2020 Spring TSINGHUA & NUS Joint Studio

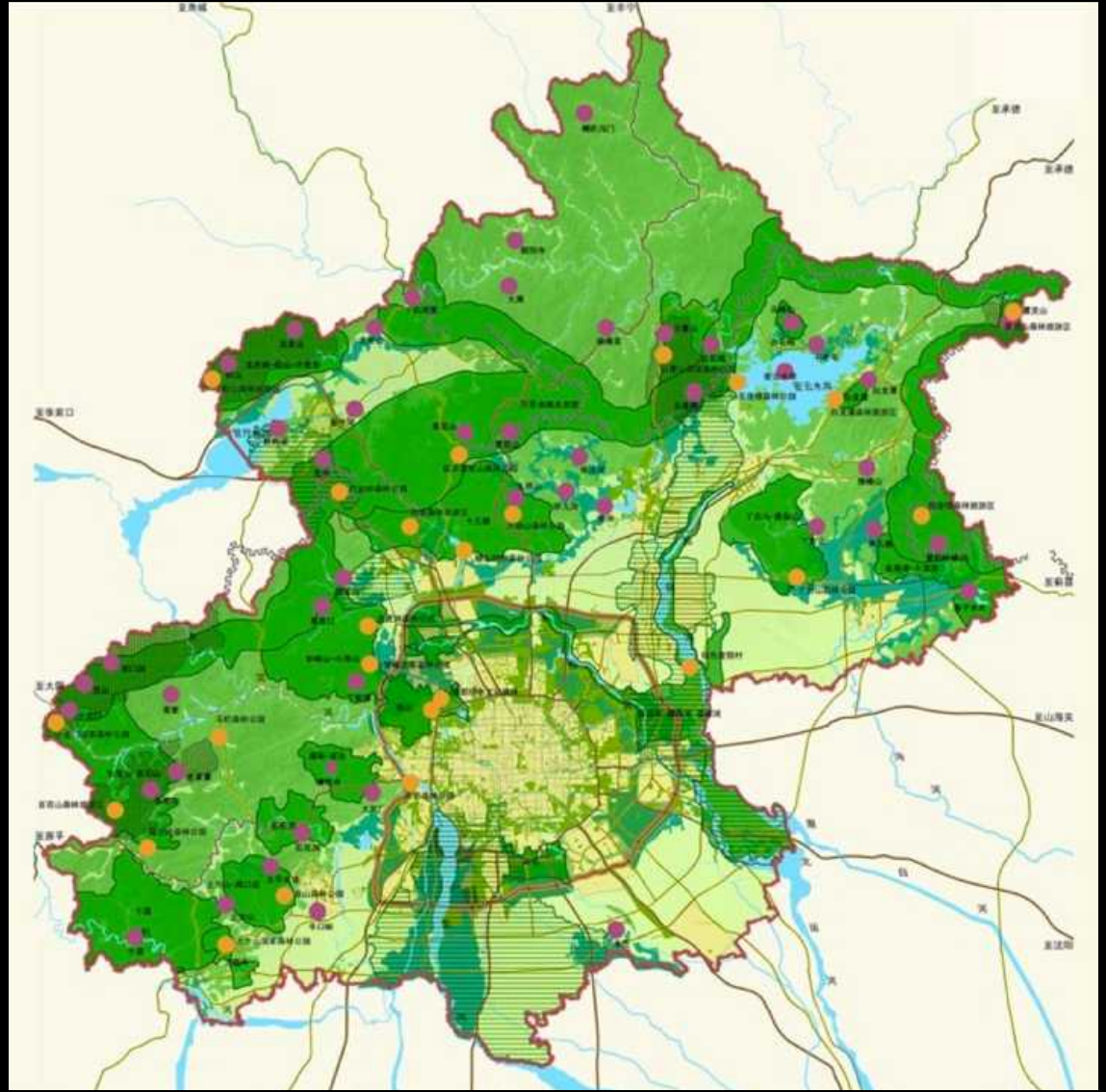
SHARING CITIES

2020-01-08

Beijing

EPMA Urban Design Studio

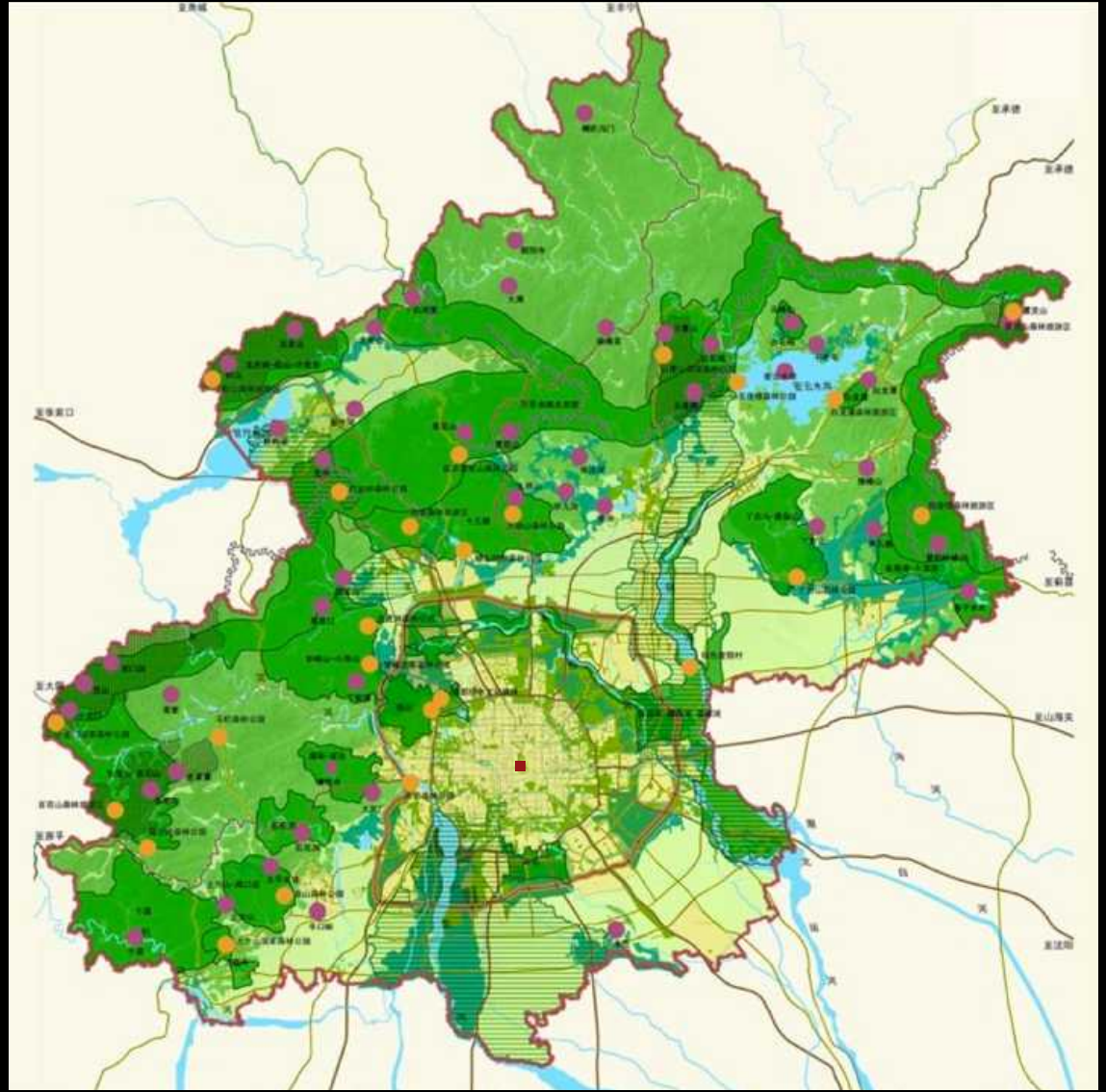
2013-2020



Beijing: a big city

area: 16 000 km2
(20x Berlin)
(20x Singapore)
(ca 70x Amsterdam)

population:
ca. 40 Milion

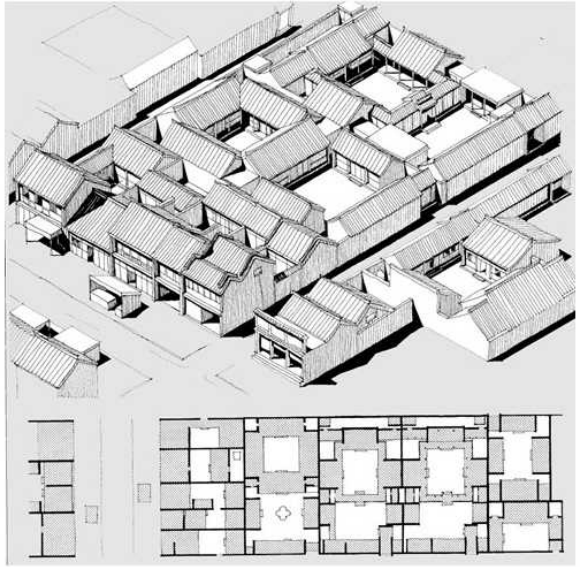


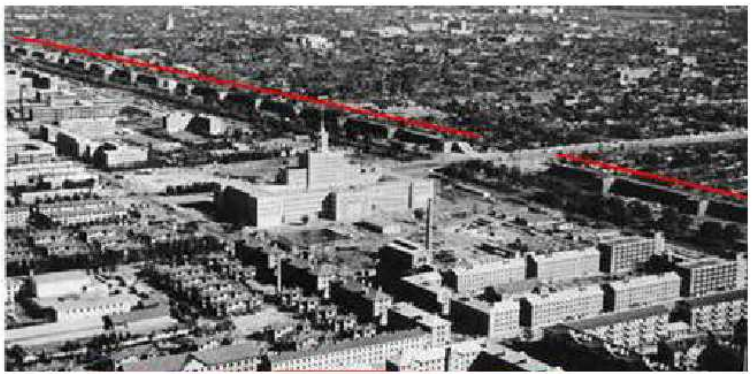
Beijing: 2015

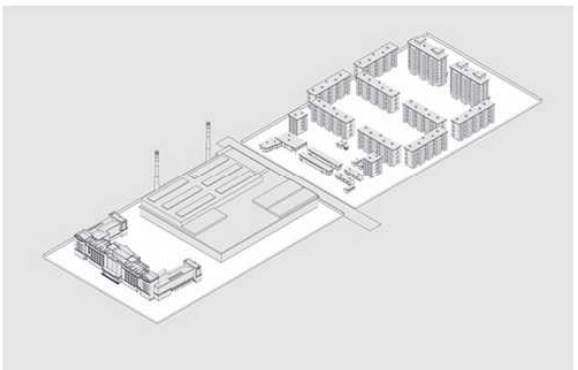
Beijing: terrain

Beijing ca 1900

Mao: Great Leap Forward (Industry & Food) 1958 - 1960

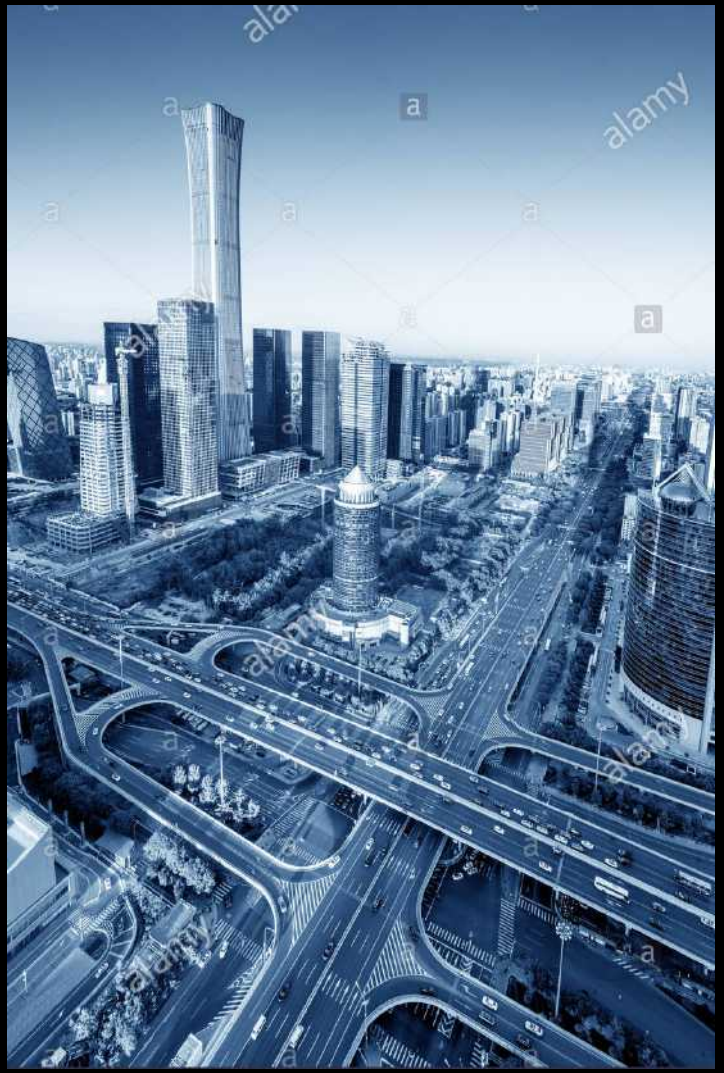






Mao: from ‘hutong’ to ‘danwei’

Opening up and reform: Modern China at Guomao CBD



Opening up and reform: Modern China at Guomao CBD

Los Angeles

Beijing

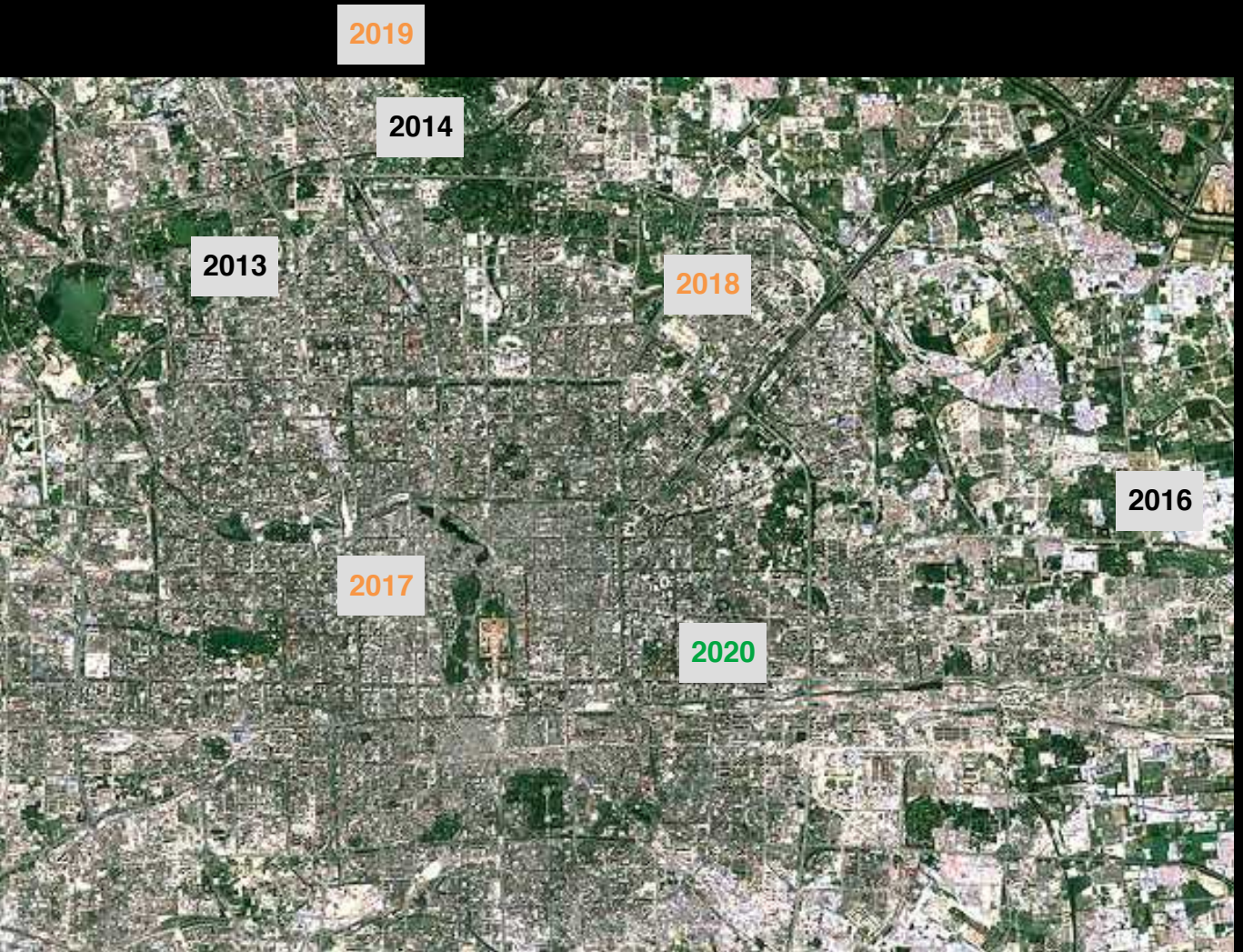
2008 - Olympics

2025 - Beijing CBD

2020 - Guomao Skyline

2010 - Guomao Skyline

2013 - Knowledge City
2014 - Water City
2015 - Healthy City
2016 - Edge City
2017 - Sharing History + NUS
2018 - Sharing Industry
2019 - Sharing Countryside
2020 - Sharing Guomao



2013 - Knowledge City
2014 - Water City
2015 - Healthy City
2016 - Edge City

2017 - Sharing History
2018 - Sharing Industry
2019 - Sharing Countryside
2020 - Sharing Guomao

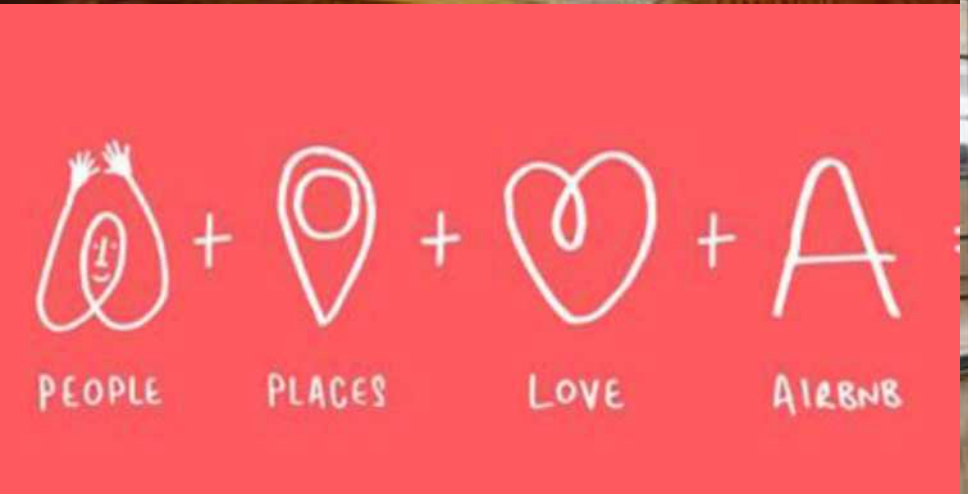
SHARING CITY 共享城市

Sharing Lifestyle and Urban Regeneration

共享生活与城市更新

airbnb
Belong Anywhere

UBER
EVERYONE'S PRIVATE DRIVER


+
+
+
A
PEOPLE
PLACES
LOVE
AIRBNB

CREATE
YOUR
LIFE'S
WORK
wework
2010

01 / Sharing City Seminar and Discussion

02 / Site Visits

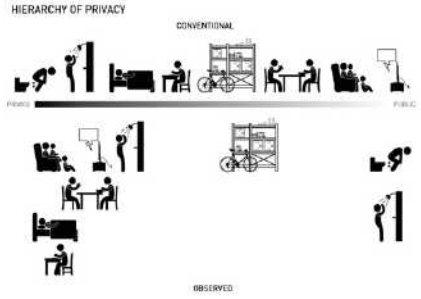
Open House Visits

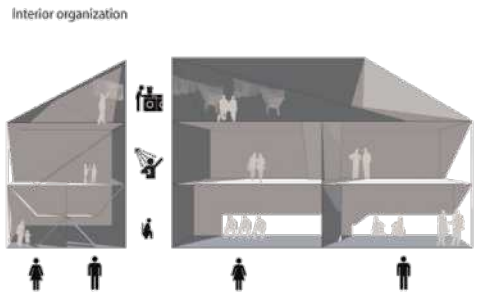
Understanding a Historical Site

Individual Grouping Site Study Exploration

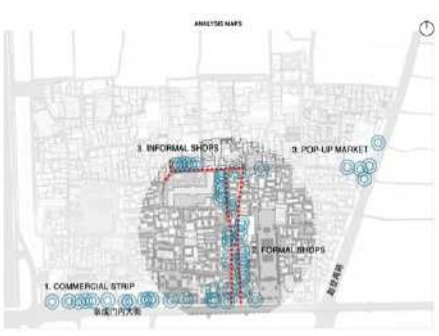
03 / Design Charrette Review

Sharing Workspace

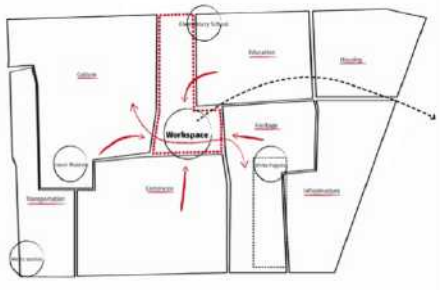


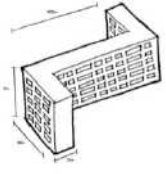


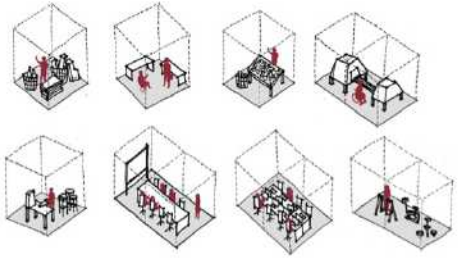
Sharing Commerce

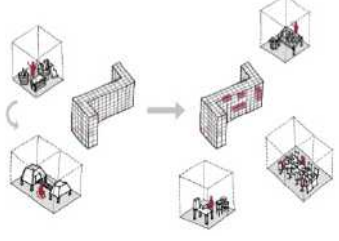


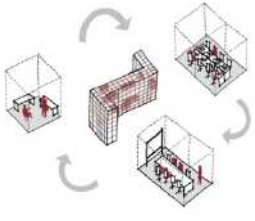
Sharing Housing





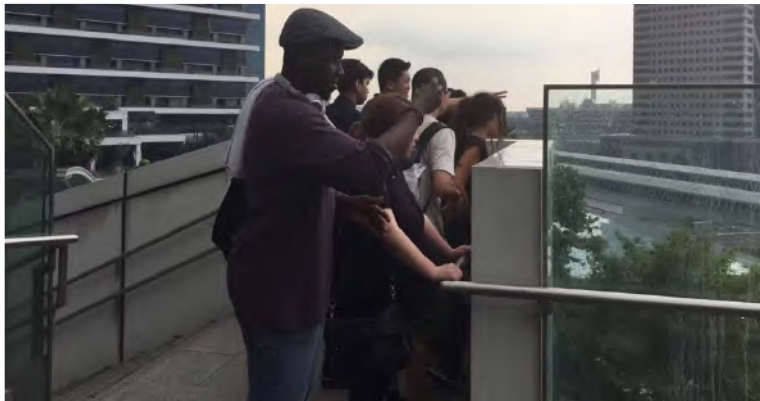






01 / Sharing Cities Seminar Lectures and Discussion

02 / Site Visits to Joo Chiat and Jurong East



03 / NUS Interim Crit Review , Presentations, Design Charrette

Case Studies Presentation Discussion

Multi-Cultural, Multi-National

Brainstorming Sessions with Tutors

Student Group Discussions

Interim Crit Review

Design Charrette Review

Design Charrette Consultation with Tutors

Inter-Faculty Exchange Opportunities

01 / Sharing Cities Seminar Guest Lectures and Discussion

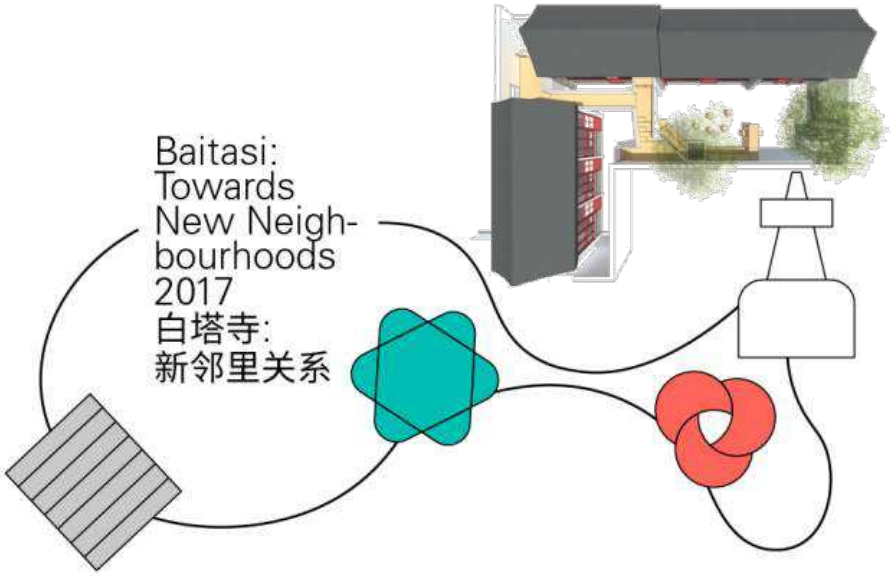
MAD Architects

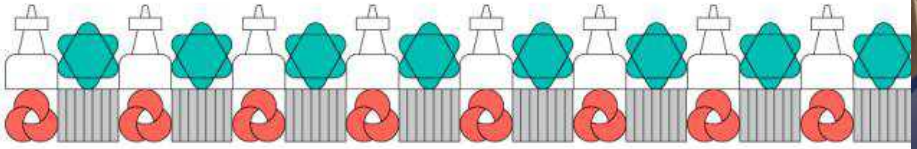
02 / Architecture Office Tours

People's Architecture Office

SEOUL INTERNATIONAL STUDIO 2017
DANKOOK HANYANG ERICA HONGIK YONSEI UNIVERSITY OF SEOUL NUS TSINGHUA UCLA UT AUSTIN FEDERAL UNIVERSITY OF RIO DE JANEIRO UNIVERSITY OF CAPE TOWN UNIVERSITY OF GENOA MIMAR SINAN THE BARTLETT THE ROYAL DANISH ACADEMY OF FINE ARTS
05.27 14:00-17:00
URA SIS DIALOGUE: Resilient Cities through Culture
05.28 10:00 - 19:30
URA SIS FINAL REVIEW
05.27-06.01 URA SIS EXHIBITION

白塔寺再生计划
BAITASIREMADE





Profound impact of new concepts of for-profit sharing of basic everyday commodities can be widely observed across the world. It changes the ways we commute (bike- and car sharing), shop (alibaba/ amazon) or work (co-working) and redefines our living (shared-housing, airbnb), and learning (e.g. open-online courses edX and MOOC) experiences. It redefines the need for us to own everything we want to use.

The "Sharing Cities" studio aims to provide solutions to emerging concept of sharing and responds to the idea of public space sharing and sustainable urban development from social, economic and humanitarian perspectives. The studio brief has been designed to discuss the idea of sharing in eight different themes: sharing housing, sharing workspace, sharing transportation, sharing education, sharing culture, sharing heritage, sharing commerce and sharing infrastructure. The National University of Singapore has selected two site; a site in the city center where the traditional Nyonya culture originates, Joochiat and a 'sub-urban' site where a railway station and residential life intersects: Jurong East.

For the work presented here, we used this starting point for an urban regeneration model, sharing the city. The design proposals are the outcome of a joint design research cooperation between National University of Singapore and Tsinghua University, regarding the topic of urban regeneration, with a specific focus on the influence of the sharing economy on urban development. The cooperation included an 8-week joint design research studio and three complementary workshops with seminars at the beginning, the middle and the end.

清华大学建筑 规划 景观设计教学丛书
SHARING CITIES 共享城市
黄鹤 [荷]和马町 张烨
张悦 陈德钦
清华大学出版社

共享城市

SHARING CITIES

共享城市

SHARING CITIES

We study sharing practices and we design shared spaces.

Sponsored by Ng Teng Fong Charitable Foundation (Hong Kong), **NUS-Tsinghua Design Research Initiative for Sharing Cities (NT-DRISC)** was jointly initiated by the Department of Architecture, National University of Singapore and the School of Architecture, Tsinghua University. The aim is to bring together scholars and students from the two top Asian architecture schools as well as experts and professionals having the same interests, exploring emerging space sharing practices and new dedicated typologies of shared spaces in the city.

With multi-disciplinary urban research expertise and excellence in design, we investigate on the spatial attributes of sharing practices and the economics, institutions, governance, and ethics of space sharing; develop insights on the conditions that the built environment of the city imposes on sharing practices and the transformation of urban spaces that sharing activities enable; and develop innovative design solutions that can encourage and promote meaningful sharing activities.

Initiated and presented by:

NUS | DOA ARCHITECTURE

清华大学建筑学院

Sponsored by:

Ng Teng Fong Charitable Foundation 黄廷方慈善基金

In a partnership with:

DPA DP ARCHITECTS

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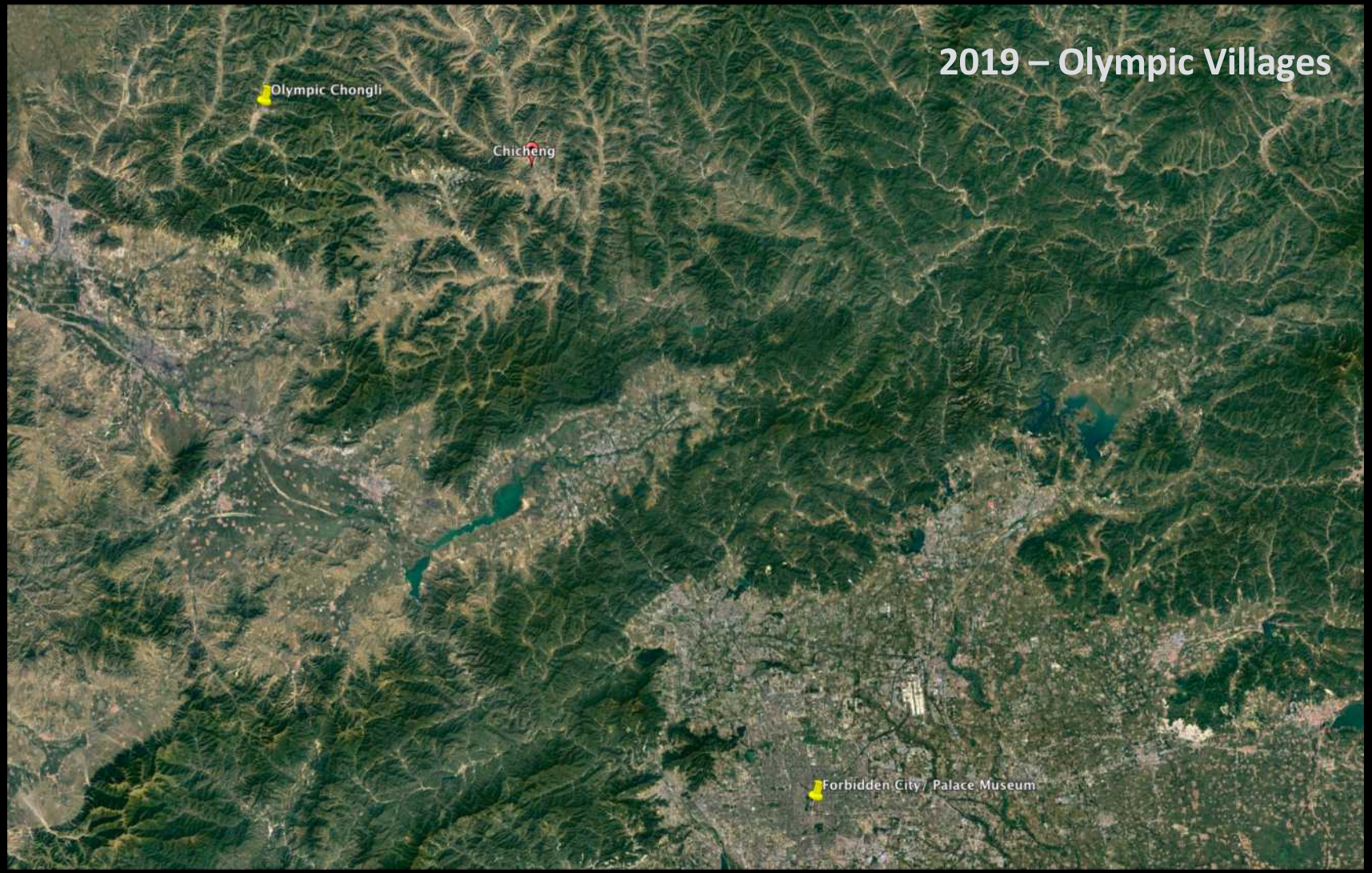
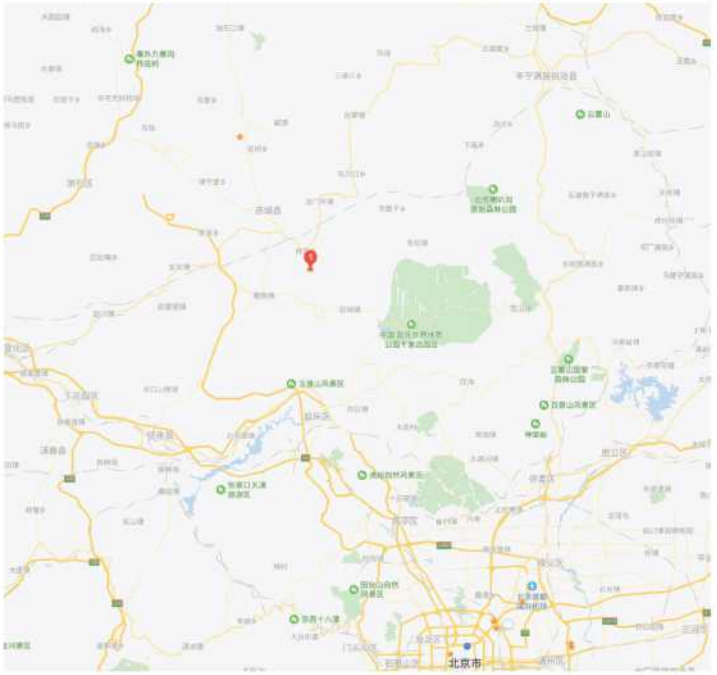

2019 – Olympic Villages
Olympic Chongli
Chicheng
Forbidden City / Palace Museum

样田乡-上马山村

8_样田乡上马山村



上马山村
cription for your map.
Legend
Zhan
Shangmashancun
Earth
S / Airbus
200 m

Mountain Village

Lorenzo, Jack, Aleksandra, Otmane, Qingqing

DESIGN STUDIO 3
Project Year:
2019

Location:
Wanshuiquan village

Students:
Lorenzo Marfisi, Jack Shi, Aleksandra Platova, Otmane Outifa, Qingqing Hu

Design Studio Tutors:
Yue Zhang, He Huang, Martijn de Geus

Key words:
river, gathering spaces

The idea is to transform this "exit way 2022 Olympics games village" to the Gateway Village. It can become the entrance of the region and of a bigger system.

TANG DINASTY WALL. As the first face of the village, the idea is to highlight the wall, it's history and materiality. The entrance is now a museum that will display the history of the village, a bus stop for the visitors and a gathering area for the villagers.

MAIN STREET. The street will represent the identity of the people living there and providing at the same time the new public function capable to welcoming people: restaurants, small shops, public spaces as well as services and facilities. For the village it will represent then the economical center.

GATEWAY HOUSE. The idea is to transform the fortress house to an indoor-welcoming place that will provide the basic facilities. The strategy is to use one plug-in that links street and courtyard, and one plug-in that connects users from the courtyard to the interior.

QUARRY FOREST. Two quarries have damaged the landscape at the back of the village. The idea is to recover that land and transfrom it in a productive forest. Using both quarries, the idea is to create a series of terraces that will stabilized the ground and at the same time will suit the site for grow plants.

These forest are also the beggining of a hiking route that will connect the village with the LOOKOUT VALLEY, the cave houses, the 1000 year old tree, the old village and hills that surround Duanmugou.

Strengths/Characteristics

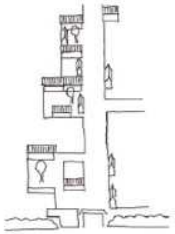
TANG DINASTY WALL

We purpose activate it by put museum beside the wall and created the relation of the museum with every side of it. for example, in front is the bus stop. At the back is small public gathering space and the side that next to the wall it's provides another perspective for the great wall.

MAIN STREET

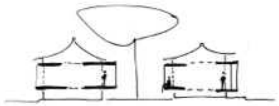
It represents the first image of the village beyond the ancient wall, becoming the new core of the village for the touristic vision brought by the Olympics games. The street will represent the identity of the people living there and providing at the same time the new public function capable to welcoming people: restaurants, small shops, public spaces as well as services and facilities. For the village it will represent then the economical center.

This can be possible opening some of the courtyards, using abandoned houses and secondary building to this new functions making all of them visible from the street. This new elements are activating the connection with the space from the outside to the inside.



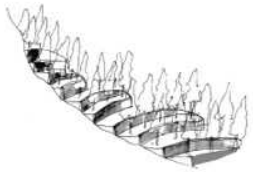
GATEWAY HOUSE

The idea of the Gateway house is to transform the fortress house to an indoor-welcoming place that will provide the basic facilities. The strategy is to use one plug-in that links street and courtyard, and one plug-in that connects users from the courtyard to the interior. While at the same time both plug-ins are a linkage, they are also the facilities containers. The plug-in is design as a module which would hold facilities and gathering activities.



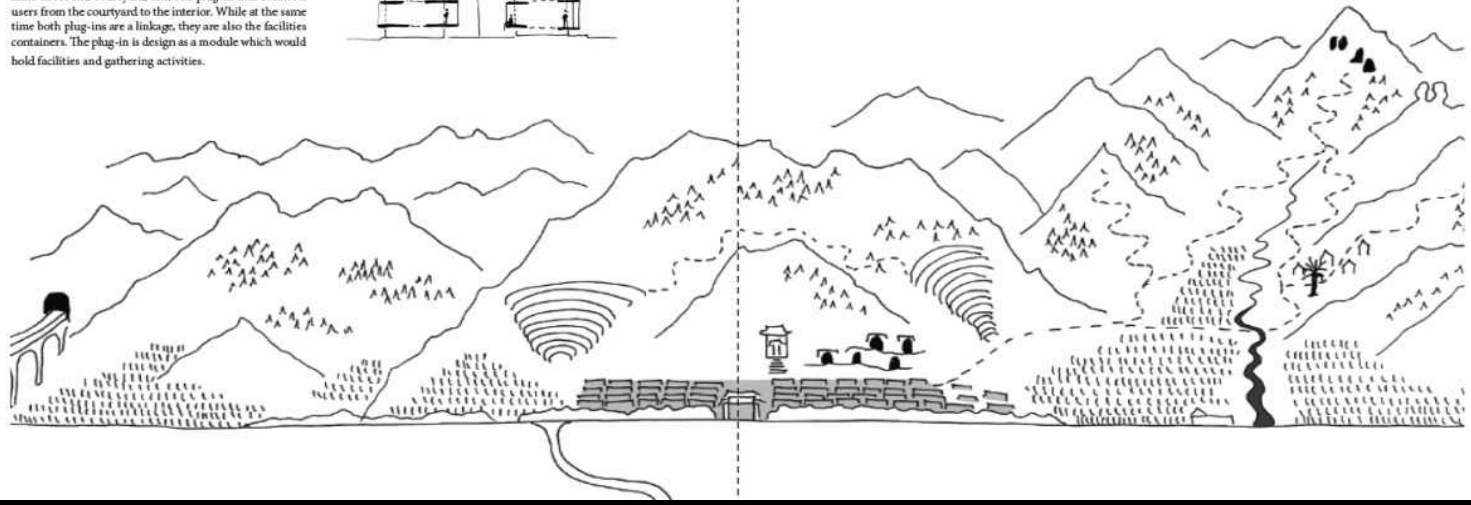
QUARRY FOREST

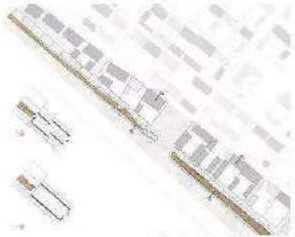
A forest park is designed within the two quarries. A single wall will be built, meandering through the quarries and reaching the top. It makes terraces in order to stabilize the ground and keep the water. An altar platform is located at the top, to have a Taiji session or to observe the stars. The whole park is connected by a pedestrian and planted path joining Duanmogou's main street.



LOOKOUT VALLEY

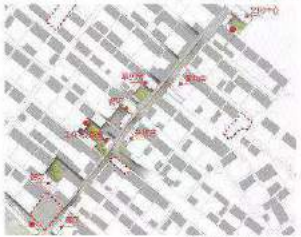
A forest park is designed within the two quarries. A single wall will be built, meandering through the quarries and reaching the top. It makes terraces in order to stabilize the ground and keep the water. An altar platform is located at the top, to have a Taiji session or to observe the stars. The whole park is connected by a pedestrian and planted path joining Duanmogou's main street.





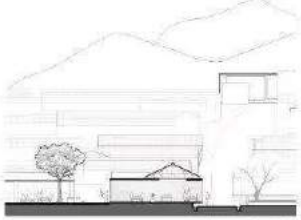
1. Tang Dynasty wall - floor plans

1. Museum interior view



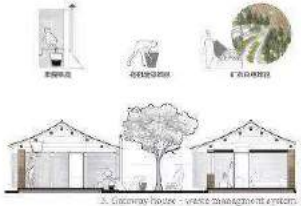
2. Main street - floor plan

Wall - Main street - proto-type house



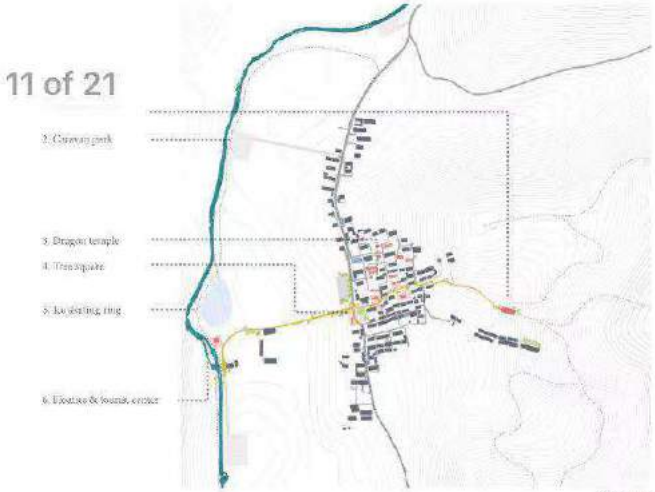
2. Main street - floor plan

2. Main street life

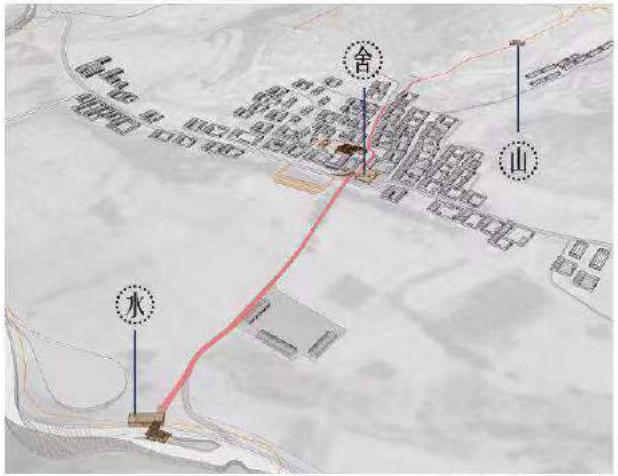


3. Gateway Home - waste management system

3. Life inside the house



Master plan



River - Home - Mountain / Master plan

SHARING CITY

Smart, future, shared lifestyle in the modern city : Guomao

Location of Beijing CBD
4th Ring Road
3rd Ring Road
2nd Ring Road
CBD
3.99km²
Chang'an Street
Central Axis
2D

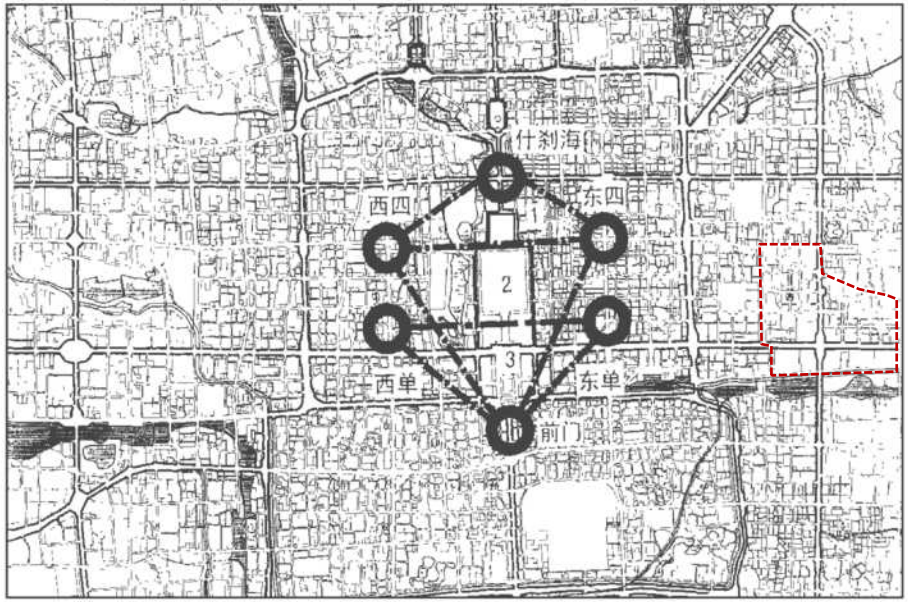


图 1　北京市传统商业中心结构历史演变图

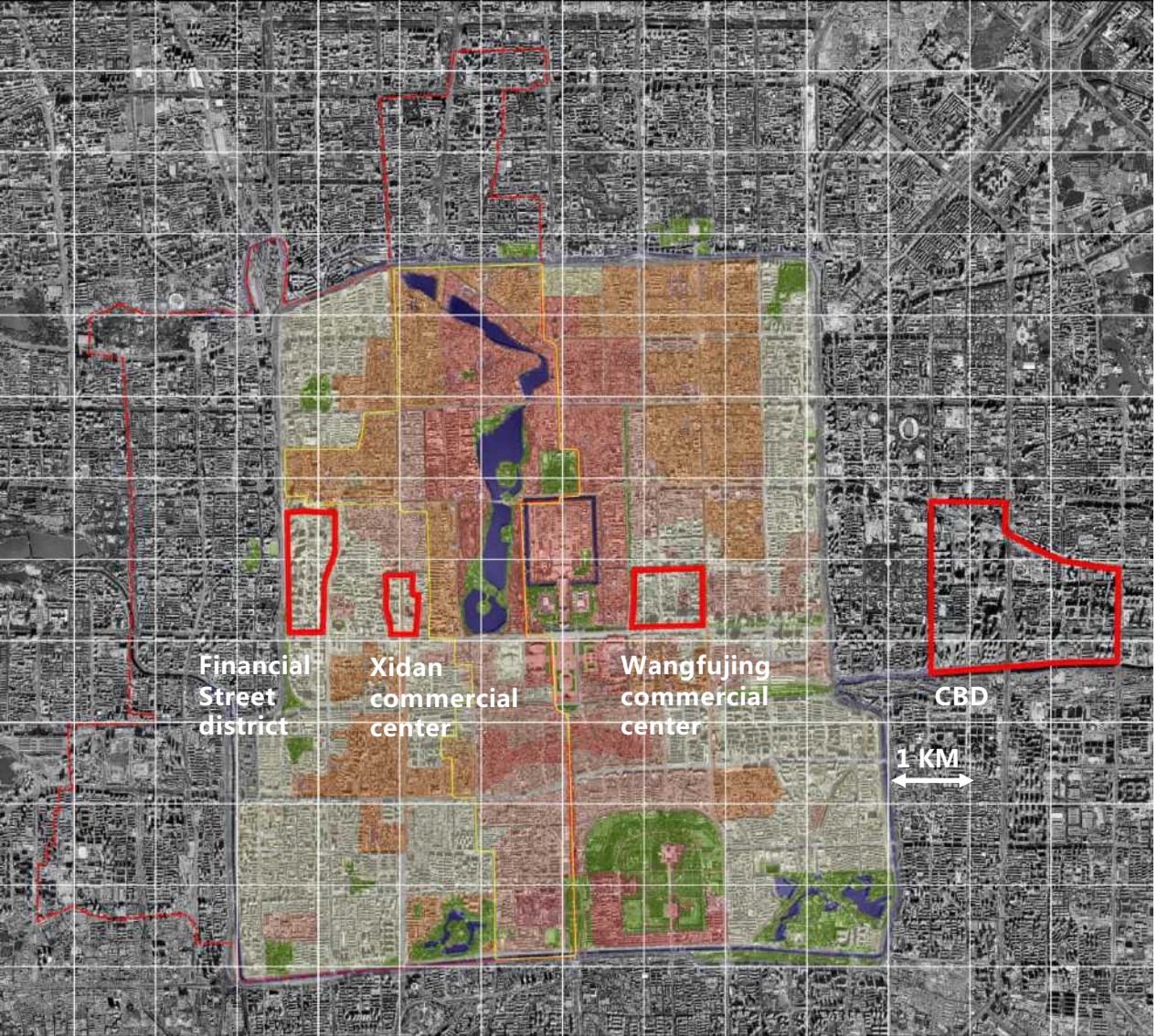
1. 元代正三角形结构：什刹海——东四——西四　2. 明代倒三角形结构：东四——西四——前门　3. 清代倒三角形结构：东单——西单——前门

From：ZHU Weihong ,City Planning Review, 1999, Vol.23(8), pp.12-17

Ancient commercial centers in Beijing City

Beijing CBD before development. (1967)

Image from：
https://en.wikipedia.org/wiki/Beijing_central_business_district#/media/File:Beijing_CBD_before_development_-_satellite_image_(1967-09-20).jpg



Since 2000, CBD and Financial Street District were planned as two core financial centers for Beijing

Financial Street District plan

CBD plan

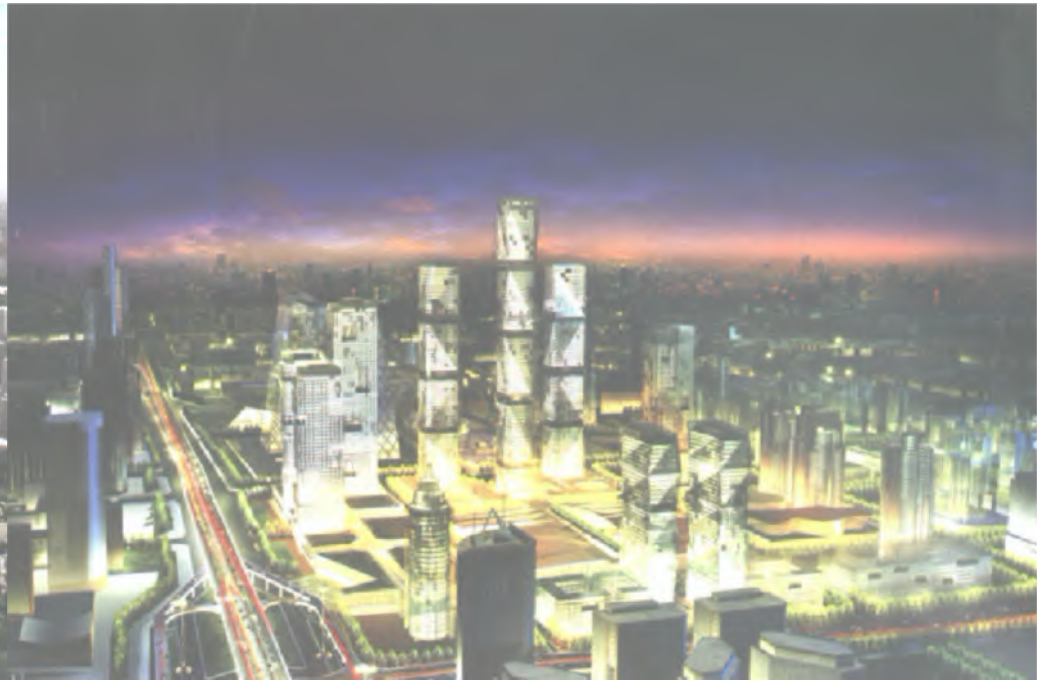
From Wang Yin，Beijing Urban Planning and Design Institute

Beijing City global design competition in 2002 and 2009

In 2002, 11 design teams participated in the global competition for Beijing CBD. Pei Cobb Freed & Partners, SOM, China Architecture Design & Research Group, Tsinghua University Architecture Design Institute won the second prize with the vacancy of first prize.

In 2009，SOM won the first prize in the global design competition for CBD east expansion.

Beijing City global design competition in 2002



Beijing CDB East Expansion Competition, 2009

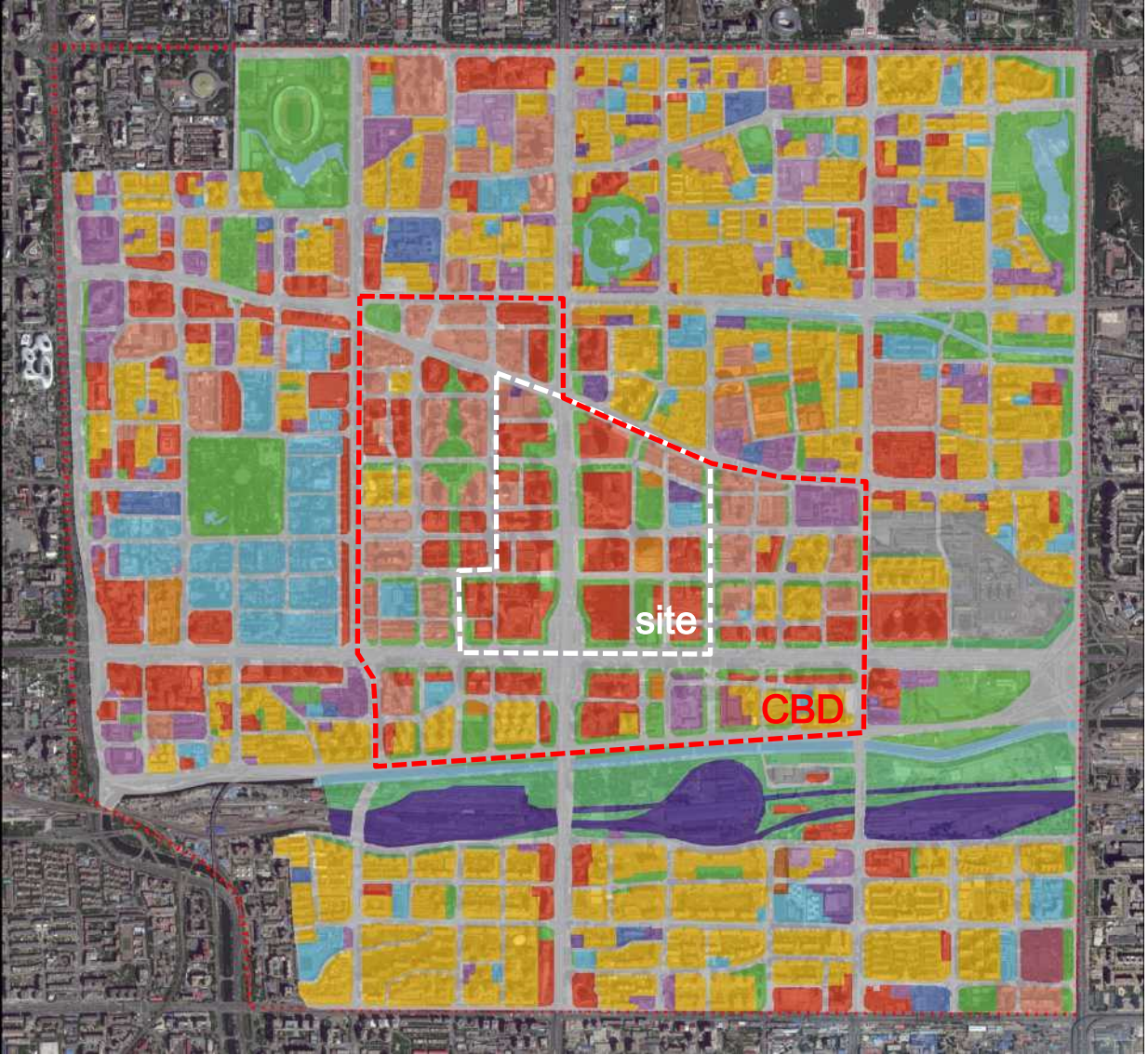
Beijing CDB East Expansion, SOM

https://www.som.com/projects/beijing_cbd_east_expansion

Beijing CDB East Expansion, SOM

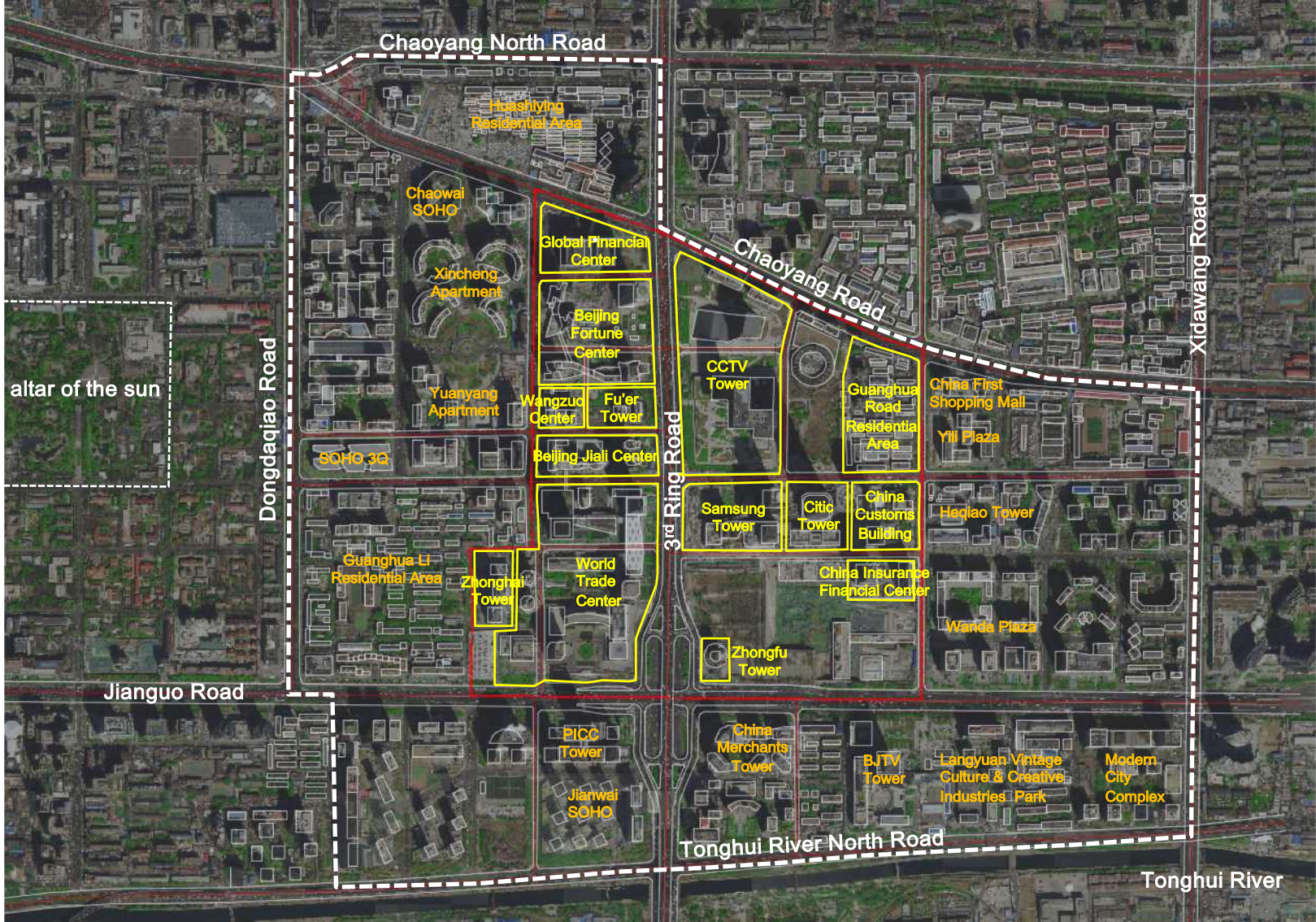
https://www.som.com/projects/beijing_cbd_east_expansion

Land Use Plan



Legend

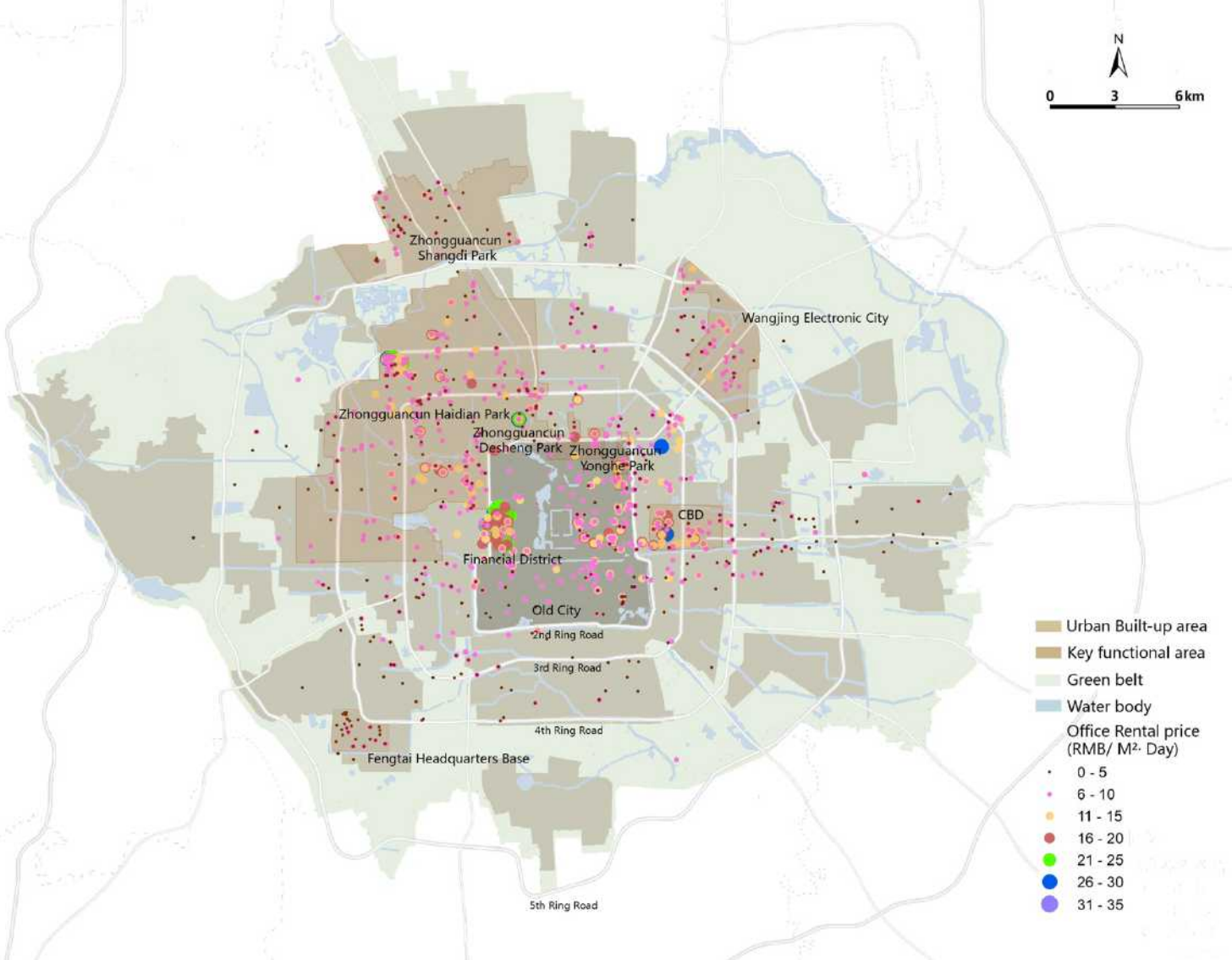
- Residential
- Commercial and Financial
- Parking
- Education and Research
- Culture and Entertainment
- Public Green space
- Foreign affair Administration
- Manufactory Industry
- Mixed use
- Municipal Utility
- Administration
- Fundamental Education
- Water Body
- Road
- Railway


Chaoyang North Road
Huashiying Residential Area
Chaowai SOHO
Xincheng Apartment
Global Financial Center
Beijing Fortune Center
Yuanyang Apartment
Wangzuo Center
Fu'er Tower
Beijing Jiali Center
SOHO 3Q
altar of the sun
Dongdaqiao Road
Chaoyang Road
CCTV Tower
Guanghua Road Residential Area
China First Shopping Mall
Yili Plaza
Xidawang Road
3rd Ring Road
Samsung Tower
Citic Tower
China Customs Building
Heqiao Tower
Guanghua Li Residential Area
Zhonghai Tower
World Trade Center
China Insurance Financial Center
Wanda Plaza
Zhongfu Tower
Jianguo Road
PICC Tower
China Merchants Tower
BJTV Tower
Langyuan Vintage Culture & Creative Industries Park
Modern City Complex
Jianwai SOHO
Tonghui River North Road
Tonghui River

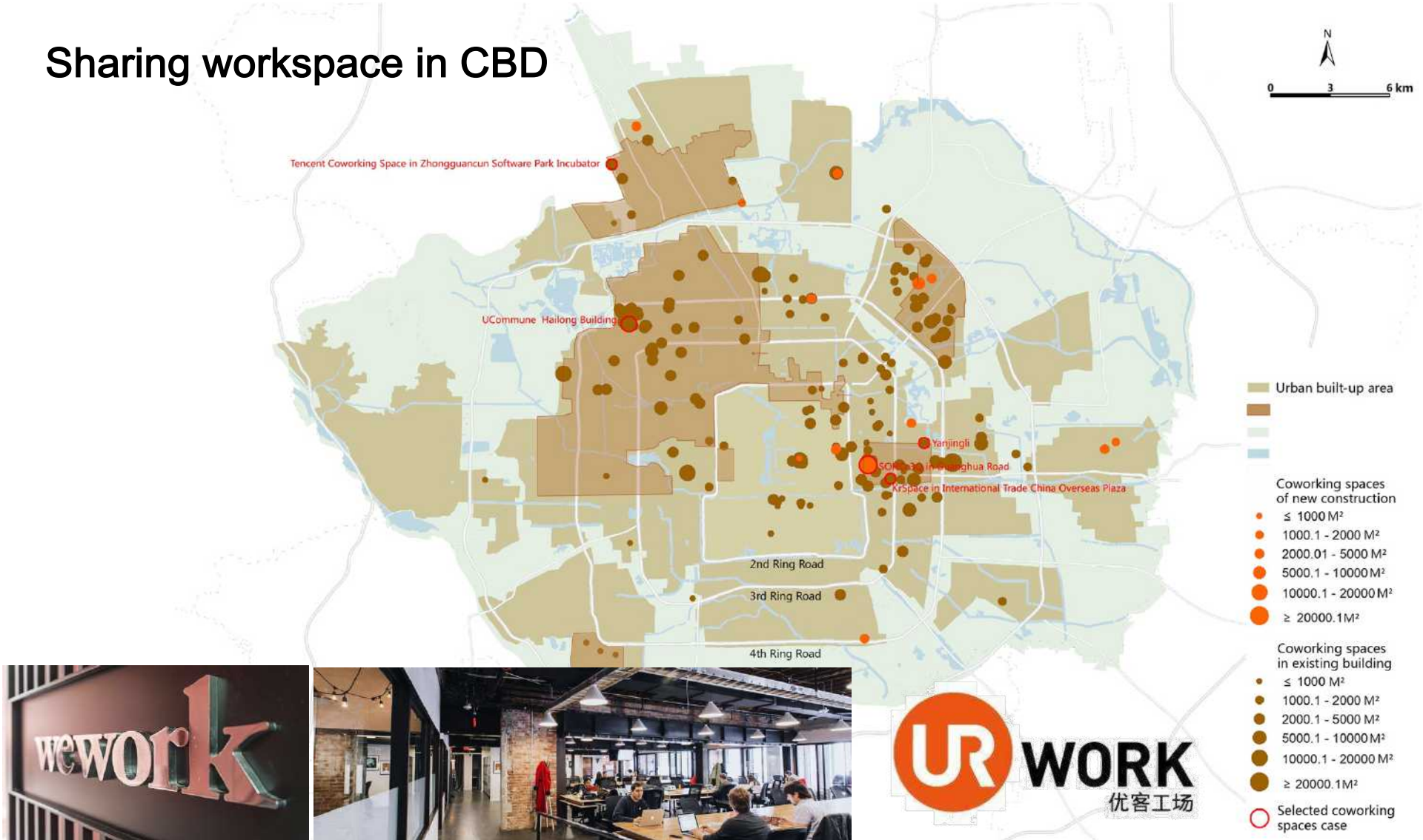
CBD 3.99km²

https://baijiahao.baidu.com/s?id=1612810074463455544&wfr=spider&for=pc

CBD Empty office in economy decline



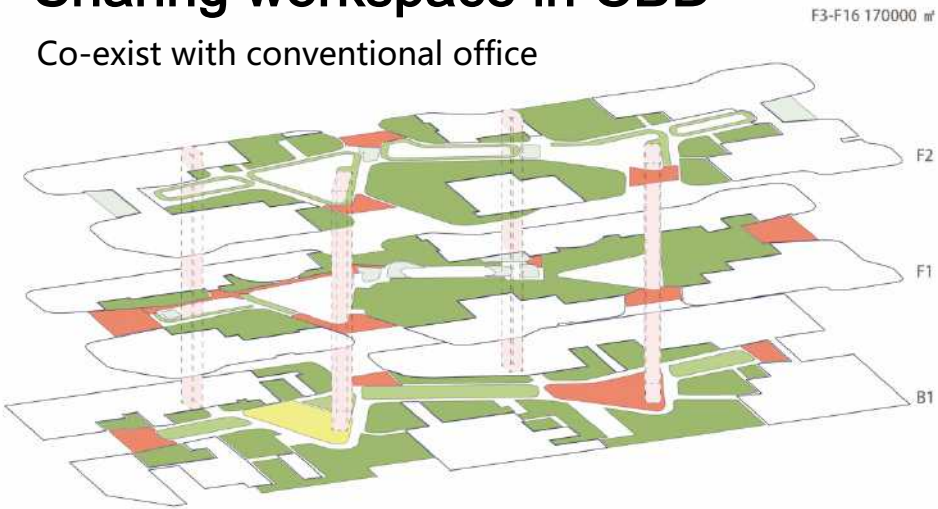
Sharing workspace in CBD



UR WORK 优客工场

Sharing workspace in CBD

Co-exist with conventional office



Shared Lounge & AD & Services	3200 ㎡
Shared Hall	500 ㎡
Shared Meeting	1600 ㎡
Individual - Working Space	2000 ㎡
Shared desk - Working Space	12100 ㎡
Vertical transport Circulation Space	14000 ㎡
Co-working Area	33400 ㎡
Other Space	20000 ㎡
Total Area	223400 ㎡
Co-working area ratio	0.15

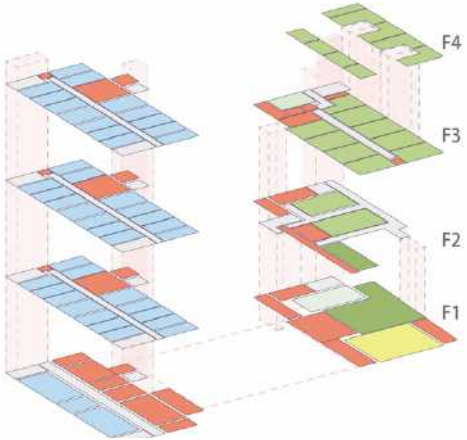
SOHO 3Q 光华路

SOHO 3Q in Guanghua Road

* SOHO 3Q由商场改造而成，回面积和成本控制，部分走廊被设计为办公区域，交通空间和办公空间界限较为模糊，故不做明确色块示意

Sharing workspace in CBD

Co-exist with youth apartment



F1

F2

F3

F4

Shared Lounge & AD & Services	700 ㎡
Shared Hall	120 ㎡
Shared Meeting	80 ㎡
Individual - Working Space	580 ㎡
Shared desk - Working Space	180 ㎡
Living Space	1020 ㎡
Vertical transport Circulation Space	1581 ㎡
Courtyard	
Co-working Area	4261 ㎡
Total Area	4261 ㎡
Co-working area ratio	1

燕京里
Yanjingli

SHARING CITY

Smart, future, shared lifestyle in the modern city : Guomao

EPMA Studio introduction + homework

Topic1 : living
Topic2 : working
Topic3 : mobility / transportation
Topic4 : biodiversity/ green infrastructure
Topic5 : commerce / leisure/ public and community service
Site
1km²
Phase1 : strategy research （cover the whole site）;
Phase2 : detailed design （on selected area）

The following is required for each group:

1.Case study: a globe case of sharing city life with urban regeneration or smart city design case, and a CBD case in your hometown or country;

2.General proposal of the whole site；

3.Detailed solution of the specific site.

Sharing cities cases:

sharing living :

- -Upgrading San Rafael-Unido (1st Global Holcim Awards Gold) by Silvia Soonets, Isabel Cecilia Pocaterra, Maria Ines Pocaterra/Proyectos Arqui 5, Urban Integration Project, Caracas, Venezuela
- -Kozaza and Lobo, Korea
- -The Co-housing scheme of Copenhagen
- -Xiaomi YOU+ youth community in Beijing Suzhouqiao near North West Third Ring ，China

sharing working :

- -Wework in London South End，UK
- -The Hive in Singapore, Hong Kong, Bangkok
- -KoHub in Koh Lanta, Thailand
- -Yanjingli in Beijing Chaoyang District, China

sharing transportation :

- -Metro cable, Medellin, Columbia
- -Shared cycling scheme over a few decades in Copenhagen
- -Sweetch (sharing parking) in San Francisco, USA

sharing infrastructure :

- -Urban Flood Protection Infrastructure (4th Global Holcim Awards Bronze) by BIG，New York City, USA
- -Urban Remediation and Civic Infrastructure Hub (3rd Global Holcim Awards Silver) by Alfredo Brillembourg, Hubert Klumpner/Urban Think Tank, São Paulo, Brazil
- -Marina Barrage, Singapore

Sharing commerce :

- -Parkview Green, Beijing, China
- -Sino-Ocean Taikoo Li Chengdu, China

Sharing leisure :

- - Millennium Park in Chicago, US
- - Vessel in New York, US by Thomas Heatherwick
- -1000 trees，Shanghai, China by Thomas Heatherwick

sharing service :

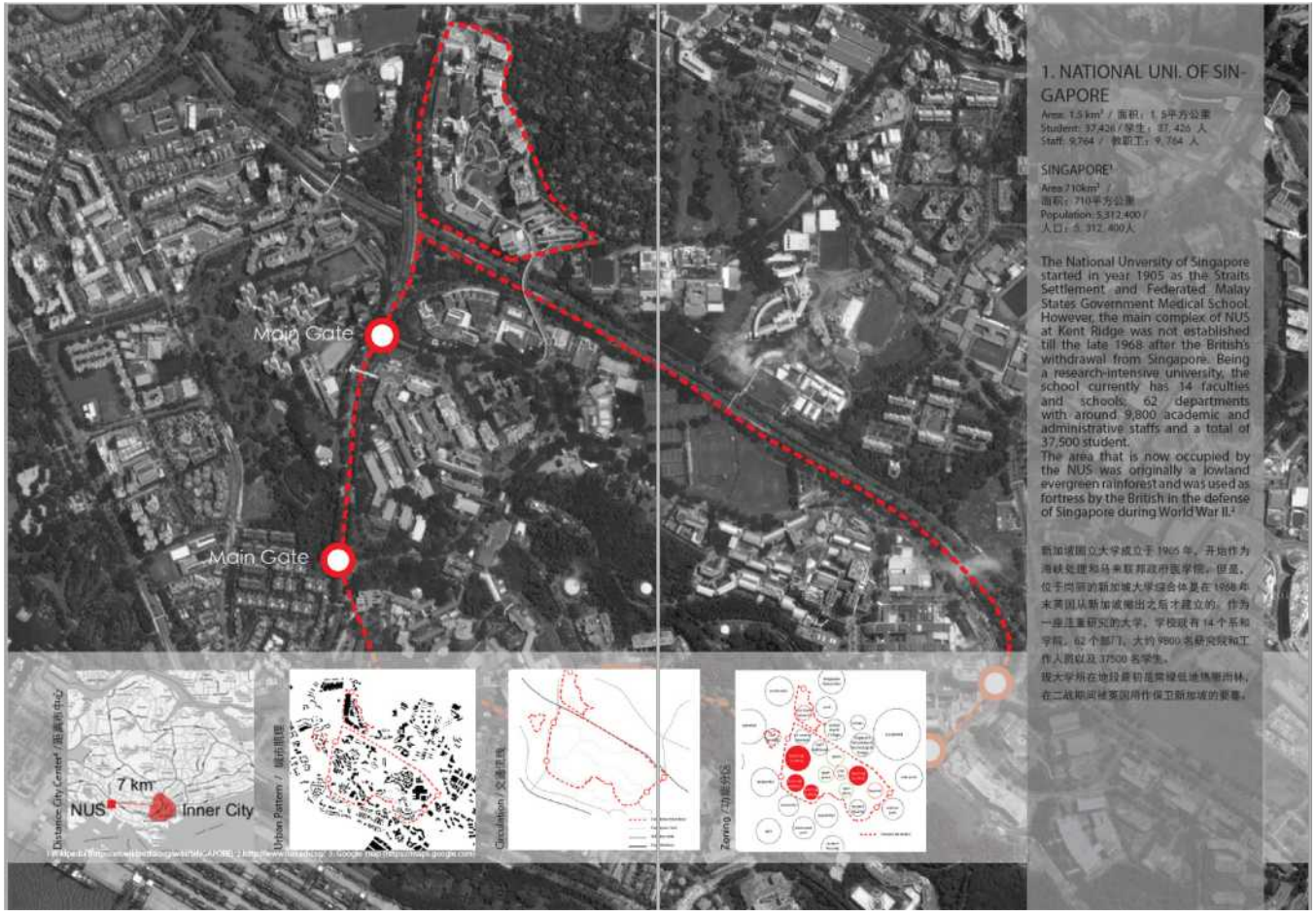
- - Micro-Yuan'er（2016 Aga Khan Award for Architecture）by ZHANG Ke，Beijing, China
- - Madinat al Zahra Museum（2010 Aga Khan Award for Architecture）by Sobejano Architects S.L.P, Fuensanta Nieto & Enrique Sobejano, Cordoba, Spain
- -Gaoligong Handcraft Paper Making Museum by HUA Li/ TAO Trace Architecture office, Yunan Province, China
- -Friendship Centre（2016 Aga Khan Award for Architecture）by Kashef Mahboob Chowdhury/Urbana, Gaibandha, Bangladesh

Smart cities cases:

1. Woven city, designed by BIG
2. Masdar city (https://masdarcity.ae)
3. New Songdo City, designed by KPF (https://www.kpf.com/projects/new-songdo-city)
4. Xiong'an New Area (http://english.xiongan.gov.cn)

5. Smarter London Together (https://www.london.gov.uk/what-we-do/business-and-economy/supporting-londons-sectors/smart-london/smarter-london-together)
6. Sidewalk Toronto (https://www.sidewalktoronto.ca)
7. Smart Seoul (http://digital.seoul.go.kr/eng/smart-seoul/strategy)
8. Kashiwa-no-ha Smart City (https://kashiwanoha-smartcity.com/en/)
9. Amsterdam Smart City (https://amsterdamsmartcity.com)
10. Smart Nation Singapore (https://www.smartnation.sg)
11. Smart City Wien (https://smartcity.wien.gv.at/site/en/smart-traffic-lights/)
12. Smart Cities New York (https://smartcitiesny.com)
13. SmartPORT "DIGITAL" : Port of Hamburg (https://www.hafen-hamburg.de/de/presse/media/video/smartport-digital---37960)

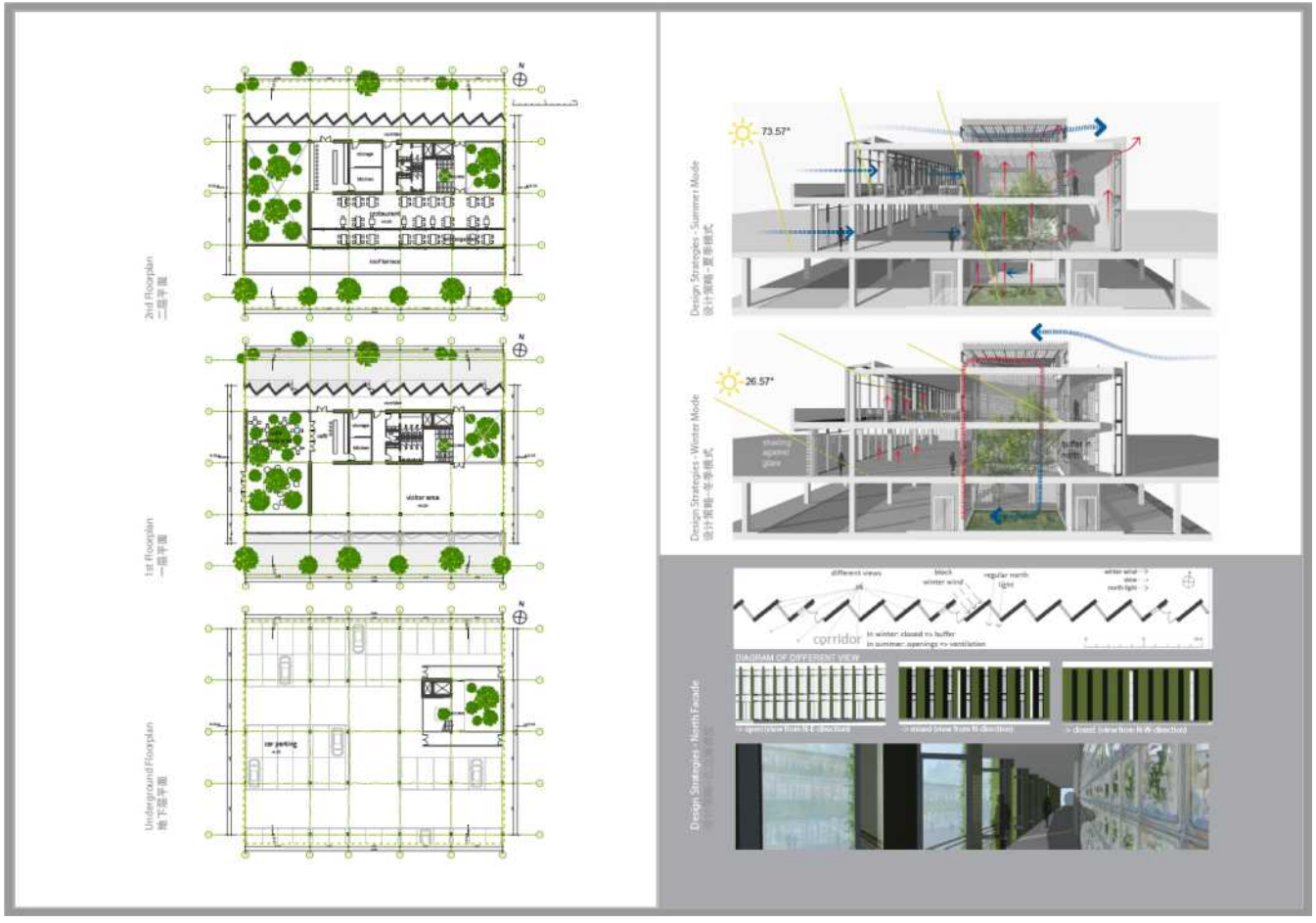
Case study: 1. general information (information of city and population, brief introduction of the case, image of location, urban pattern, circulation, zoning, page 1)



Template of Indesign file （fixed layout）

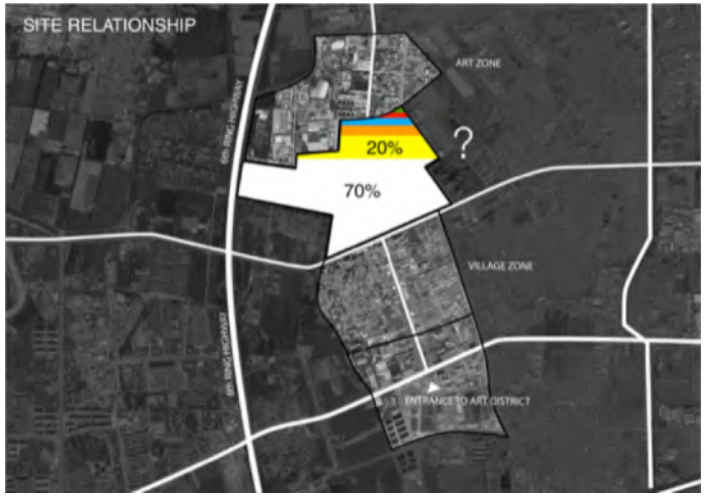
Case study: 2. detailed information (image, photo, diagram, text, etc.. page 2)

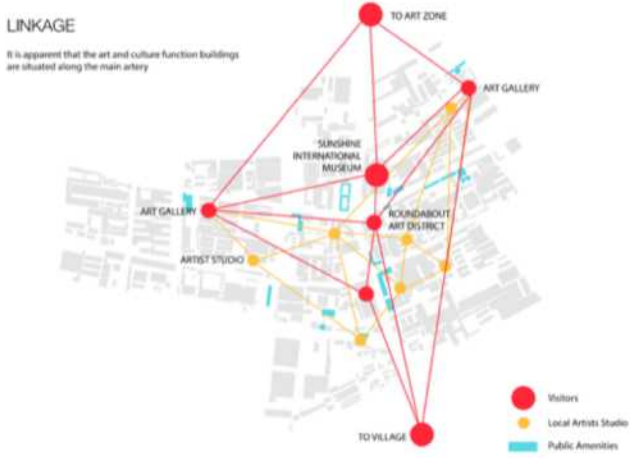
3. Brief study of your case（600-1000 words）



Template of Indesign file （free layout）

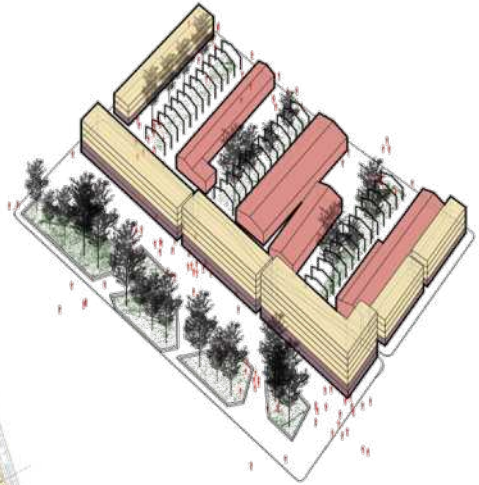
General proposal : system analysis and strategies for the whole site

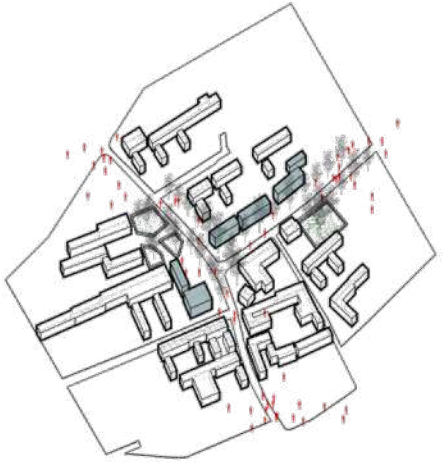


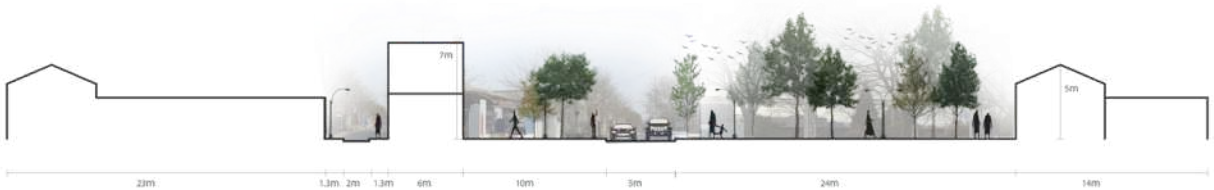


Example： Edge City，2016

Detailed Design: urban design of the specific site of the topic







Example： Edge City，2016