Towards 2050: Developing a Sino-Dutch Approach for Sustainable Urbanisation

Workweek 2014:
Transit-Oriented Development at Qinghe Station
14-19 September

Content

1. Fact sheet Workweek 2014: Transit-Oriented Development at Qinghe Station

Title of the programme
Towards2050: Developing a Sino-Dutch Approach for Sustainable Urbanisation

Title of the project
Workweek 2014: Transit-Oriented Development at Qinghe Station

Assignment
Research by design for future development at Qinghe Station and its surrounding area (including exploration of relevant aspects of ChangPing Station and Badaling Station development)

Commissioned by

Creative Industries Fund NL, Rotterdam
Beijing Municipal Commission of Urban Planning, Beijing (BMCUP)

Team

Curators	Wu Chen, Beijing Institute for Architectural Design, Beijing (BIAD) Ton Venhoeven, VenhoevenCS architecture+urbanism, Amsterdam Wu Weijia, Tsinghua University, School of Architecture, Dept. of Urban Planning, Beijing
Project coordinators	Zheng Tian, Beijing Institute of Architectural Design, Beijing (BIAD) Caine Zhang, Beijing Institute of Architectural Design, Beijing (BIAD) Huang He, Tsinghua University, School of Architecture, Institute of Architecture and Urban Studies, Beijing Martijn de Geus, Tsinghua University, School of Architecture, Dept. of Architecture, Beijing Thijs van Spaandonk, VenhoevenCS architecture+urbanism, Amsterdam Liu Gang, Beijing (OBO VenhoevenCS architecture+urbanism) (coordinator Dutch parties)
Executive organizations	VenhoevenCS architecture+urbanism, Amsterdam Beijing Institute for Architectural Design, Beijing (BIAD) Tsinghua University, School of Architecture, Beijing

Time table

10 July-14 September	Preparations for the workweek
14-19 September	Workweek 2014: Transit-Oriented Development at Qinghe Station
24-25 September	Presentation of results to BMCUP

Possible additional components

22-23 September	Roundtable BIAD: TOD Xinghuo station
24-25 September	Workshop World Bank: with China railway Company
26 September	Presentation at Beijing Design Week
October	Visit Mayor Eberhard van der Laan
Jan 2015	Visit Minister Wilma Mansveld

Location of workweek
Tsinghua University, School of Architecture, Beijing

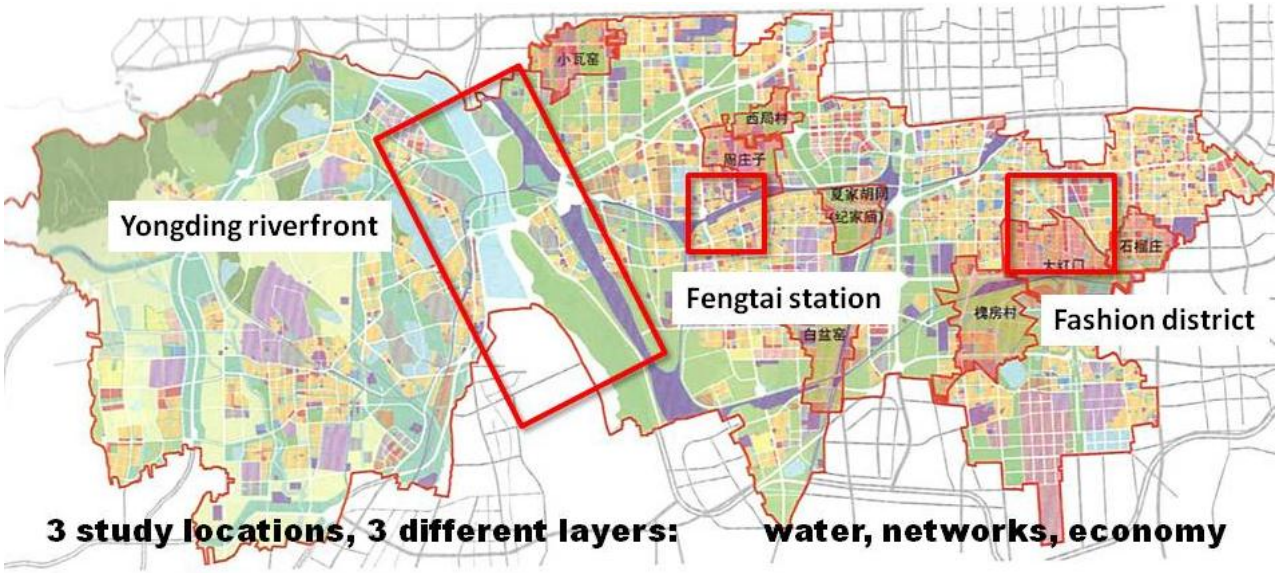
Contact details

Zheng Tian	+86 138 1065 1909	biad88@163.com
Caine Zhang	+86 135 1105 8341	dadycain@hotmail.com
Huang He	+86 139 1100 3023	huanghe@tsinghua.edu.cn
Martijn de Geus	+86 185 1039 2327	m.degeus@gmail.com
Thijs van Spaandonk	+31 6 18112681	t.vanspaandonk@venhoevencs.nl
Liu Gang	+86 131 4623 3877	liugang@thepinprojects.com

2. Introduction

This is a project proposal for the next step of the multiannual program *Towards2050, developing a Sino-Dutch Approach for Sustainable Urbanisation,* initiated by the Creative Industries Funds NL in July 2013.[1] The goal of the initiative is to explore how the Dutch integrated planning approach can be of added value to the challenges Chinese metropolitan regions are facing in the process of rapid urbanisation.[2] This question is explored by means of Sino-Dutch 'research by design' workweeks on specific spatial planning challenges.[3]

The first exploratory workweek was organised during the Beijing Design Week in September 2013. The aim was not to perform a thorough study, but rather to create a platform for an exchange of ideas between Dutch and Chinese professionals. During this workweek, they worked on three pilot cases in Beijing, provided by the local stakeholder, the Fengtai District Planning Bureau.[4]



The promising results of this first workweek were taken as a starting point for developing a further collaboration between stakeholders in Beijing, the Creative Industries Fund NL and Chinese and Dutch professionals in urban development. From September 2013 until now, this collaboration has led to the wish of a second workweek, with the assignment provided by the Beijing Municipal Commission of Urban Planning: Transit-Oriented Development (TOD) along the corridor of the new Jing Zhang High-Speed railway, which connects the Qinghe area in Beijing with the city of Zhangjiakou in Hebei province.[5] The focus of this research by design will be Qinghe station and its environment. This station area is seen as a prototype for many similar projects in China (more than 3000) and strongly connected to the Chinese intentions to create a more sustainable society and economy.

The workweek will be held from 14-19 September 2014, with approximately 24 Dutch and Chinese experts from various disciplines participating. The results of this second workweek will be more elaborate than that of the first workweek in 2013. After the workweek the results will be presented to the Beijing Municipal Commission of Urban Planning. The aim is to show that the Dutch approach to integrated planning and design is a valuable contribution to the further development of prevailing planning practices for the Beijing Municipal Commission of Urban Planning. Also in this type of Transit Oriented Development and inner city redevelopment projects, methods and insights of the Dutch Approach can be very helpful. It can be used to

[1] For more information on the multiannual programme *Towards2050*, please see appendix 1
[2] For more information on the Dutch integrated planning approach, see appendix 2
[3] For more information on Research by Design, see appendix 3
[4] For more information on the Fengtai results, please contact Thijs van Spaandonk at VenhoevenCS, t.vanspaandonk@venhoevencs.nl
[5] For more information on Transit-Oriented Development (TOD), see appendix 4

combine issues from land use planning, water management, sustainable mobility and economic development in integrated spatial plans. This way the workweek also offers opportunities for other top sectors, next to the creative industry.

For the results of the workweek to have a wider impact, it is important to not only have a specific report with confidential data for the commissioners and stakeholders, but also a public version that focuses on underlying design and planning principles. These principles could be used in other regions with similar challenges. This public version can be disseminated in China and the Netherlands among relevant government institutions, research and knowledge institutes and professionals. Activities to disseminate the results are mentioned as 'optional' in this project proposal.

Besides the workweek on Qinghe station from 14-19 September, based on an assignment by BMCUP, there are two other Chinese parties that are eager to work together with Dutch experts on their TOD studies: the World Bank in China and the TOD department of the Beijing Institute of Architectural Design. These additional workweek components are described in Chapter 6: Additional Components.

Participants of the 2013 Fengtai workweek

3. Relevance of the assigment

Station area development and TOD are urgent topics in China, which is rapidly urbanizing, modernizing and motorizing (Chinese cities see an increase of over 16 million cars a year). When done well, the benefits of this type of development for China are numerous. Not only can it help in tackling the major environmental problems like air pollution, it can also add to a better quality of life for people in the growing cities. These two issues have become a top priority for the new government.

Smog in Beijing

China's current investment in transit is massive – 3,000 km of urban rail will be in operation in 2015, 6,000 km in 2020. Thus, tremendous opportunities lie in Chinese cities to apply TOD and the related Land Value Capture (LVC, an important economic aspect of TOD) around metro stations and high-speed railway stations. Among the over 4,000 metro stations that will be in place in Chinese cities by 2020, at least 15 percent of them have potential to become new community hubs, if good TOD is applied.

But to realize Transit-Oriented Development and Land Value Capture, the challenges faced by Chinese cities are apparent, such as the poor coordination among metro companies and land developers, hampering legislation, a lack of an integrated planning approach, etc. In short: the Chinese governments on all levels know what should be done, but nobody knows how it should be done. Therefore, the government is looking for international best practices.

The governments in China have initiated and are still initiating projects in order to tackle the issue of TOD; on a national level, the National Development and Reform Commission (NDRC) has launched TransFORM, the joint China-World Bank Solution Platform for urban transport. And the Ministry of Housing and Urban-Rural Development (MoHURD) will soon launch the National Smart City Joint Labs, focussing on Smart City developments, also in relation to TOD and Micro Cities. On a local level, the Beijing Municipal Commission of Urban Planning has just commissioned the Beijing Institute for Architectural Design to develop TOD guidelines for Beijing metro stations.

The practice of the Dutch integrated planning approach, with alliances and design as a tool for vision making can be used to develop the instruments needed for successful implementation of TOD. Several organizations in China realize this potential, but also consider it a highly experimental approach. The Chinese way to approach planning is to design first, based on design experience, existing typologies, norms and standards. Then the other specialists come in and comment on the design, after which the designs are adjusted. In TOD this is not the best approach, with very difficult development processes and many stations remaining isolated locations with poor connectivity and spatial quality for communities, pedestrians, and cyclists.

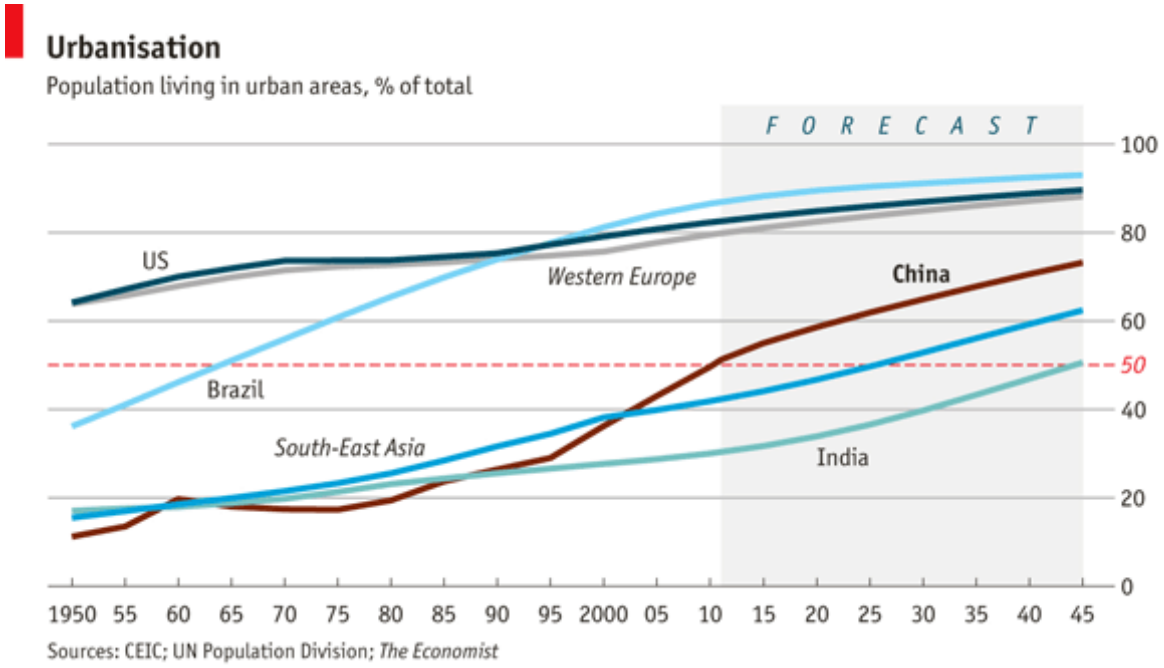
Research by design and working in a multidisciplinary, multi-stakeholder environment is new and a challenge to China. But many organisations are eager to learn from our experiences and want to experiment through an exchange of methods (e.g. BMCUP, Tsinghua, Worldbank, Mohurd, BIAD). To be able to organise this exchange and get the best out of it, without disturbing the otherwise hectic planning process, a station area was chosen for which the official planning procedure will only start in 2015. This creates the opportunity to organise a real exploration of opportunities - through research by design - in this project that can be profitable once the official planning process begins. Positive results will also create many opportunities for Dutch companies active in related aspects of urban planning.

Beijing South Railway Station

4. Goals of *Towards2050* and the Qinghe Workweek 2014

For China:

- Contributing to possible solutions to the problems of contemporary urbanization in China, and especially in Beijing;
- Creating opportunities for Chinese experts to develop their knowledge in the field of integrated planning and design solutions, and in TOD in particular;
- Contributing to the development of a creative economy;
- Creating opportunities for Chinese designers and other experts to develop a network in the Netherlands and Europe;
- Increasing mutual understanding between Chinese and Dutch approach.
- Develop collaboration at university and government level between China and The Netherlands.



For The Netherlands[6]:

- Creating opportunities for Dutch experts to develop their knowledge in the field of integrated planning and design solutions, and in TOD in particular;
- Creating opportunities for Dutch designers to develop a network in China;
- Displaying and promoting the added value of the "Dutch Integrated Planning Approach" in the Chinese context, and particularly in Beijing;
- Displaying and promoting the work of Dutch designers and other experts in relevant urban planning issues in China and Beijing in particular;
- Increasing mutual understanding between Chinese and Dutch approach.
- Develop collaboration at university and government level between China and The Netherlands.

[6] More on the opportunities for the Dutch participants, see Appendix 6

5. The Workweek 2014: TOD of Qinghe Station

a. The commissioners

Beijing Municipal Commission of Urban Planning (BMCUP)

The Beijing Municipal Commission of Urban Planning is responsible for the research and realisation of all urban and rural planning within the municipality of Beijing. It also participates in the city's economic and social development planning; it is responsible for the laws, regulations and technical standards; and it is in charge of all bids and tenders.

The BMCUP has clearly expressed a great interest in Dutch integrated planning approach. The strong political force to deal with challenges to improve the quality of life in the city demands a firm, integrated approach. Sustainable mobility is considered to be a key factor in this, with Transit-Oriented Development as key strategy. Through TOD, pedestrian and bicycle movement can be enhanced, and the quality of public space and the quality of life with it. Everybody agrees on the potential of TOD, but hardly anybody in China knows how to do it. The standardized methods do not seem to work, since many projects fall victim to competing hierarchies of the railway company, bus companies, municipality, investors, project developers and other stakeholders. The BMCUP acknowledges Dutch integrated planning as a potential way out of their dilemma's.

The person directly responsible for the assignment of the workweek is Mr. Wang Wei. Mr. Wang is the deputy director of the BMCUP and in charge of the station area developments in Beijing. He is originally an engineer. The director of the BMCUP, Ms. Huang Yan, has a PhD in urban Planning form the University of Leuven. She has a keen interest in European style planning.

The Creative Industries Fund NL

The Creative Industries Fund NL began operating on 1 January 2013. It operates within the context of the Dutch government's culture policy and focuses on all the designing disciplines and on E-culture in a broad sense. The Fund issues project grants in order to foster substantive quality in architecture, urban design, landscape design, product design, graphic design, fashion and E-culture, to foster innovation and cross-sector approaches and to professionalize entrepreneurship. An important concern is the improvement of the links between designers/makers and clients/manufacturers. By commission of the Ministry of Education, Culture and Science and the Ministry of Foreign Affairs, and with support from the Ministry of Economic Affairs, a programme is being set up to focus on expanding the international market. *Towards2050: Developing a Sino-Dutch Approach for Sustainable Urbanisation* is one of the projects within the internationalization programme.

b. The project team

Curators

There are three curators, who are responsible for the content and the results of the workweek, and for bringing top experts to the table.

1. *Wu Chen* Beijing Institute for Architectural Design, Beijing

The Beijing Institute for Architectural Design (BIAD) is a state-owned architectural design and consulting institute based in Beijing. It's practice has a broad scope, including a/o urban planning, investment planning, architecture, engineering, landscape design, interior design, cost calculation and project management. It has more than 4.500 employees, and is still growing. If a foreign architectural office wants to build a project in China, it is obligated to work with one of the state-owned design institutes. Thus, BIAD has worked with many notable architects from abroad, such as I.M. Pei, Perkins+Will, Mecanoo, Paul Andreu, Skidmore, Owings and Merrill. BIAD is one of the two state design institutes with which the BMCUP works.

Prof. Wu Chen is the Design Principal and Deputy Chief Architect at BIAD. He is the son of Mr. Wu Liangyong, the former chief urban planner of Beijing who was responsible for the master plan for post war extension of Beijing. Wu Chen is also professor at Tsinghua University. He is very interested in expanding his work to Europe and has a keen interest in establishing a network in the Netherlands and beyond.

Wu Chen is the curator responsible for the relation with the Chinese commissioners, Ms. Huang Yan and Mr. Wang, and negotiating the deliverables.

2. *Wu Weijia* Tsinghua University, School of Architecture, Department of Urban Planning, Beijing

Tsinghua University is one of the top universities in China. It is a member of the C9 league, the elite university alliance of mainland China. The School of Architecture has 4 departments: Architecture, Urban Planning, Landscape Architecture en Building Science & Technology. It also has another 8 (research) institutes, a/o the Institute of Architectural and Urban Studies. The School of Architecture publishes several magazines, such as *Urban and Regional Planning* and *World Architecture*.

Prof. Wu Weijia is professor at the Department of Urban Planning and the deputy director of the Institute of Architectural and Urban Studies. His fields of expertise not only include design, but also policy and regulations. He is also the chief researcher for the Beijing 2049 study, which was conducted together with Cambridge university.

Wu Weijia is the curator responsible for support for the workweek, such as arranging the work shop facilities, the group of students assisting the experts during the workweek, the preparatory work, etc.

3. *Ton Venhoeven* VenhoevenCS architecture+urbanism, Amsterdam

Ton Venhoeven is the curator responsible for the relation with the Dutch commissioner. He is founder and principal architect/planner at VenhoevenCS and former chief government advisor on infrastructure in the Netherlands. As former professor in architectural history and theory at Eindhoven University, Ton Venhoeven also has a solid background in the academic world.

<u>Project coordinators</u>
The curators have all assigned 2 project coordinators each to the workweek.

Beijing Institute of Architectural Design:
- Zheng Tian
- Caine Zhang

Tsinghua University, School of Architecture
- Huang He (Institute of Architecture and Urban Studies)
- Martijn de Geus (Deptartment of Architecture)

VenhoevenCS architecture+urbanism
- Thijs van Spaandonk
- Liu Gang

The project coordinators will be responsible for preparing the workweek content and logistics, inviting experts, guests, organizing meetings, preparing materials and tools, computers, etc. They will also use their networks to solve problems that may arise. Mr. Liu Gang will coordinate between the Dutch and Chinese parties.

c. The case study

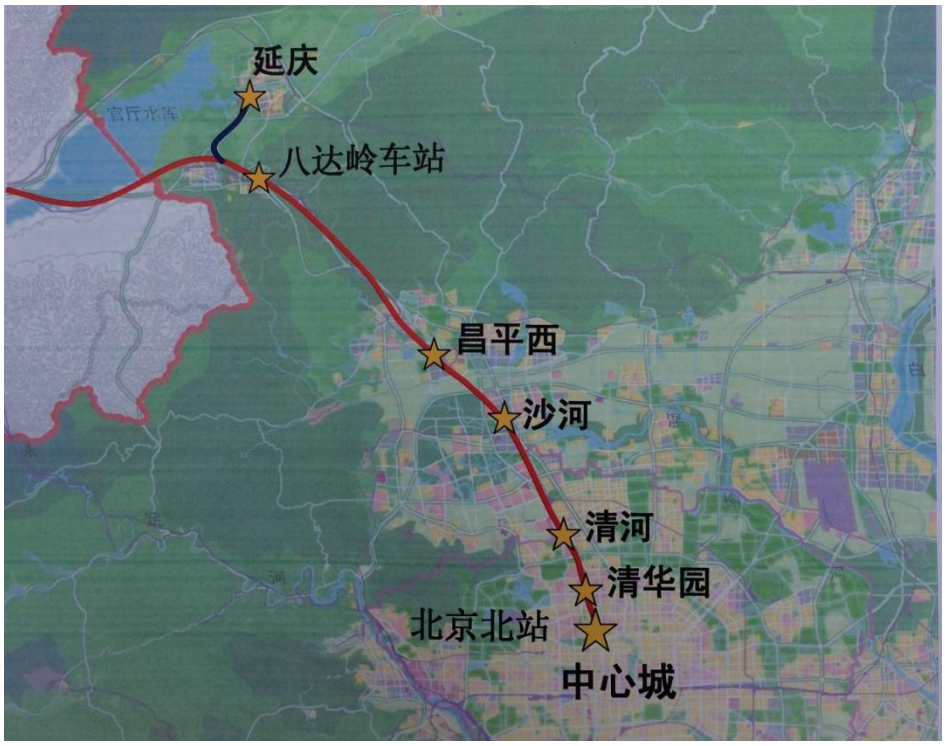
The case study is TOD along the corridor of the new Jing Zhang High-Speed railway, which connects the Qinghe area in Beijing with the city of Zhangjiakou in Hebei province. The JingZhang High-Speed line is scheduled to be operating in 2022.

The focus of the research by design will be the development potential of QingHe station and its environment. However, since passenger flows and developments at other station areas along the corridor are crucial for defining the development potential, QInghe station cannot be studied properly as a stand-alone project. Therefore, short explorations of the development potential of Changping and Badaling station should be considered as well.

Other aspects that may be relevant for defining passenger flows and TOD potential:

- Changping District is home to the Ming Tombs and beautiful scenery;
- Badaling is the most visited section of the Great Wall;
- Some trains may divert to Yanqing, one of the proposed sites of the Horticultural Expo in 2019. Yanqing could also be a location for a possible Winter Olympics.
- The whole line connects to Zhangjiakou and inner Mongolia, Qinghe is the end station in BeiJing.
- This line will be a high speed line and the last part of the track to Beijing will be a high frequency line as well.

Qinghe Station area is a considerable assignment. It is at least 3 times the size of the Zuidas in the Netherlands. It is a new station and nothing has been designed for it as of yet, but the BMCUP wants to start the official planning procedure in 2015. It is therefore an ideal moment for the Workweek: we can show how an integrated approach and research by design can be used to explore and show hitherto unknown potential of Transit-Oriented Development at this location.



d. The research questions

During the workweek, through research by design, we aim at finding answers for numerous research questions:

Hub

- How can we organize an optimal feed-in by other public transport services (bus, subway, tram, local train)?
- How can we create a station that is also well accessible for private cars for optimal multi-modal use?
- How can we organize the accessibility of slow-modes (bicycle and pedestrian) and develop optimal slow traffic networks with surrounding neighbourhoods?
- How can we promote the most evenly distribution of train passengers throughout the day/week/year?
- How can we create optimal parking solutions for cars and bicycles?
- How many people/cars/buses/bicycles/metro's are going to use/visit this station?
- Which are the optimal dimensions to accommodate these requirements
- How can we use smart technology to optimize planning and use

Place

- What would be the preferred density around the station within 800 meters, 2000 meters?
- What would be the preferred mix of functions(housing, offices, retail, leisure, healthcare)?
- What would be the preferred distance of the different functions in relation to the station?
- Which public spaces are needed to accommodate public needs for quality of life?
- Which public spaces are needed to create opportunities for leisure and shopping?
- Which public spaces are needed to create buffer capacity around peak hours?
- How does this station area relate to other stations on the corridor? This could influence the choices made for the above questions.

Design

- How can we create an attractive and healthy public space and nice places to stay, so the station area becomes more than just a place of flow?
- How can we create quality of place for residents, employees and visitors?
- How can we create a safe and healthy micro environment for pedestrians and cyclists, also at night?
- How can we include optimal way finding in the urban design?
- How can we create a spatial framework that guarantees quality and sufficient flexibility in order to enable an optimal Public-Private cooperation?
- How can we facilitate a development that will benefit the surrounding area as much as possible?
- How can we design a station that facilitates urban development around it in the best possible way.

Development and investment

- How can we control cost and generate return on investment?
- What is the best phasing in execution?
- How can we provide a flexible and innovative framework for future development?
- How can we provide attractive and adaptable opportunities for private investment?

And: How are the results from this assignment useful and applicable in similar assignments in China and The Netherlands?

e. Preparations for the workweek

Tsinghua University will be mainly responsible for gathering and preparing data needed for preparation of participating experts of the workweek. If necessary they will be assisted by BIAD.

Relevant data are background information for the specific site, city master plans, area detailed control plans, transportation plans, and other related materials.

In August, a one week preparation session with all project coordinators takes place in Beijing. Relevant agencies will be invited by Tsinghua University and BIAD: DRC, Planning, Land Resource (particularly land transactions), Construction, Transport, Transit, Bus, and design institute.

f. Set-up of the workweek

The workshops consist of a variety of elements; lectures, field visits, debates, presentations, work sessions, dinners and drinks. The programme will have a good balance of active/passive, plenary/parallel and formal/informal moments.

Since the assignment is quite substantial, we will divide the project into three parts, each part allocated to a different multidisciplinary team.

The workweek will start on Sunday with a plenary brief on the proceedings of the workweek and the explanation of tasks. After this there will be plenary site visits with explanations by local stakeholders.

From Monday through Friday, the workshops take place. Each day, experts will attend workshops in the morning and guide three parallel design processes in the afternoon. A total of 9 Tsinghua University students will be available (3 for each team) to elaborate the results into drawings, graphs, etc. They will perform extra research if needed.

On Wednesday evening, there will be a roundtable with visiting experts. At this occasion, the preliminary results will be presented and discussed. This is also an opportunity to invite important stakeholders that cannot be invited as an expert for the workshops (e.g. Worldbank, MoHURD, CAFA, UPSC, China Railway Company).

On Friday evening there will be a presentation of the preliminary results and explanation of the next steps. This presentation is followed by a small network party.

Field trip during 2013 Fengtai workweek

g. Workweek day-to-day

Thursday	*11 Sep*	*departure Dutch curator and project leader from Amsterdam*	
Friday	*12 Sep*	*arrival Dutch curator and project leader in Beijing*	
		local preparations by curators & support teams	
Saturday	*13 Sep*	*local preparations by curators & support teams*	
		departure Dutch experts from Amsterdam	
Sunday	14 Sep	arrival Dutch experts in Beijing	
		briefing of the workweek	
		introduction by stakeholders	
		excursion to the Jing-zhang Railway project sites	
Monday	15 Sep	morning	: expert workshop: Research by Design Chinese Approach
			design models research
		afternoon/evening	: elaboration of morning results
Tuesday	16 Sep	morning	: expert workshop: Research by Design Dutch Approach
			integrated design approach
			selection of model
		afternoon/evening	: elaboration of morning results
Wednesday	17 Sep	morning	: expert workshop, integration of aspects
		afternoon	: elaboration of morning results
		evening	: roundtable discussion with visiting experts
Thursday	18 Sep	morning	: expert workshop remaining design topics
		afternoon/evening	: elaboration of results and producing deliverables
Friday	19 Sep	morning	: elaboration of results and producing deliverables
		afternoon/evening	: elaboration of results and producing deliverables
		evening	: end of workweek for experts & network party
Saturday	*20 Sep*		*: meeting of curators & support teams on follow up*
Sunday	*21 Sep*		*: fine tuning deliverables if necessary by support teams*
Week 2			*: presentation of results by curators to BMCUP*

h. Deliverables

There will be several deliverables:

- Exploration alternative design models of the area
- Design station and surrounding area with drawings, renderings, and architectural models
- Booklet for general publication
- Solid confidential report – if required by the BMCUP

i. Experts

The experts needed for the case study come from various disciplines. The commitment and quality of the experts is the responsibility of the curators:

Experts provided by curators:	Wu Weijia Tsinghua University	Wu Chen BIAD	Ton Venhoeven through open call in NL
urban planners	2	2	3
architects	2	2	3
landscape architects	1	1	3
mobility experts	1	0	1
TOD expert	0	0	1
urban economist	0	0	1
Total	6	5	12
water specialist	*0*	*0*	*1 (optional)*

The total team during the workweek will consist of 3 curators, 6 project coordinators, 23 experts, and approx. 9 students. Plus a number of visiting experts for the round table on Wednesday evening.

Visiting experts
In addition to the day to day participants of the workweek, we invite a selective group of visiting experts to a roundtable halfway through the workweek. These visiting experts can come from e.g. Worldbank, MOHURD, CAFA, China Railway Company.

Support for experts
Before, during and some days after the workweek, 9 students from Tsinghua University (master and PHD) are available to support the experts.

j. Workweek location
Tsinghua University has been kind enough to offer its facilities for presentations, workshops and daily work during the workweek. There will be internet connections. All participants are expected to bring their own computers with software.

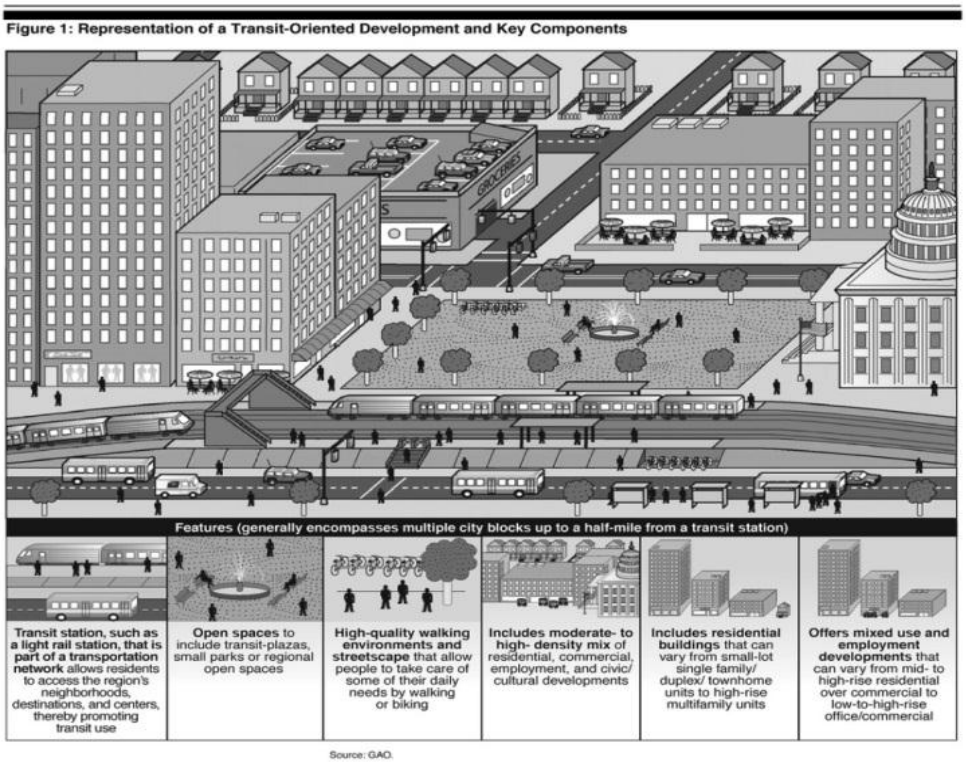
6. Additional components
There are several additional components that can be added to the workweek:

1. TOD of Xinghuo Station
2. World Bank TOD seminar
3. Beijing Design Week
4. Extracurricular activities

For these options we will need an additional week from 20 - 26 September. These options also have other stakeholders and a different project team than the Workweek TOD for Qinghe Station.

Both the TOD department of BIAD and the World Bank are interested to work together with Dutch experts on their TOD studies.

Ton Venhoeven is currently (June 2014) discussing the Xinghuo Station and World Bank seminars with the respective stakeholders. The content of these seminars is still being developed, depending on their demand and funding capacity. So far we did not decide on the exact format, nor did we decide how many and which experts are needed to participate in these seminars. This will be more clear by the beginning of July 2014.



1. TOD of Xinghuo Station

Next to the assignment for Qinghe station, our commissioner Mr. Wang Wei from BMCUP asked Ton Venhoeven to make an assessment of Xinghuo station in the east of Beijing, a project he delegated to the TOD department of BIAD. This department of BIAD in its turn proposed to include two other topics in the workweek. : an assessment of water management issues around Xi Cheng station in Beijing and the development of TOD guidelines for Beijing metro stations and their environment, an existing assignment of BIAD from BMCUP on this topic. Venhoeven is currently discussing a two day program for a seminar/workshop on Xinghuo station and on TOD guidelines for Beijing.

Stakeholders/Commissioners

- Wang Wei, Beijing Municipal Commission of Urban Planning, Beijing
- Zhou Lie, Beijing Institute for Architectural Design (BIAD), Beijing

Curator

- Ton Venhoeven, VenhoevenCS architecture+urbanism, Amsterdam

Project coordinators

- Zhou Qing, Beijing Institute for Architectural Design (BIAD), Beijing
- Wu Xiaoshi, Beijing Institute for Architectural Design (BIAD), Beijing
- Thijs van Spaandonk, VenhoevenCS architecture+urbanism, Amsterdam

Dutch experts – t.b.c.

To be decided: most probably 3 urban planners and 3 specialist (mobility experts, TOD specialists, urban economists), plus Ton Venhoeven and Thijs van Spaandonk.

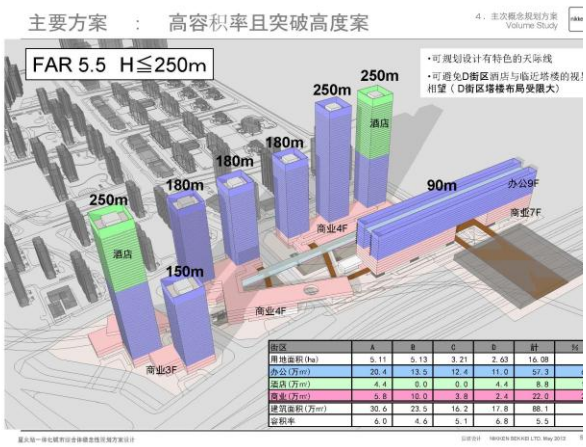
Questions from BIAD TOD department to be dealt with in the workshop/seminar

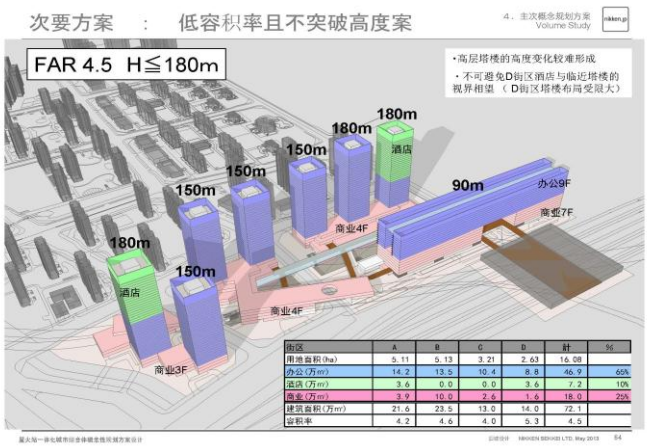
Part 1_Economy:

1. To what level of economic development (advancement of general economy) TOD is capable? Are there any evaluation methods (relating to the level of economic advancement) that we can refer to?
2. What are the most critical factors in determining the scale & density (F.A.R.) of development of an area?
3. The Built environment in the Netherlands and China are greatly different, how do you plan to carry out this project in Beijing, what are your working methods?
4. What are the percentage or ratio of the land cost (cost of land purchase) and profit of a real estate development project in Netherlands? Does Netherland or any other countries in Europe have a legally fixed value for the percentage of profit in development? Or could there be any mandatory requirement by government in margin capping?
5. Defining the scale of TOD around Xing-Huo Station is closely related to the cost during pre-development phase. How do you calculate your break-even point in relationship to the project's scale & density (F.A.R.). What's the common principle in other nations?
6. How to calculate how much underground (commercial) development should be allocated on an urban scale?
7. How do business planning and urban planning interact, and how do business planning & architectural design interact, which profession should take the leading role?
8. During the urban design phase, is business planning also involved?
9. How does the presence of subway in an urban area impact on property development model?

Part 2_Planning:

1. Promoting TOD could increase the usage of public transportation, thus increasing the capacity of transportation within the TOD area. How much extra development (via denser development) can be possible by the TOD model in comparison to standard urban developments? Are there any general standards or experiences we can refer to?
2. The current traffic condition around Xing-Huo Station is very congested, and the new high-speed railway station and Subway station would inevitably put more pressure on transportation & the road network. What planning & traffic measures can be applied to alleviate this problem? How do you reach a balance between alleviating traffic congestion & greater, denser developments.
3. What are the methodologies & theories in TOD design around the world? Do these theories have any guidance to the practice work?
4. Can you inform us of TOD projects in your own country or region? What do you think about TOD projects in East Asia, such as in Singapore, Hong Kong and Japan? What are the differences? What can China learn from these experiences?
5. For any new subway lines (or existing subway lines for redevelopment) in the Netherlands, do you conduct a rezoning urban planning process along the line? If so, in what stage of the project is this conducted? Who provides the leading role? What are your goals?





Part 3_Operation and management:
1. For projects such as Xing-Huo, are there any standard project management frameworks that are common by international standards? What professions would be included in the project management team, how are fees calculated?
2. In the stage of planning design and management, are there mechanisms that you can use on problems that are currently unanswerable, is it through university research programs, government research institute or other ways?
3. Can you please share your experience on the flood management system in your country, focusing on project management and operation.

Setup of the two day seminar – t.b.c.

Monday	22 Sep	morning	3 presentation (20 min) on traffic
			Workshop on traffic
		afternoon	3 presentation (20 min) on land use planning
			Workshop on land use planning
Tuesday	23 Sep	morning	3 presentation (20 min) on financial models
			Workshop on financial models
		afternoon	3 presentation (20 min) on TOD guidelines
			Workshop on TOD guidelines

For the presentations, there will be approximate 30-50 people. Most will return to work after this. A smaller group will stay for the workshops.

2. World Bank TOD workshops

In December 2012, The National Development and Reform Commission (NDRC) launched TransFORM, the joint China-World Bank Solution Platform for urban transport. It is a multiannual programme aimed at finding answers to questions like:

How can Transit Oriented Development be applied to optimize use of public transport and Non Motorized Transport (pedestrian, bicycle) options.

- How can TOD be used to create attractive cities and walkable neighborhoods.
- How can Land Value Capture systems from land use development around nodes be used to finance sustainable mobility infrastructure development
- How can urban rail networks answer current and future Chinese urban mobility needs?
- How can they be built to structure urban growth?
- How can alternative options be evaluated to meet such needs in a given corridor?
- How can such networks be financed? How can the long term costs of an urban rail network be estimated and covered?
- What share of cost can be recovered from fares while taking into account social and environmental considerations?
- How can ridership and impact be maximized by integrating rail and bus services and by adjusting urban transport policies to encourage the use of public transport?

TransFORM seeks to support the development of new and improved solutions for a number of major urban transport challenges. TransFORM draws on lessons derived from Chinese and international urban transport practice, as well as on conversations with a broad network of practitioners, to develop solutions adapted for China. TransFORM will also share and disseminate knowledge gained through actual projects and pilots by capturing systematically the lessons learned through their implementation.

At the request of the World Bank we have reserved two days in the second week. The details of the setup and content of the workshop will be discussed in the beginning of August, after the holidays.

Commissioner: Paul Procee, World Bank, Beijing

Curator: Ton Venhoeven, VenhoevenCS architecture+urbanism, Amsterdam

Project coordinators Gerald Ollivier, World Bank, Beijing
Thijs van Spaandonk, VenhoevenCS architecture+urbanism

Dutch experts: To be decided

Setup of the two day workshop – t.b.c.
Wednesday 24 Sep
Thursday 25 Sep

3. Beijing Design Week

On Friday 26 the opening of the Beijing Design Week takes place. Options for participants to give presentations on their work and the workweek can be discussed with the organisation of the BJDW.
Also, a presentation of the results of the workweek on Qinghe Station might be an option: during the Beijing Design Week there are many designers and visitors from all over the world that may be interested in the Dutch participants and the results of the workweek. However, we would need to find additional funds for the production of presentation materials.

4. Extracurricular activities

Network and PR opportunities

In the remaining or spare days Dutch experts can use their time to extend their presence and networks in China. During this period there are plenty opportunities to develop networks and potential collaborations with Chinese partners.
Also, it may be possible to organise a series of lectures by the Dutch experts at Tsinghua University, the Central Academy of Arts (CAFA), the Chinese Academy of Social Scienses (CASS) or other educational and research institutions.

Visit Mr. Eberhard van der Laan, Mayor of Amsterdam

The visit to China by the Mayor of Amsterdam is planned for October. This may also be an excellent opportunity to show case the Dutch integrated planning approach. However, again, we would need to find additional funds for the production of presentation materials.

Visit Ms. Wilma Mansveld, Minister for the Environment

The Dutch Minister for the Environment will visit China in the beginning of 2015. This may also be an excellent opportunity to show case the Dutch integrated planning approach. However, again, we would need to find additional funds for the production of presentation materials.

7. Provisional timetable

Preparations

14 July	Start of the project
14 July-14	September Preparing and organising the workweek
14 July	Start selection process of Dutch experts
4 August	Final selection of Dutch and Chinese experts
11 August	Preparation session in Beijing for project coordinators
18 August	Plenary brief for Dutch experts

Workweek

14-19 September	Workweek TOD Qinghe Station
26 September	Presentation of results to BMCUP

Additional components

22-23 September	Seminar TOD Xinghuo Station
24-25 September	Seminar World Bank
26 September	Opening Beijing Design Week
October 2014	Visit by Mayor Eberhard van der Laan
January 2015	Visit by Minister Wilma Mansveld

8. Funding and Support

So far, all costs for the development and preparations for the 2014 activities of Towards 2050 have been covered by the Creative Industry Fund NL and VenhoevenCS architecture+urbanism, with support from Royal Dutch Embassy to China in Beijing.

The Creative Industry Fund NL and VenhoevenCS intend to support the workweek on TOD of Qinghe Station in September 2014 financially. However, considering the scope and cross-sector topic, we are looking for additional support, both in cash and kind from other sectors.

On the Chinese side, BIAD and Tsinghua University cover the costs for their respective curators and project coordinators. The Chinese experts will give their hours for free. Tsinghua University will make their facilities available and contributes with 9 master/PHD students during the workweek. BIAD will contribute with a model maker during the workweek.

BIAD will also cover the cost of the additional TOD seminar on Xinghuo Station. The World Bank has some funds for their TOD seminar.

Additional support will be required to make the workweek in September happen. The ambition is to work on a Dutch integrated promotional model, based on the results of the workweek.
According to this model, pilot projects / workweeks are used to build relationships and trust. This is necessary if we want to evolve towards one hard push with a common vision supported by the Dutch government and various (top) sectors. in our view, such a consorted push is required to exploit the opportunities that China's quest for sustainable urban development will create for Dutch designers, entrepreneurs and research institutions.

Appendix 1: About the multiannual programme Towards 2050

Towards2050: Developing a Sino-Dutch Approach for Sustainable Urbanisation is a multiannual programme commissioned by the **Creative Industries Fund NL**, and organized together with the Dutch office for sustainable architecture, urban planning and infrastructure **VenhoevenCS architecture+urbanism**.

Both China and the Netherlands share complex issues regarding urbanisation and the spatial organisation of our countries. Challenges on economic development, demography, mobility, housing, resources, energy, environment, water and quality of life in general are all related to spatial planning. To face these challenges in The Netherlands, in China and in all other urbanising regions of the world, it is necessary to collaborate and exchange experience, knowledge and know-how on dealing with these complex and interrelated issues.

Complex challenges call for multi-disciplinary action. We need the involvement of Chinese and Dutch professionals with a wide range in background and expertise; specialist and generalists; experienced researchers and students; policy-makers and designers; public organisations and private enterprises. These actors will be brought together in workweeks to discuss, develop and envision a shared future for sustainable urban regions in China and The Netherlands.

The Dutch approach of integrated planning is a model of collaboration in itself, as a result of the long history of dealing with the specific spatial and environmental conditions of the Dutch Delta. It aims to facilitate the international collaboration and exchange of knowledge on integrated (urban) design issues and holistic- and long-term spatial planning. Because China developed its own planning approaches, *Towards 2050* is aiming at developing a Sino-Dutch approach and a bilateral collaboration on sustainable urban development.

Towards 2050: Developing a Sino-Dutch Approach for Sustainable Urbanisation is an exchange of Chinese expertise and Dutch knowledge in the fields of spatial planning, urbanisation, mobility, urban economics, water management, agriculture and others. With this exchange we hope to develop valuable ideas for smart and sustainable cities and regions, as well as a Sino Dutch integrated planning approach, tailored to the Chinese conditions and requirements of today and tomorrow.

Appendix 2: The Dutch Integrated Planning Approach

The Netherlands has a long tradition of spatial planning. It began with the need to protect land against flooding. Later, urbanisation compelled planners and politicians to develop strategic plans. The period of post-war reconstruction in the 1950s saw many national, regional and local planning documents come into being, starting a tradition of strategic, integrated planning adapted to the high density of spatial uses and interests and the Dutch consensus culture.

The creation of alliances and the use of design as a tool are key elements of drawing up spatial visions. This demands that governments fulfil a different role. The Dutch approach to planning is proactive. It means listening to and communicating with all stakeholders, who each represent different challenges and tasks and who share the desire to make a difference. It also means looking to the future, to prepare for future challenges and opportunities. Therefore, trend analysis, adaptive planning and life cycle approach are at the core of the Dutch integrated planning approach. Planning is about being prepared – because solutions take time and require consistent long-term policy and implementation.

Dutch planning means integrating themes and seeking multi-purpose solutions. It means planning by design, across different scales, timescales and layers of occupation, looking at networks (e.g. infrastructure, water system and energy) as well as the geophysical and natural environment. Competing requirements of water safety, agricultural fertility, liveability, mobility, economy as well as political support from multiple

backgrounds have to be balanced and negotiated before any design or plan can be implemented. And related to this multiplicity, also investment schemes from multiple business cases have to be matched.

The Dutch Integrated Planning Approach not only requires a multidisciplinary expert and design team, but also an open, participatory planning process with multiple stakeholders and alliances in planning, design, finance and execution. This may sound rather complicated and time consuming, but the presence and participation of the different stakeholders guarantees not only a vivid debate, but also solid, adaptive and profitable design solutions that can be implemented in reality. With these integrated planning qualities, the Dutch Approach is used as a tool to create healthy, sustainable and smart cities.

Appendix 3: Research by Design

Although the results of the workweek in the end may look like a design, the workweek on transit-oriented development at Qinghe station is not about making a master plan or an in depth research for the construction of the new High Speed Railway Terminal for QingHe. Instead it helps defining the project brief, the scope and the opportunities for the future planning and construction of this station. The workweek uses Research by Design as a method to explore the development potential for Qing He station.

Research by Design helps us to:

- Specify and sharpen the project brief for a project or study area;
- Identify the opportunities for a project area so that they won't be overlooked and lost in the process;
- To define the boundaries of the spatial, societal, environmental and financial feasibility;
- To formulate a vision for a project, which helps to initiate discussion and debate;
- To anticipate on possible long term developments.
- To develop a sustainable Business Case

Research by Design defines:

- The project brief, the project context and stakeholders;
- The project process and the modality for collaborations with all stakeholders.

Research by Design visualises the different spatial scenarios for abstract choices or possibilities in policy. By drawings, maps, models, diagrams and infographics, a possible future environment can be imagined. This helps communication between planners, policy makers, designers and of course communication with stakeholders, users and citizens.

Research by design can be used to deal with the complexities of transit-oriented development and public-private partnership. Research by design is relatively new in China, this is one of the interesting aspects of the workweek. On the one hand Chinese designers are used to immediately start with design work, on the other Dutch experts are used to deal with research by design principles. The resulting exchange of design experiences can lead to an interesting exchange of methods, with for the Chinese more research in their design, and for the Dutch more design in their research.

Appendix 4: Transit-Oriented Development (TOD)

Transit-oriented development," or TOD — creating well-designed, walkable communities around a mass transit system, with a dense mix of housing, retail, offices or other amenities — is an increasingly important urban form. TOD is relevant in the whole world: in developed countries that are transitioning from suburban to urban and for developing countries that are rapidly urbanizing and have to deal with rapidly growing number of private cars.

TOD is a comprehensive strategy to develop attractive and sustainable, but also competitive cities. Economic sustainability is part of the TOD strategy, creating economic activity and land value is key to this type of sustainable development. When TOD is done well, real estate market responds, generating substantial increase in property value. Such value can then be captured through Land Value Capture (LVC) mechanisms to finance transit as well as improvements around neighbourhoods.

In order to improve the quality of life, the urban economy and the environment simultaneously, the Chinese government focuses strongly on developing TOD projects in its new policy on urban planning. On request by the Ministry of NDRC, the World Bank is performing a study on TOD implementation throughout China. In this context TOD and Land Value Capture came together recently, and were discussed extensively at a workshop co-organized by the World Bank and the Institute of Comprehensive Transport of the National Development and Reform Commission, bringing together over 120 Chinese national and local government policymakers, urban and transport planners, transit agencies, private developers, researchers and international experts.

Components of Transit Oriented Development

- Walkable design with pedestrian as the highest priority
- Train station as prominent feature of town center
- A regional node containing a mixture of uses in close proximity including office, residential, retail, and civic uses
- High density, high-quality development within 10-minute walk circle surrounding train station
- Collector support transit systems including trolleys, streetcars, light rail, and buses, etc
- Designed to include the easy use of bicycles, scooters, and rollerblades as daily support transportation systems
- Reduced and managed parking inside 10-minute walk circle around town center / train station

Benefits of TOD

- Higher quality of life
- Better places to live, work, and play
- Greater mobility with ease of moving around
- Increased transit ridership
- Reduced traffic congestion and driving
- Reduced car accidents and injuries
- Reduced household spending on transportation, resulting in more affordable housing
- Healthier lifestyle with more walking, and less stress
- Higher, more stable property values
- Increased foot traffic and customers for area businesses
- Greatly reduced dependence on foreign oil
- Greatly reduced pollution and environmental destruction
- Reduced incentive to sprawl, increased incentive for compact development
- Less expensive than building roads and sprawl
- Enhanced ability to maintain economic competitiveness

Quotes

"Transit Oriented Development as an approach to combat traffic congestion and protect the environment has caught on all across the country. The trick for real estate developers has always been identifying the hot transportation system. Today, highways are out; urban transit systems are in."
The Urban Land Institute (ULI) on current trends in US.

“Transit investment has double the economic benefit to a city than does highway investment.
Transit can enable a city to use market forces to increase densities near stations, where most services are located, thus creating more efficient subcenters and minimizing sprawl.
Transit enables a city to be more corridor-oriented, making it easier to provide infrastructure.

Transit enhances the overall economic efficiency of a city; denser cities with less car use and more transit use spend a lower proportion of their gross regional product or wealth on passenger transportation."
From *Sustainability and Cities*, by Newman & Kenworthy

Appendix 5: Opportunities for Dutch designers and specialists

TOD is not only an important topic in China, but also in other parts of the world, both in developed and in developing countries. Knowledge of best practices and international experience in TOD will create opportunities for Dutch urban planners, architects, landscape architects, mobility experts, urban economists and engineering firms, not only in China, but also in The Netherlands and the rest of the world. The workweek will contribute to the development of knowledge and experience among the participating experts.

This station area is a prototype for many similar projects in China (more than 3000) and strongly connected to the Chinese intentions to create a more sustainable society and economy. This policy will result in many public private partnerships to develop plans and projects for these areas. In the coming years these projects can be very attractive for Dutch investors and engineering firms, especially if the related tenders will demand an integrated approach on spatial planning (like the Dutch Approach). Already at this moment there are huge opportunities for architects, landscape architects and urban planners in China. By developing a network in China related to this kind of projects, Dutch experts develop knowledge on issues and topics that can be relevant at a later stage. Participating in the workweek and getting to know Chinese experts and people from BIAD is an important first step, also to become familiar with the current debate on TOD, the relevant topics in China and in Beijing in particular.

Apart from the topic of TOD there are other pressing issues in China that may be relevant for Dutch planning and design experts:

- lack of affordable housing in cities (public housing)
- elderly care (e.g. life cycle housing). There will be a mission on elderly care to China in the last quarter of 2014, initiated by the Dutch Ministry of Health, Welfare and Sport
- lack of potable water and inner city flood risk (water management in relation to land use)
- shortage of arable land (agriculture, horticulture in relation to land use

Dutch knowledge and experiences in these fields could be displayed in a range of presentations on urban planning and (landscape) architecture, e.g. at Tsinghua University or at the Beijing Design Week.