series of steps. An early version of the iNode was presented in November 2012 at the Ministry of Infrastructure and Environment.

II

Conclusions and recommendations

Through the development and testing of iNode, the following conclusions and recommendations can be drawn:

1. iNode is particularly relevant at a strategic regional level, where the relationship and selection between the different nodes plays a role in spatial planning and transport. This is also relevant at the metropolitan scale, as is the case in Amsterdam. The tool is less relevant for smaller municipalities.

2. When the variables of the calculations are adjusted by the users themselves, the understanding of the concept is broadened and a wider group of users can be served. This allows them to work with the data themselves, and thereby allows them to think more carefully about the issues at hand. A 1200 meter catchment area around a station may, for instance, be too large for certain parties, but too small for others.

3. The state government should play a facilitating and coordinating role for TOD development that goes beyond provincial borders. Developing a platform for information interchange is an example

III

of such a facilitating role. The state government is therefore the appropriate party to further develop the iNode tool. This may happen in collaboration with other interested parties, such as the municipality of Amsterdam, private consultancy companies and the Deltametropolis Association.

Next Steps

The next step is to find an organisation or combination of parties that want to adopt this concept, implement and manage it.

Try iNode with a pc or tablet at http://inode.bedrijvenserver.nl/inode/

IV

PLANNING 2014

I COMMUNICATION

and, as of 2014, TOD is no longer an exotic concept. It is now a workable principle that we, in the Dutch Delta Metropolis, have learned to use practically. We are happy with this development and with the fact that we have been able to contribute to this development through SprintCity, in collaboration with many other parties, not least the Delft University of Technology and Next Generation Infrastructures.

Nevertheless, growth has its consequences. SprintCity now stands on its own, which makes it increasingly important to work according to project-plans and in a cost-effective manner, in collaboration with stakeholders, such as provinces, the national government and transport companies. The basis for these co-productions in our network remains the same: all outcomes are freely accessible.

The communication on the project will also be approached in a different way. Due to our track record and the project-based future of SprintCity no more Updates will be released. **SprintCity Update # 6 is therefore our last update.**

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Many new plans are on the agenda for 2014. Together with governments, universities and private companies, we will continue to investigate and facilitate the development of TOD in the Netherlands. With some foreign partners, we are also going to carry out some work abroad. We intend to use both the existing butterfly model, and the planning support tool SprintCity, as well as new research and cartographic representations to address the questions in an international context.

Our collaboration with Movares on space and mobility will be continued in 2014. MSc Jan Duffhues is now no longer employed by Movares, but we are greatly indebted to him for his dedication and contribution to the development and implementation of the SprintCity planning support tool since 2010.

Over the past years, the SprintCity project idea and prototype have grown tremendously. Anyone comparing the different Updates can testify to its development. During this period, TOD has become an item on the agenda of many organisations

II

GOALS

Interim news and the results of all the subprojects will be published on our website, as well as in booklets and project fact sheets. These products will be sent to the project partners and members of the Deltametropolis Association, and can also be downloaded from www.deltametropool.nl. A new website for the Deltametropolis Association will be developed, which will allow more opportunities for participation and interaction with SprintCity and our other projects.

Lastly, some goals for 2014:

- Spreading the concept and ideas of *Make Space!* (with the province of Noord- Holland) through lectures, presentations, debates.
- Adapting and using the planning support tool SprintCity for foreign transport corridors.
- Working on urban strategies with state government and regions, with TOD as an important basic factor.
- Launching the open-source software SprintCity.

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WANTED!

PARTNERS IN BRABANTSTAD

The Deltametropolis Association and Euro Immo Star have taken the initiative to build an international partnership in which knowledge and experiences are exchanged. The collaboration aims to strengthen sustainable mobility along two rail corridors, one in Flanders and one in the Netherlands. On these corridors, spatial developments and investments are coordinated, essential links are mapped on changing modes of transportation and the potential for increasing frequency is investigated. The SprintCity and Re - Live tools are being further developed to provide a simulation of the two corridors. We are working towards agreements at the corridor level and the implementation of emergency interventions. The European Interreg programme offers opportunities to support this project through co-financing.

We are actively looking for partners in BrabantStad (NL) and in the Scheldt Landscape Park (BE) who want to work with us to engage in the challenge of further developing a regional corridor at the European level:

LOCAL AND REGIONAL AUTHORITIES

that want to look beyond their own borders and, in collaboration with other stakeholders, strengthen their region

TRANSPORT COMPANIES

that want to contribute to improving the use of the public transport system

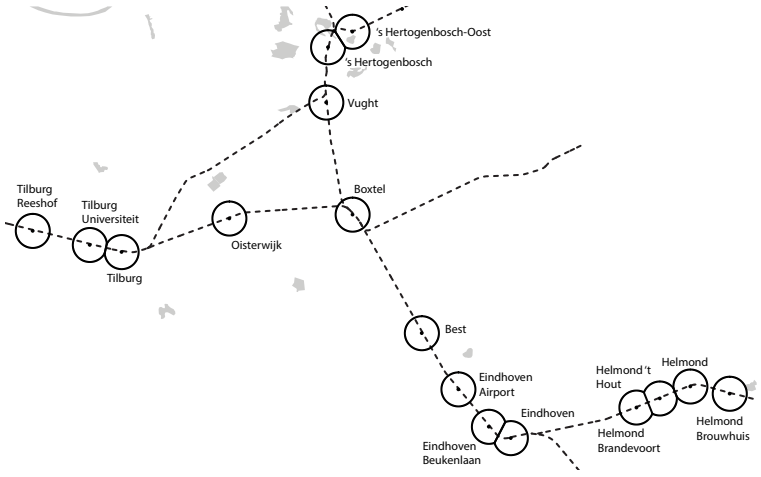
COMPANIES IN THE REGION

that will benefit from improved accessibility by car and public transport, and want to contribute to a sustainable, accessible and green environment

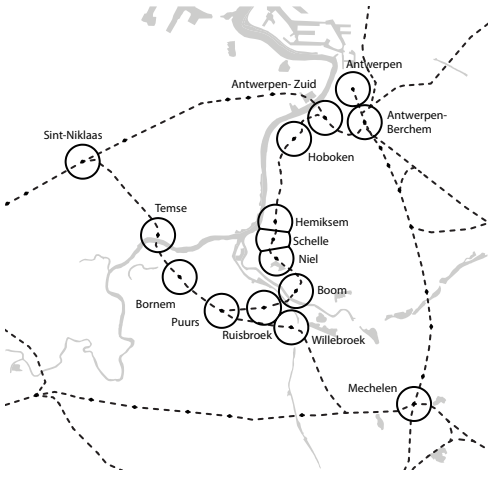
RESEARCH INSTITUTIONS

that want to contribute to research and innovation in this area of expertise

sprintstad@deltametropool.nl



BrabantStad: corridors around Eindhoven



Scheldt Landscape Park: Line 52 and Line54

Visit the SprintCity webpage!

Send SprintCity an e-mail!

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DETAMETROPOLIS ASSOCIATION

The Deltametropolis Association is a broad public organisation that feels responsible for the sustainable development of the Dutch metropolis. The Deltametropolis Assocation brings businesses, public interest groups, research institutes and governments together. The Association makes it possible to work towards a widely supported design of the metropolitan area of Randstad-Holland, focused on welfare, prosperity and the strengthening of its international competitiveness.

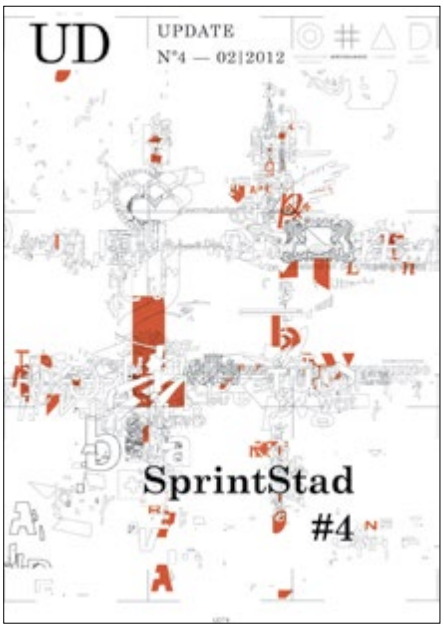
The Association is a sanctuary and think-tank that creates opportunities to to develop new ideas and a sharp discussion on the Deltametropolis, beyond the usual frameworks. It is a laboratory for promoting innovative topics and a platform for driving the discussion of our future metropolis. The association aims to guide this discussion on the development of the Dutch metropolis and promote the resulting ideas in a manner that they are put into practice.

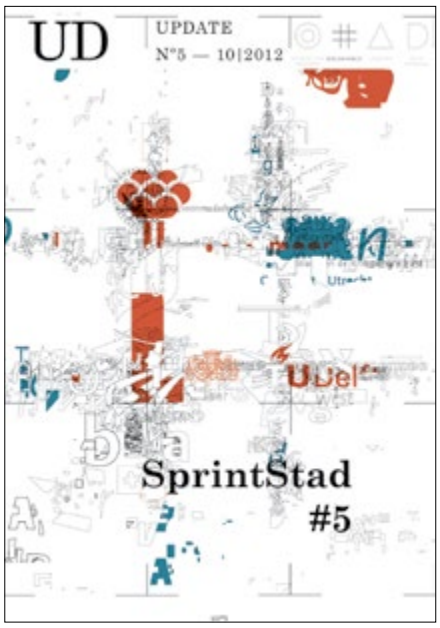
IV


UPDATE
SprintStad
#1
02.11.2009


UD
UPDATE
N°2 — 06|2010
SprintStad
#2


UD
UPDATE
N°3 — 04|2011
SprintStad
#3


UD
UPDATE
N°4 — 02|2012
SprintStad
#4


UD
UPDATE
N°5 — 10|2012
SprintStad
#5