



Making a real city for everyone:
spatial transformation towards inclusiveness and vitality
— Dalang as study case



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30 June 2016
Delft,
The Netherlands

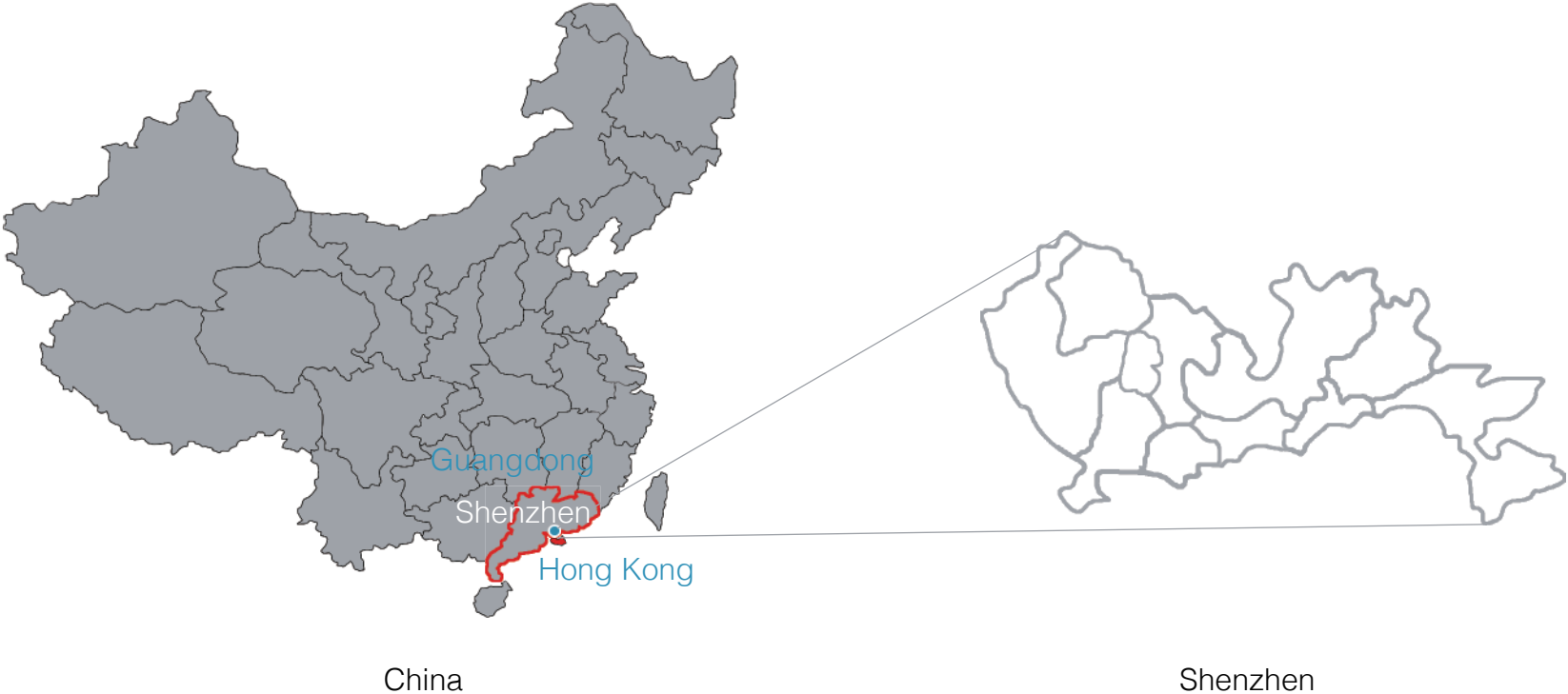


First mentor: Lei Qu
Second mentor: Birgit Hausleitner

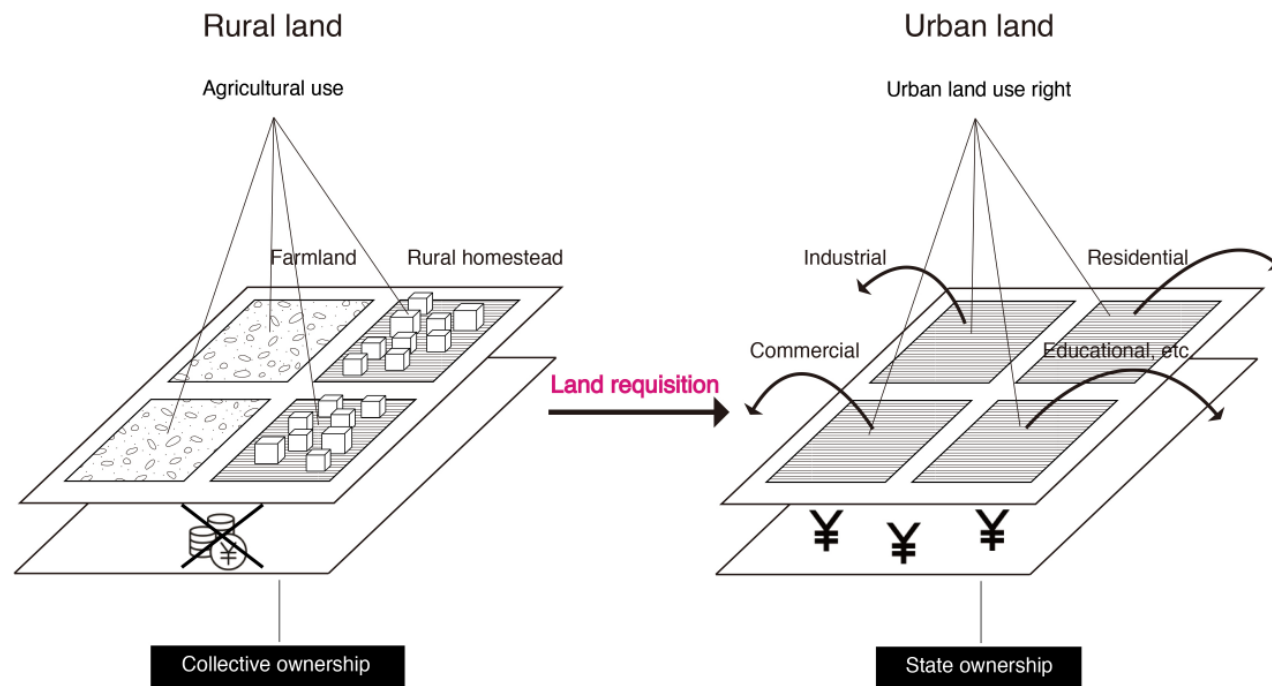
240,000,000 rural-urban migrants, **60%** are young migrants ≤ 30 years old

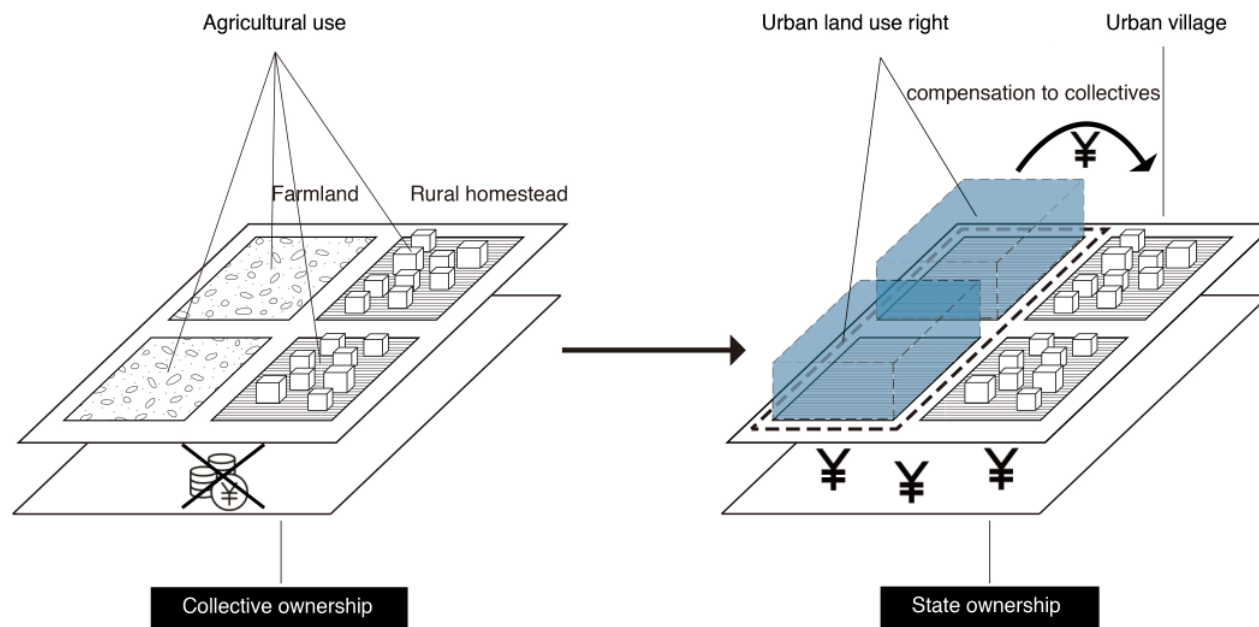


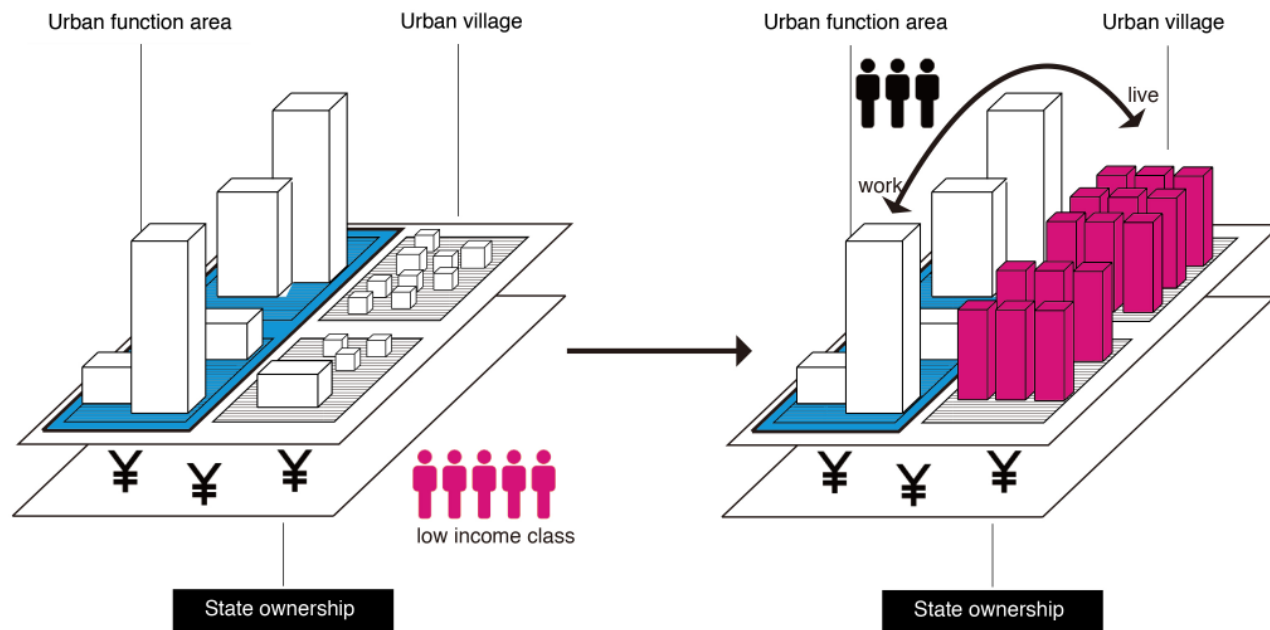
Shenzhen: a showcase of China's development











China in a transition period



What is China's 'new normal'?



Robert Peston
Economics editor

🕒 24 September 2015 | **Business** | 🗨️

WORLD | ASIA

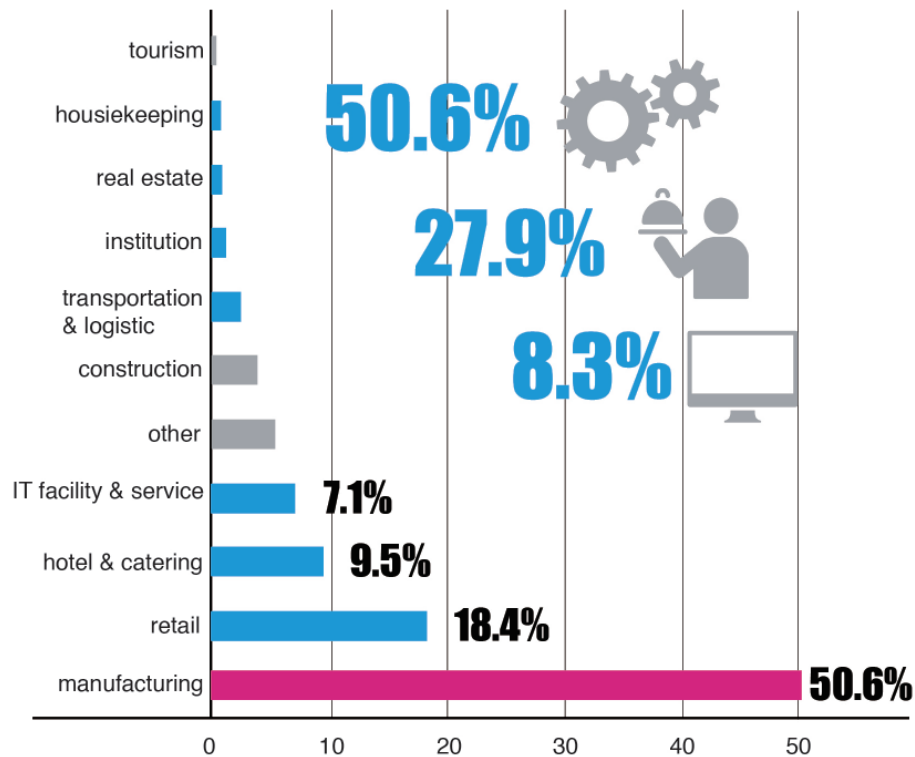
The World Struggles to Adjust to China's 'New Normal'

Transition from smokestack industries to services and consumers confounds leadership, rattles markets

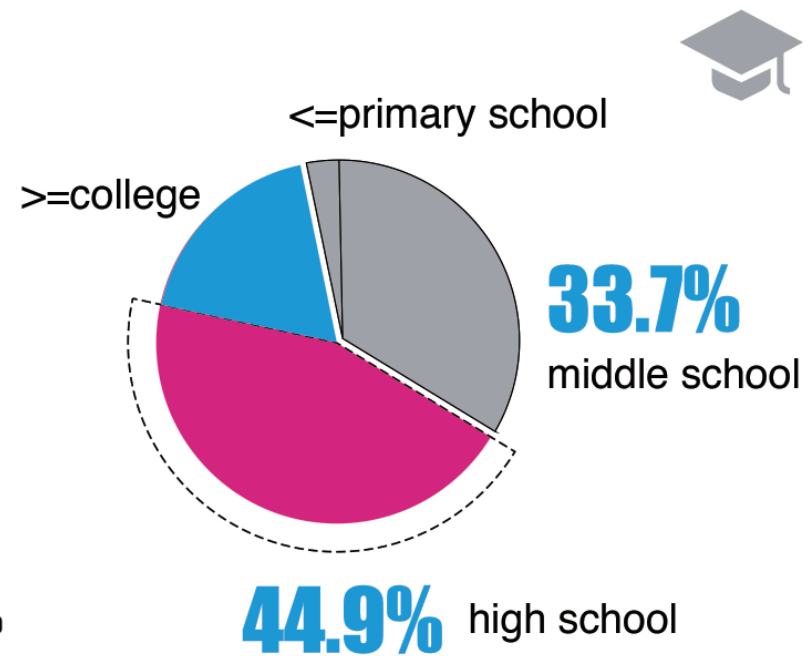
"New Normal": better quality economic growth (7%)

Vulnerability of young migrants facing industrial transition

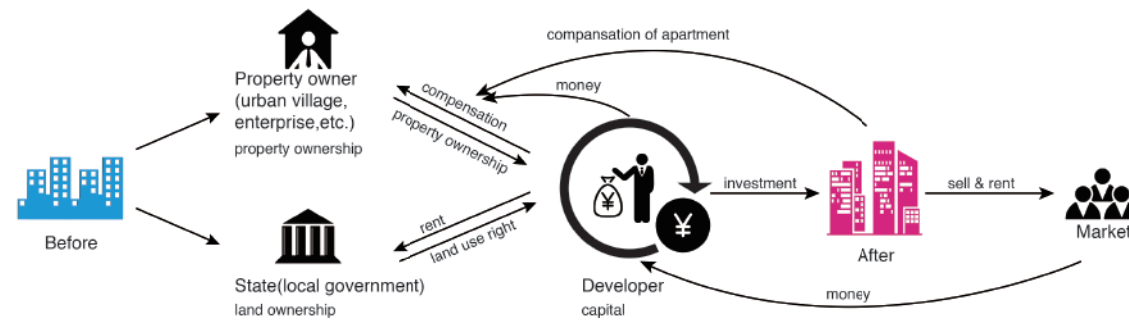
Employment structure



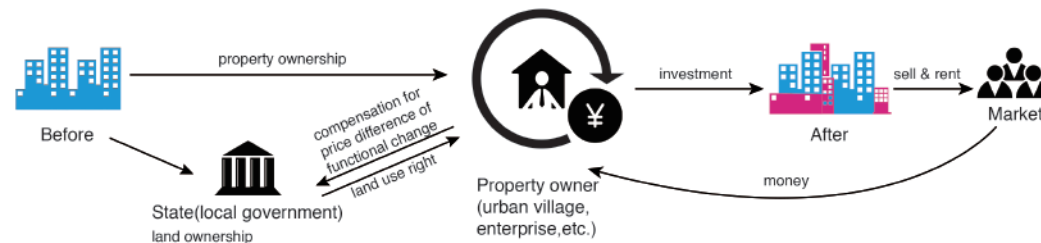
Education level



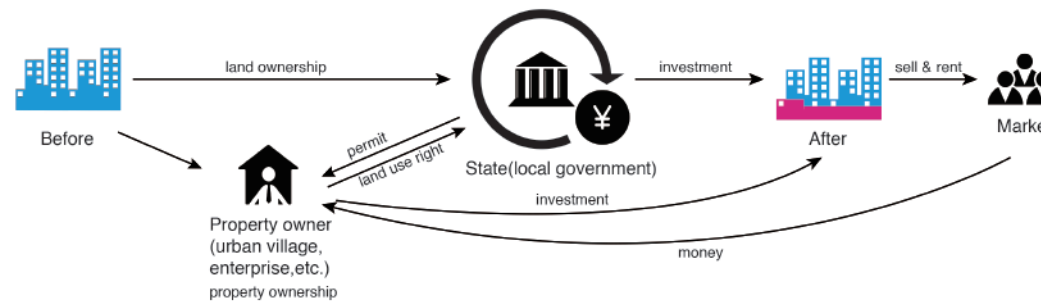
"Urban Renewal Unit Plan" in Shenzhen



Demolition-reconstruction

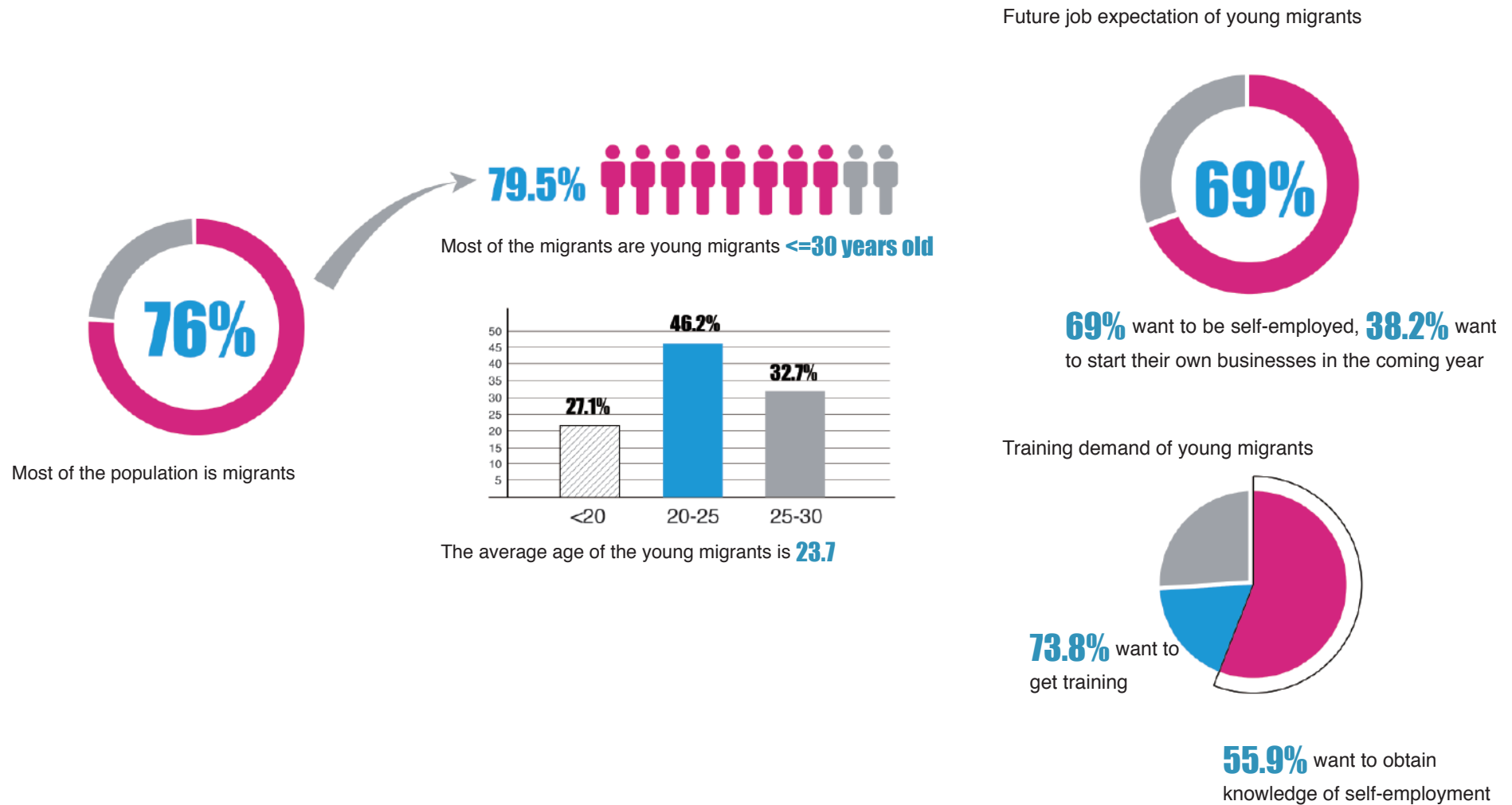


Partly reconstruction with functional change



Comprehensive improvement/ urban regeneration

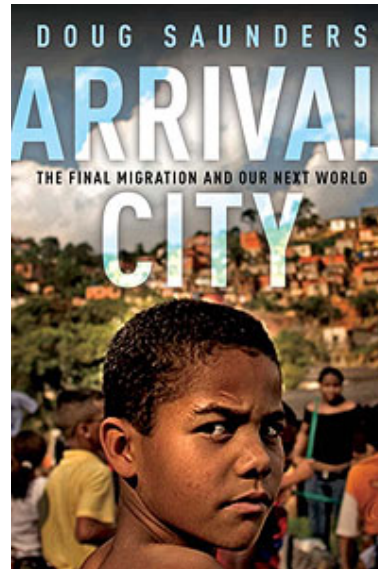
Young migrants are the majority of Shenzhen's population & their future employment expectation



How to provide more work opportunities for
young migrants?

How does it relate to space, urban planning and
design?

City of inclusiveness



"Urban village is the arrival city where the rural-urban migrants can set their foothold."

"Urban village is a place of transition, and a well-functioning arrival city can provide more opportunities for upward mobility."

— Saunders

How does the inclusiveness of young migrants
relate to space?

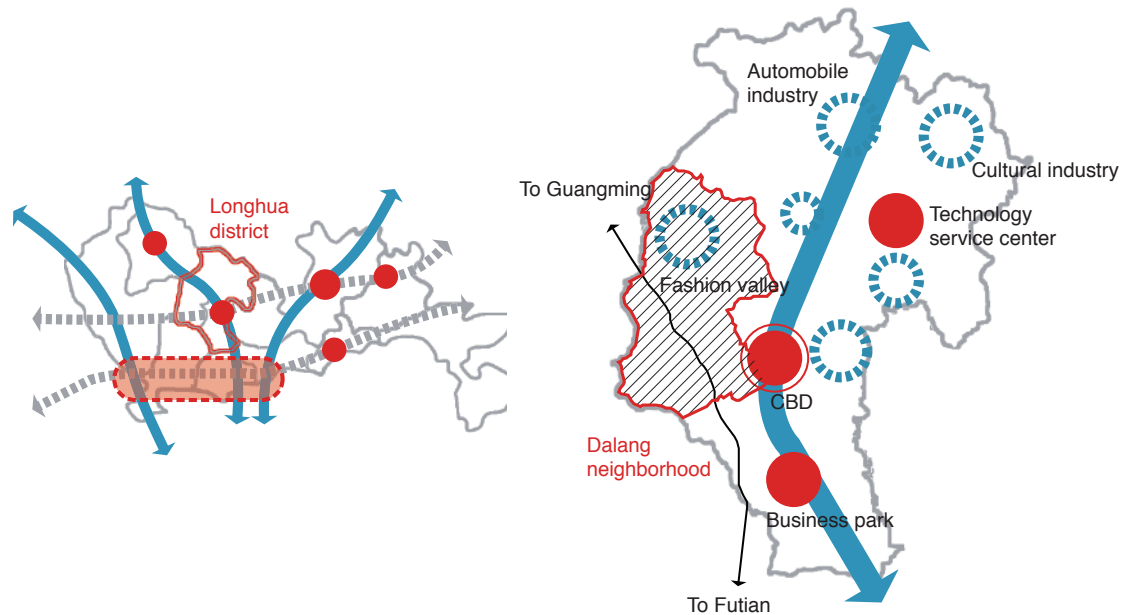
Affordable work-related space

- Target group in terms of "affordable":
migrants, fresh graduates and other career starters
- Range of work-related space
 1. Workplace
 2. Space related to work services (low-cost training, legal service, etc.)

Research question

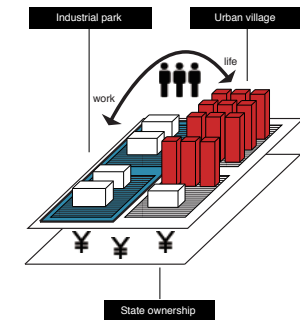
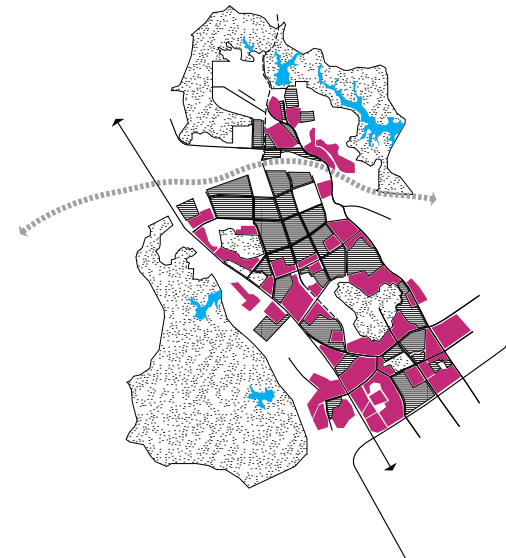
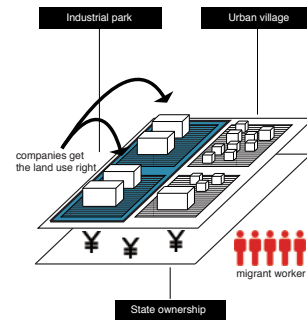
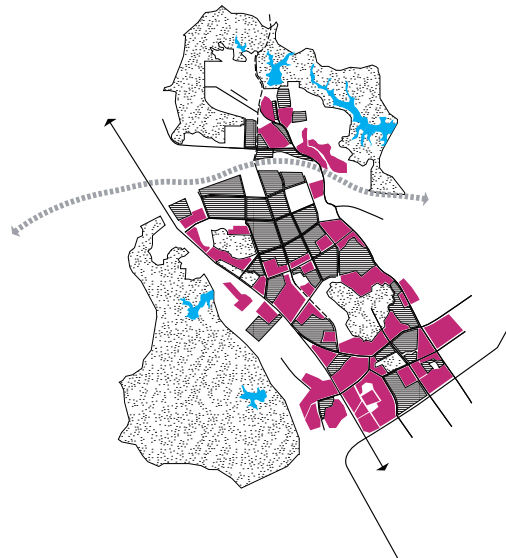
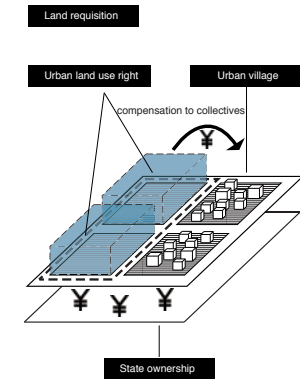
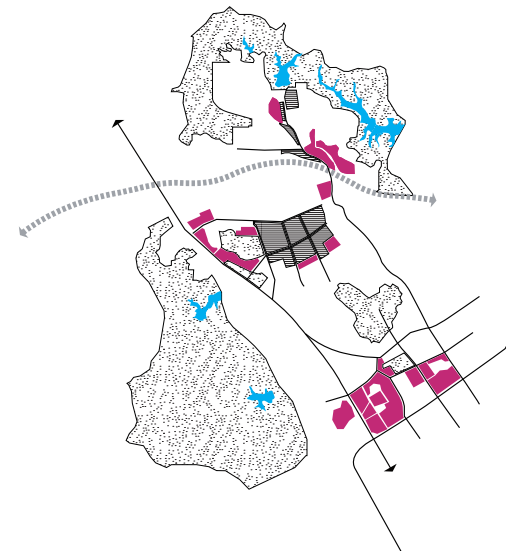
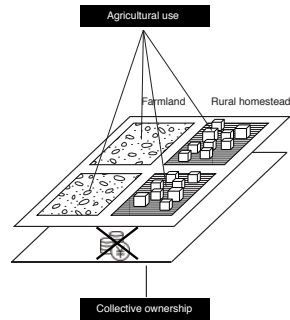
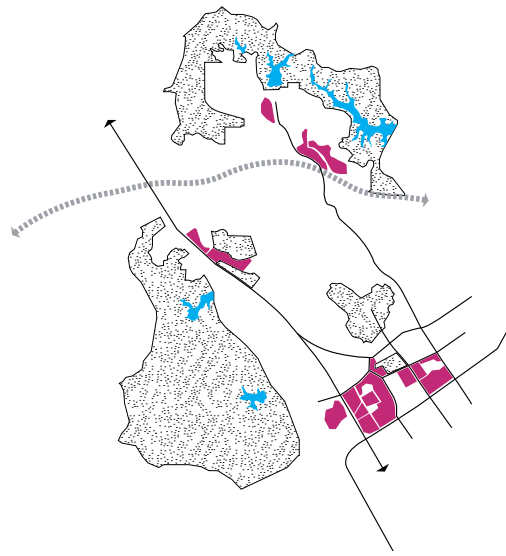
How to provide **affordable work-related space** to facilitate the career development of **migrant workers and career starters** in **urban renewal** process during a transition period?

Dalang neighborhood in Longhua district

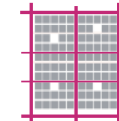
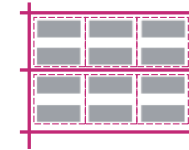
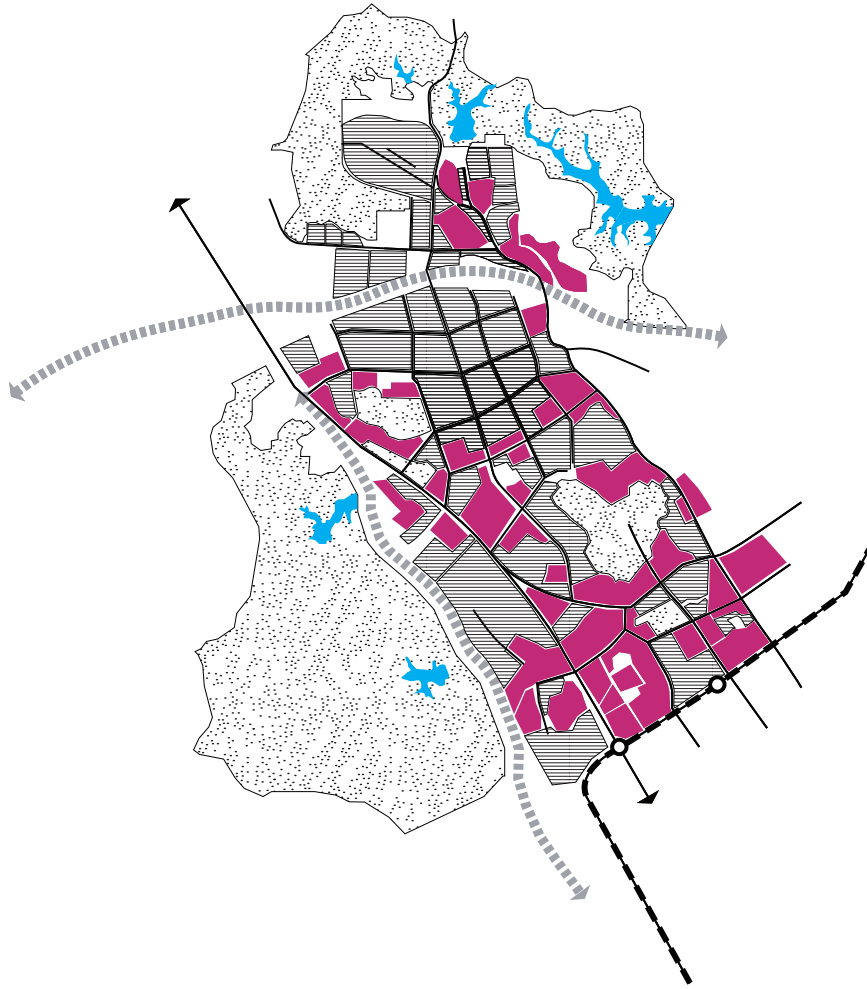


- 1 Manufacturing base facing **industrial transition**
- 2 Over **95%** of the population is young migrants
- 3 Not highly developed, still have **potential** to deal with the problem

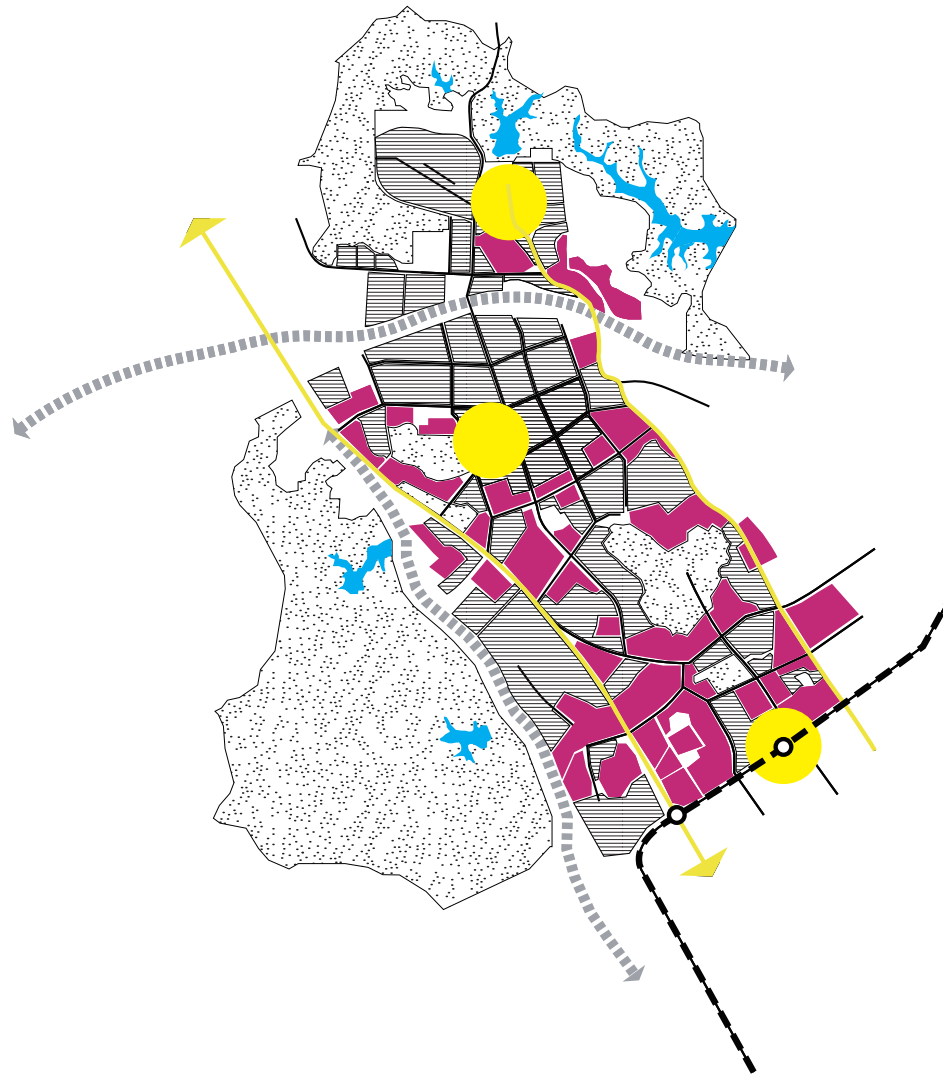
Historical development of Dalang



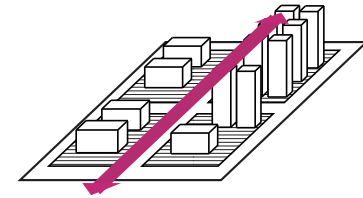
Urban pattern



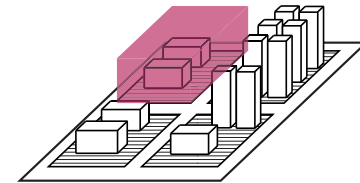
Urban renewal in Dalang



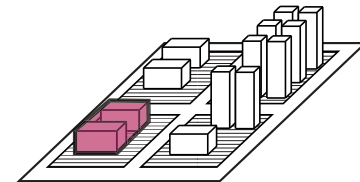
Infrastructure improvement



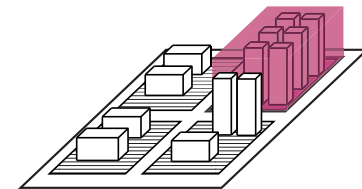
Reconstruction



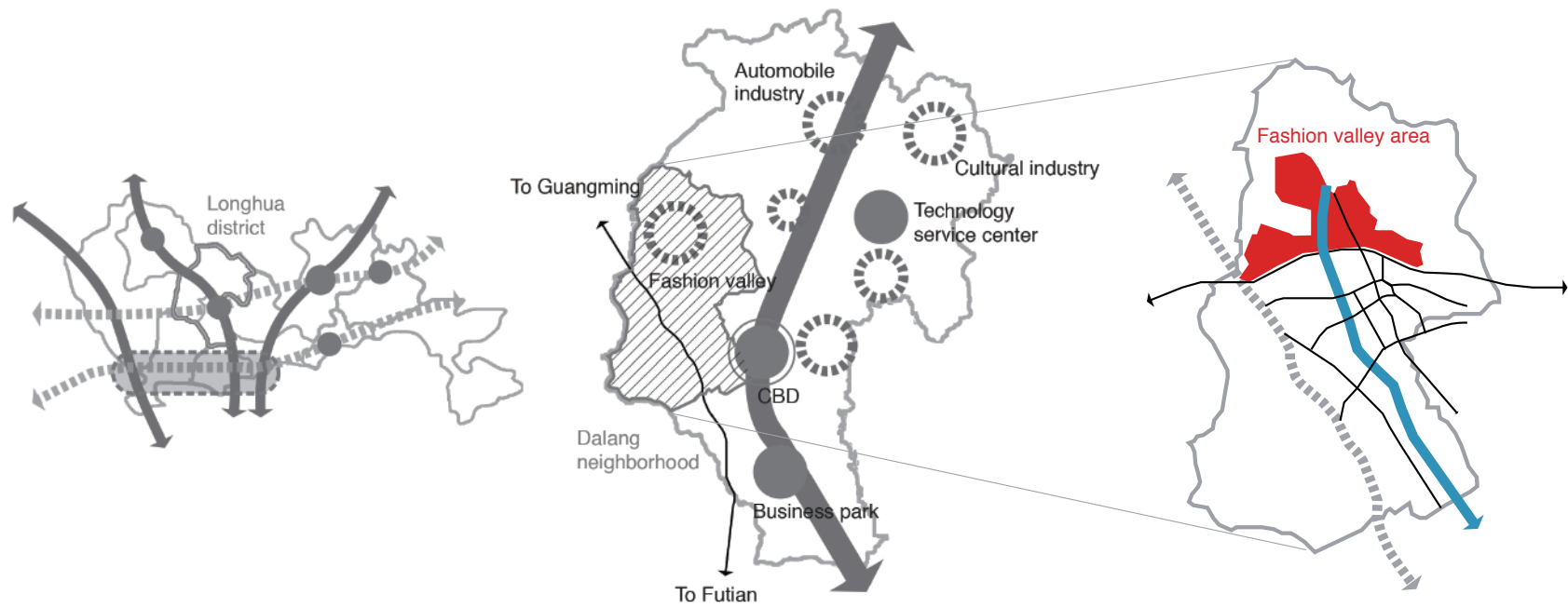
Functional change



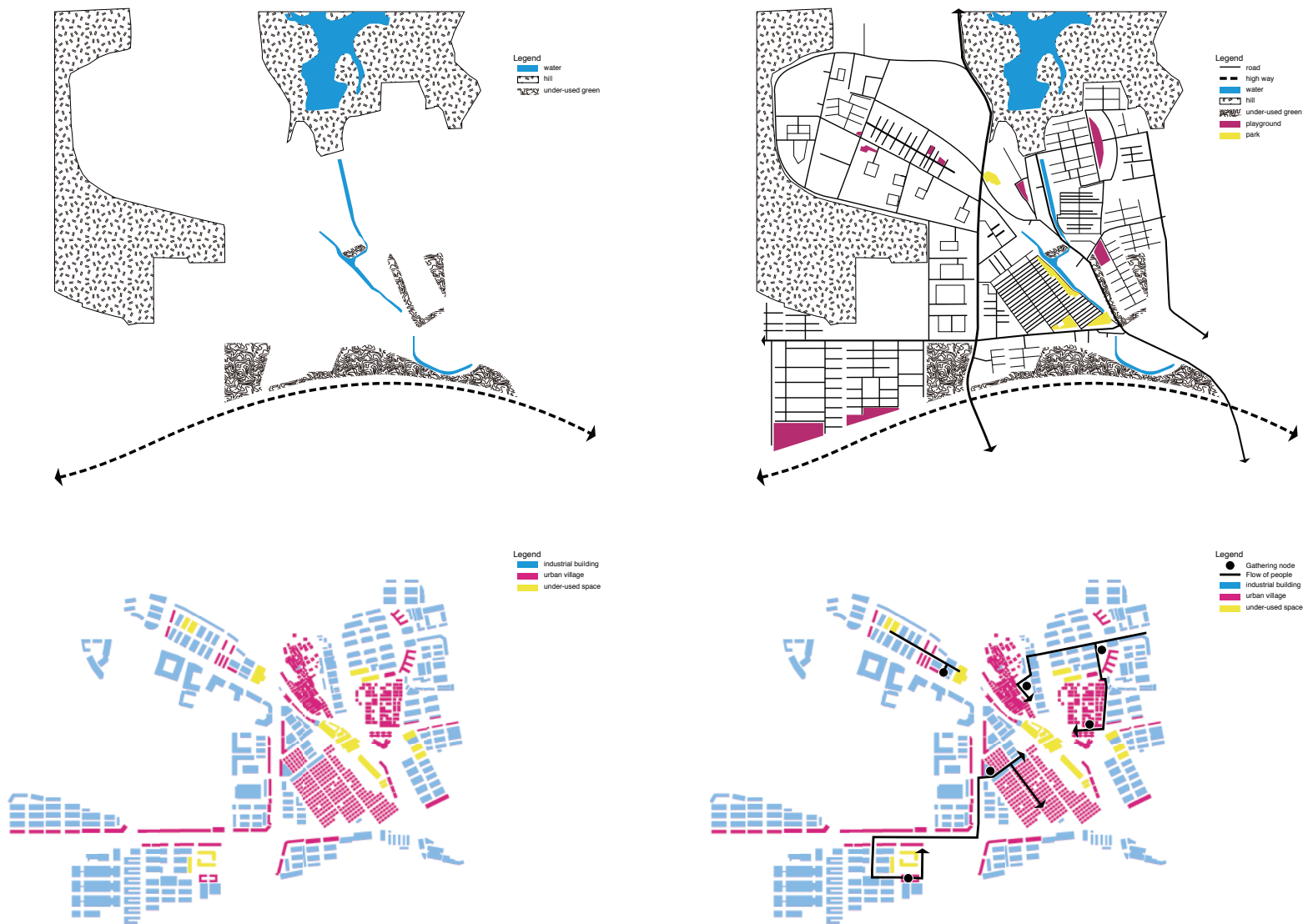
Regeneration



Fashion vallege area in Dalang



Spatial analysis



Global (radius= n) & local integration of streets (radius=3)





Research on providing affordable work-related space

What kind of affordable work-related space do they need?

Types of affordable work-related space

1 **Retail store & vendor's space**

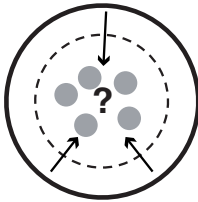
- Catering
- Grocery
- Clothing & clothing accessory
- Sporting goods, hobby, book, and music stores

2 **Workplace with low rent**

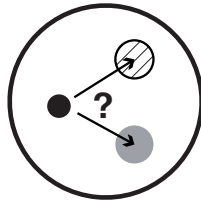
- ### 3 Space for **work-related services** provided by municipality, NGOs and social enterprises

Retailing

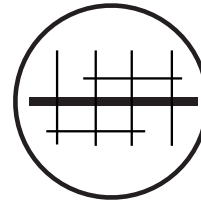
Clustering



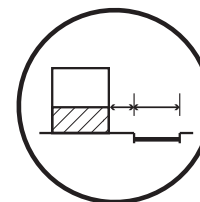
Surroundings

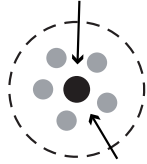
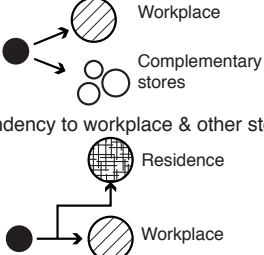
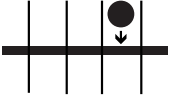
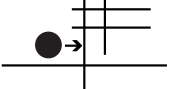
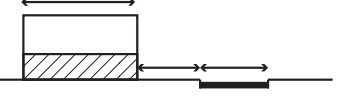

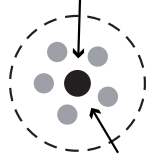

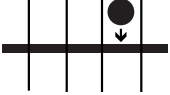
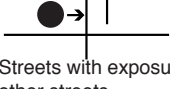
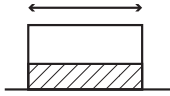
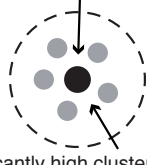

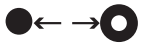

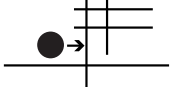
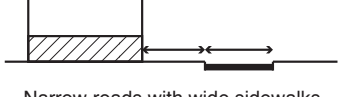
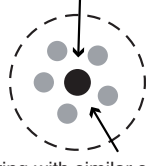
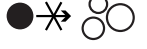
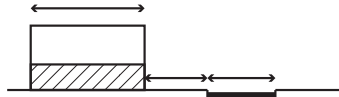


Street network



**Building footprint,
road & sidewalk**



	Clustering	Surroundings	Street network	Building footprint, road & sidewalk
Catering store	 <p>Clustering with similar stores</p>	 <p>Tendency to workplace & other stores</p> <p>Minimum turns to workplace & maximum to residential area</p>	 <p>Locate in streets with high between-ness</p>  <p>Streets with exposure to other streets</p>	 <p>Large footprint, narrow roads and wide sidewalks</p>  <p>More than one frontage</p>
Grocery store	 <p>Clustering with similar stores</p>	 <p>Tendency to workplace & other stores</p>	 <p>High between-ness</p>  <p>Streets with exposure to other streets</p>	 <p>Large footprint</p>
Clothing stores	 <p>Significantly high clustering rate</p>	 <p>Tendency to workplace & other stores</p>  <p>Locate far from bus stop</p>	 <p>On streets with high potential for passing traffic</p>  <p>Streets with exposure to other streets</p>	 <p>Narrow roads with wide sidewalks</p>
Sporting goods, hobby, book & music stores	 <p>Clustering with similar stores</p>	 <p>No important attraction towards other types of retailers</p>		 <p>Large footprint, narrow roads and wide sidewalks</p>

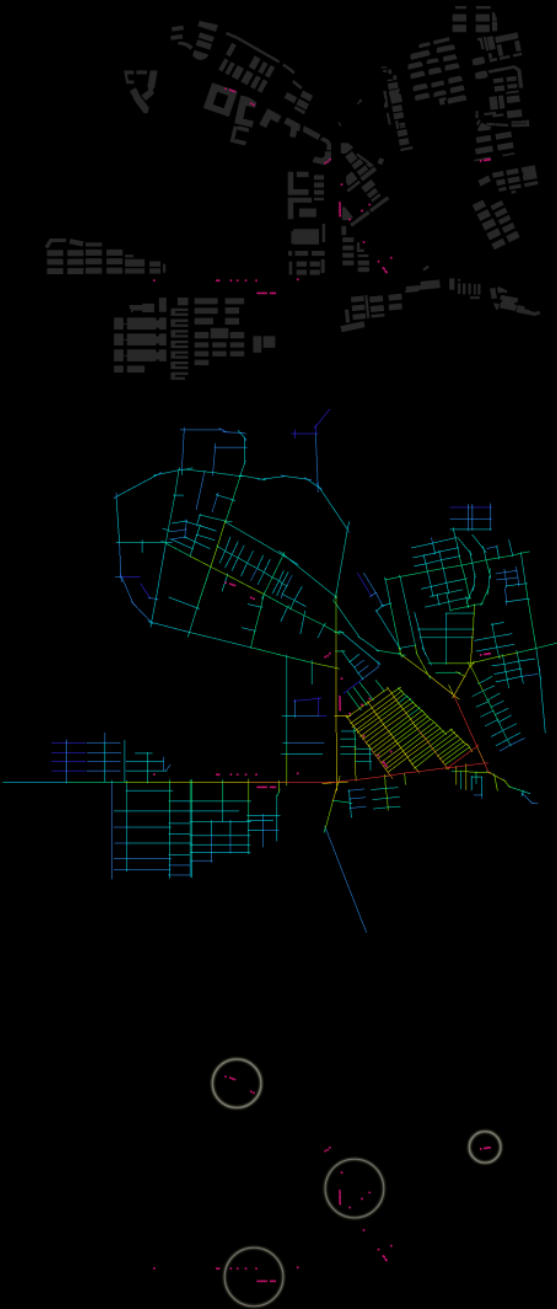
Catering



Grocery



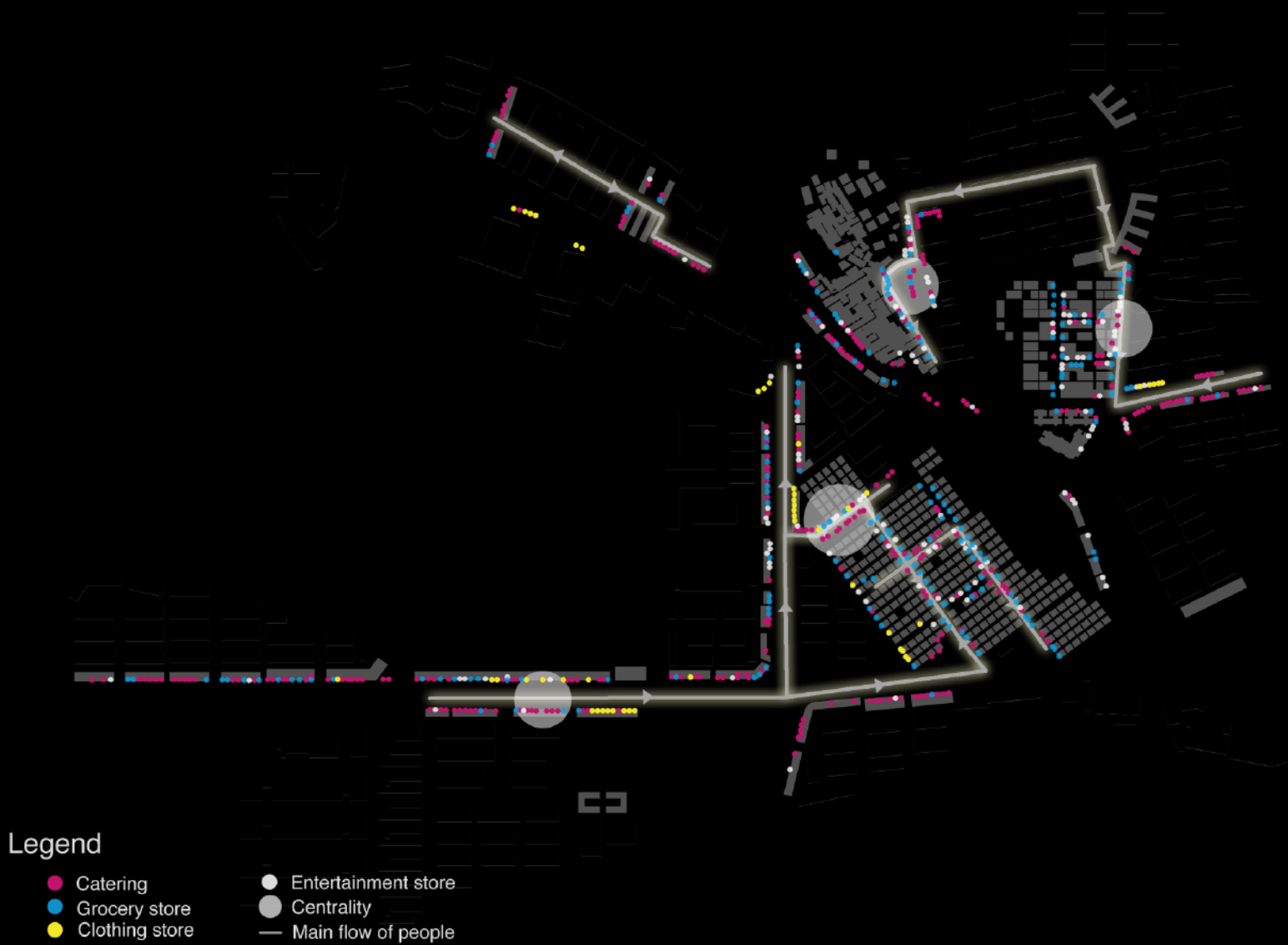
Clothing



Entertainment-related retailing

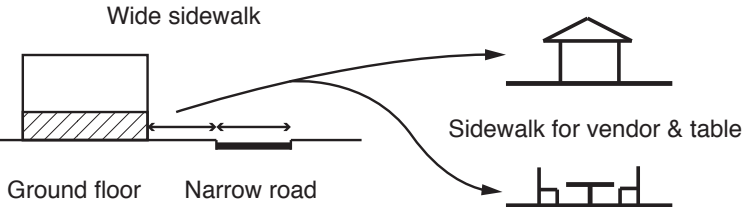


Overall retailing configuration

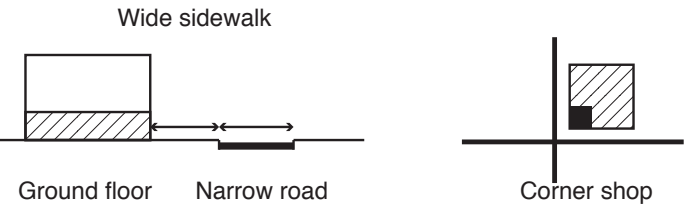


Spatial feature

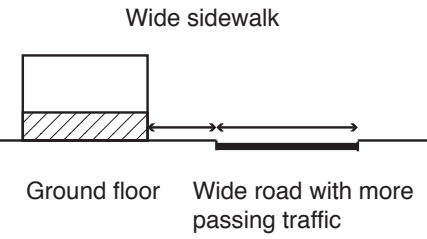
Catering store



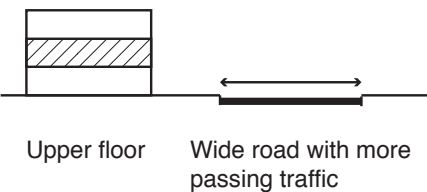
Grocery store



Clothing store



Entertainment (sporting, music, etc)

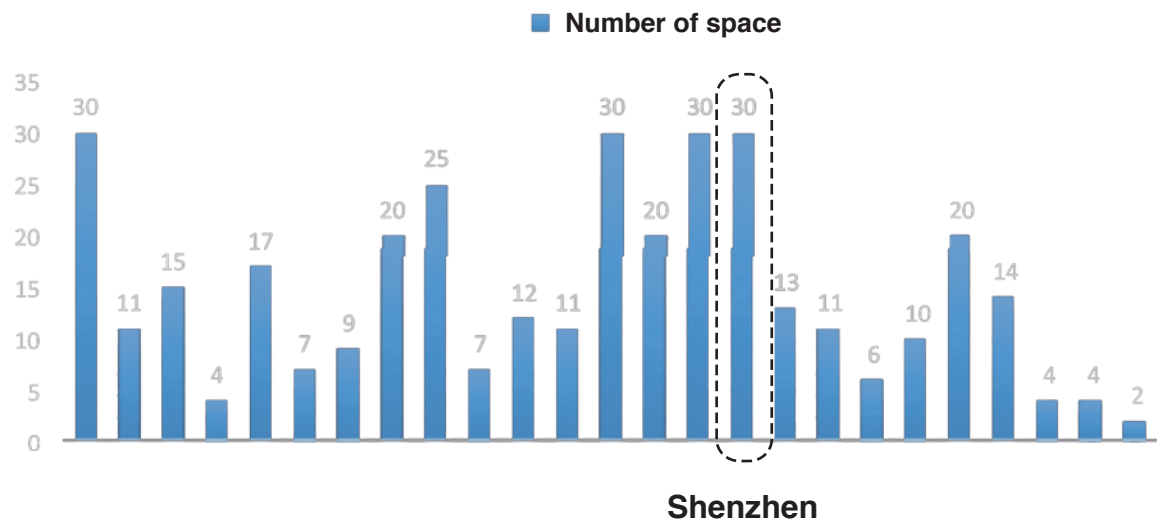


Summerized retailing configuration principles in this context

	Spatial configuration feature	Spatial condition	Overall conclusion
Catering store	<ul style="list-style-type: none"> -Concentrate in urban village; -Positive relation with street integration; -Along the routes from industrial parks to urban villages. 	<ul style="list-style-type: none"> -Ground floor; -Wide sidewalk & narrow road. 	<ol style="list-style-type: none"> 1. Tendency of clustering; 2. Strong positive relation with street integration; 3. Concentration along the routes between industrial parks and urban villages; 4. Isolated fashion valley and central part fragmented the area.
Grocery store	<ul style="list-style-type: none"> -Concentrate in urban village; -Positive relation with street integration; -Along the routes from industrial parks to urban villages. 	<ul style="list-style-type: none"> -Ground floor; -Wide sidewalk & narrow road; -Corner shop. 	
Clothing store	<ul style="list-style-type: none"> -High rate of clustering; -Concentrate near fashion industry parks; -Locate on roads with large amount of passing traffic. 	<ul style="list-style-type: none"> -Ground floor; -Wide sidewalk & wide road with more passing traffic. 	
Sporting goods, hobby, book & music store	<ul style="list-style-type: none"> -Concentrate in urban village; -Surround main gathering spots of commercial activity; -Positive relation with street integration. 	<ul style="list-style-type: none"> -Upper floor; -Wide road with more passing traffic. 	

Low-rent work related space

Number of Group Innovation Space in Chinese Cities



Low-rent workplace & additional services for starters.

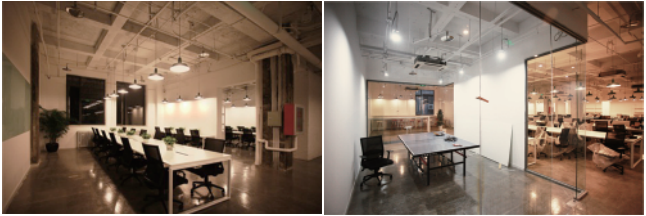
Makerspace



Co-working space



Business incubator



Startup cafe



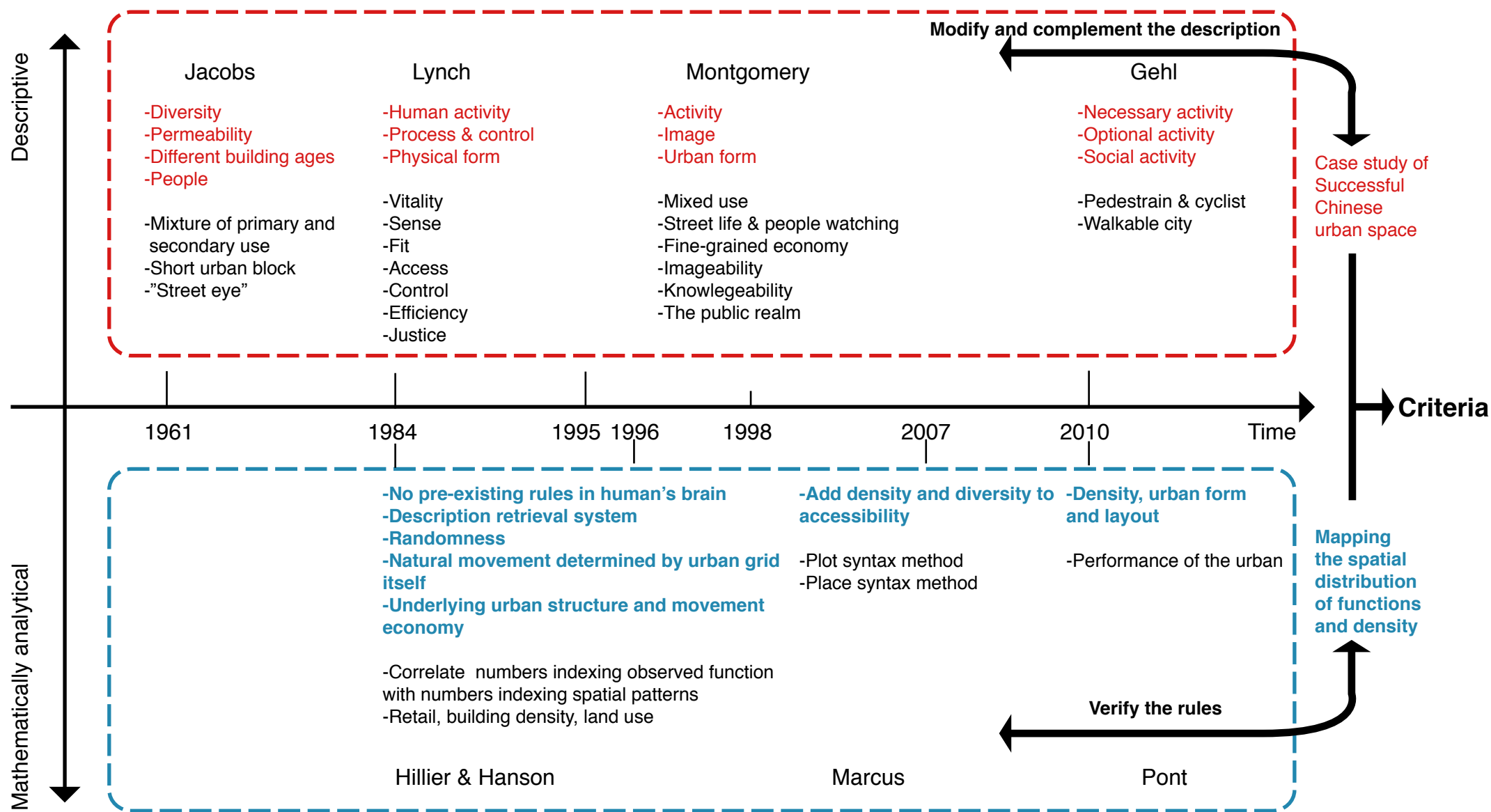
Startup community



Summerized principles of low-rent work-related space

Type of affordable workplace	Target group & Management characteristics	Stakeholder	Location	Spatial distribution	Functional demand & Spatial feature
1.Makerspace /Hackerspace	<ul style="list-style-type: none"> -Maker: people with the same interests to make something -Membership & self-governance 	-NGO, individuals			<p>Lecture & activity</p>
2.Co-working space	<ul style="list-style-type: none"> -Starters: long-term lease, short-term lease, pass-byers -Sharing facilities and services 	<ul style="list-style-type: none"> -Developer -Private investor 			
3.Business incubator	<ul style="list-style-type: none"> -Starters: fixed tenants for certain years (1-3years) through application -For enterprise incubation 	<ul style="list-style-type: none"> -Municipality -Private investor 			<p>Service & Entertainment</p>
4.Startup cafe	<ul style="list-style-type: none"> -Starters:short-term lease, pass-byers -Meeting people, interaction and sharing information & knowledge 	-Private investor (service company)			
5.Startup community	<ul style="list-style-type: none"> -Starters & entrepreneur in higher status -Long-term apartment lease with free access to workplace and facilities -Build up interpersonal connections 	<ul style="list-style-type: none"> -Developer -Service enterprises 			

What kind of urban environment can facilitate the long-term operation of these spaces?

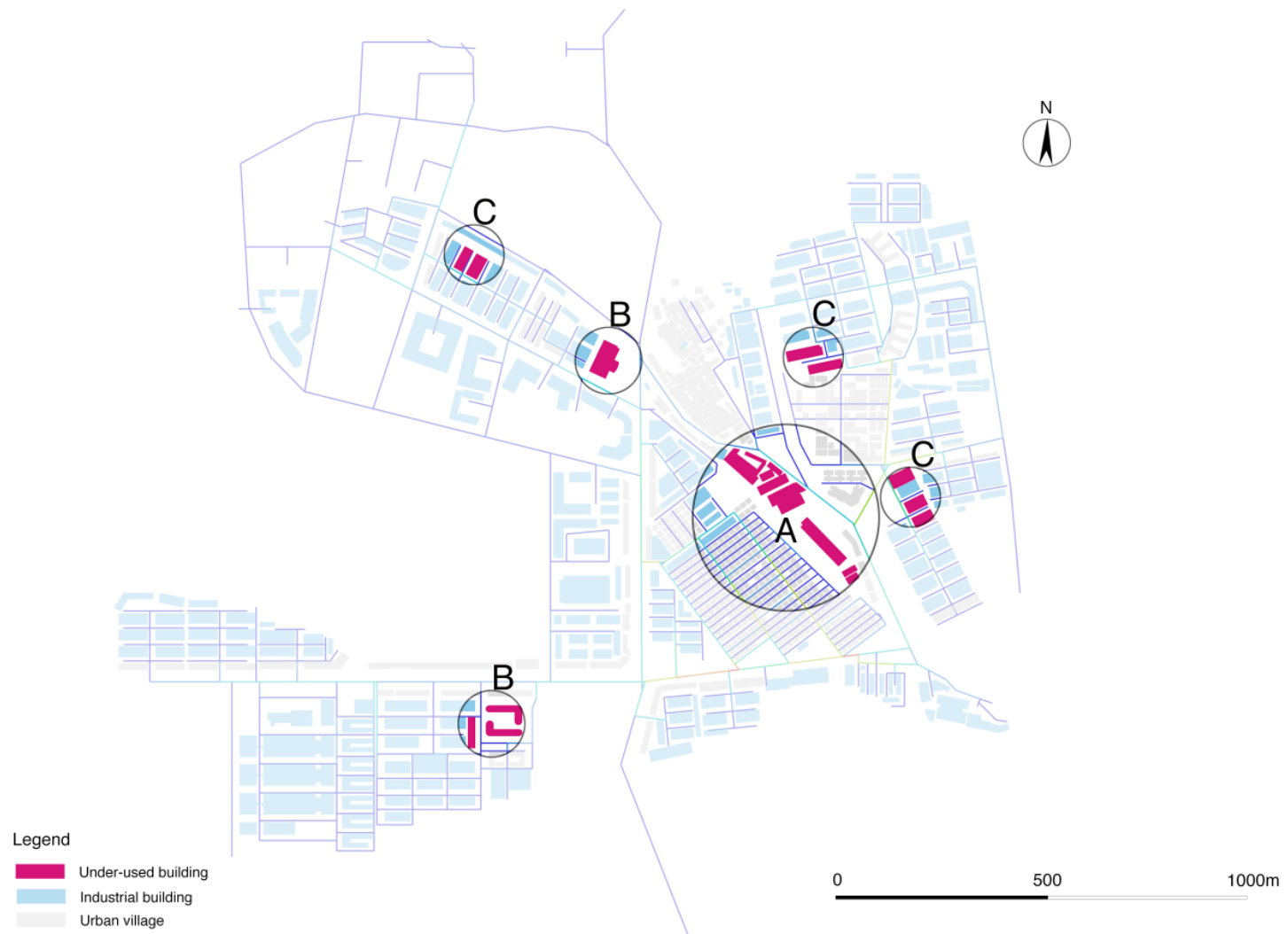


Principles

- 1 **Mixture** of primary and secondary **use**
- 2 **Fine-grained** street network for **pedestrian**
- 3 Attractive **public space**

What are the potential spatial resources in the area?

Potential spatial resources



A



B



C



A



B



C



Vision

1 **Affordable work-related space system:**

- Space for small businesses in retailing;
- Space for starters in creative industry related to fashion design, etc;
- Space for training and other public services related to work.

2 **Vibrant urban environment:**

- Production oriented space with cultural and creative activity;
- Lively space for daily consumption;
- Green walking system along waterfront.

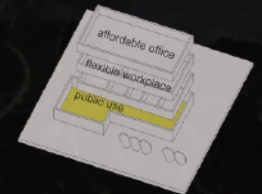
Current spatial structure



Legend

- | | |
|-----------------------|-----------------------|
| Economic structure | Open network strategy |
| Daily space structure | Public square |
| Green structure | Mixed use urban area |
| Pedestrian street | Mixed use building |

Mixed use strategy



- Legend
- | | |
|-----------------------|-----------------------|
| Economic structure | Open network strategy |
| Daily space structure | Public square |
| Green structure | Mixed use urban area |
| Pedestrian street | Mixed use building |

Open network strategy



- Legend
- | | | | |
|--|-----------------------|--|-----------------------|
| | Economic structure | | Open network strategy |
| | Daily space structure | | Public square |
| | Green structure | | Mixed use urban area |
| | Pedestrian street | | Mixed use building |



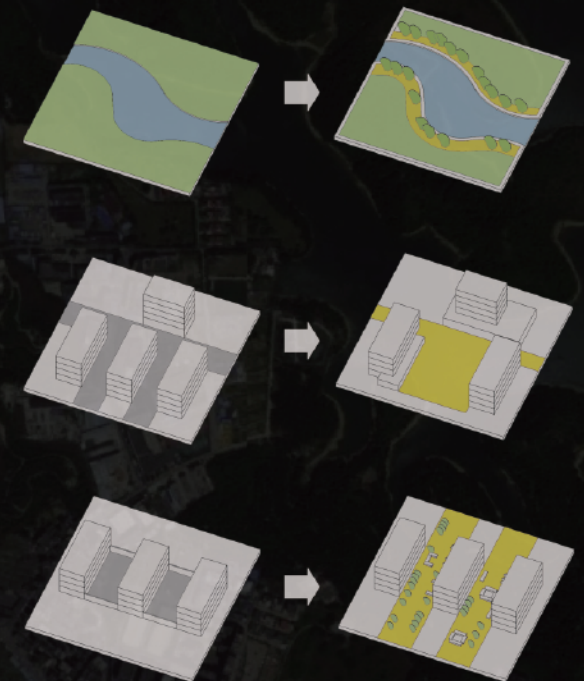
Public space strategy



Legend

- | | |
|-----------------------|-----------------------|
| Economic structure | Open network strategy |
| Daily space structure | Public square |
| Green structure | Mixed use urban area |
| Pedestrian street | Mixed use building |

Public space strategy



Legend

- | | |
|-----------------------|-----------------------|
| Economic structure | Open network strategy |
| Daily space structure | Public square |
| Green structure | Mixed use urban area |
| Pedestrian street | Mixed use building |

Spatial structure after



Legend

- | | |
|-----------------------|-----------------------|
| Economic structure | Open network strategy |
| Daily space structure | Public square |
| Green structure | Mixed use urban area |
| Pedestrian street | Mixed use building |

Street integration comparison



Current green & blue system



Legend

Waterfront space

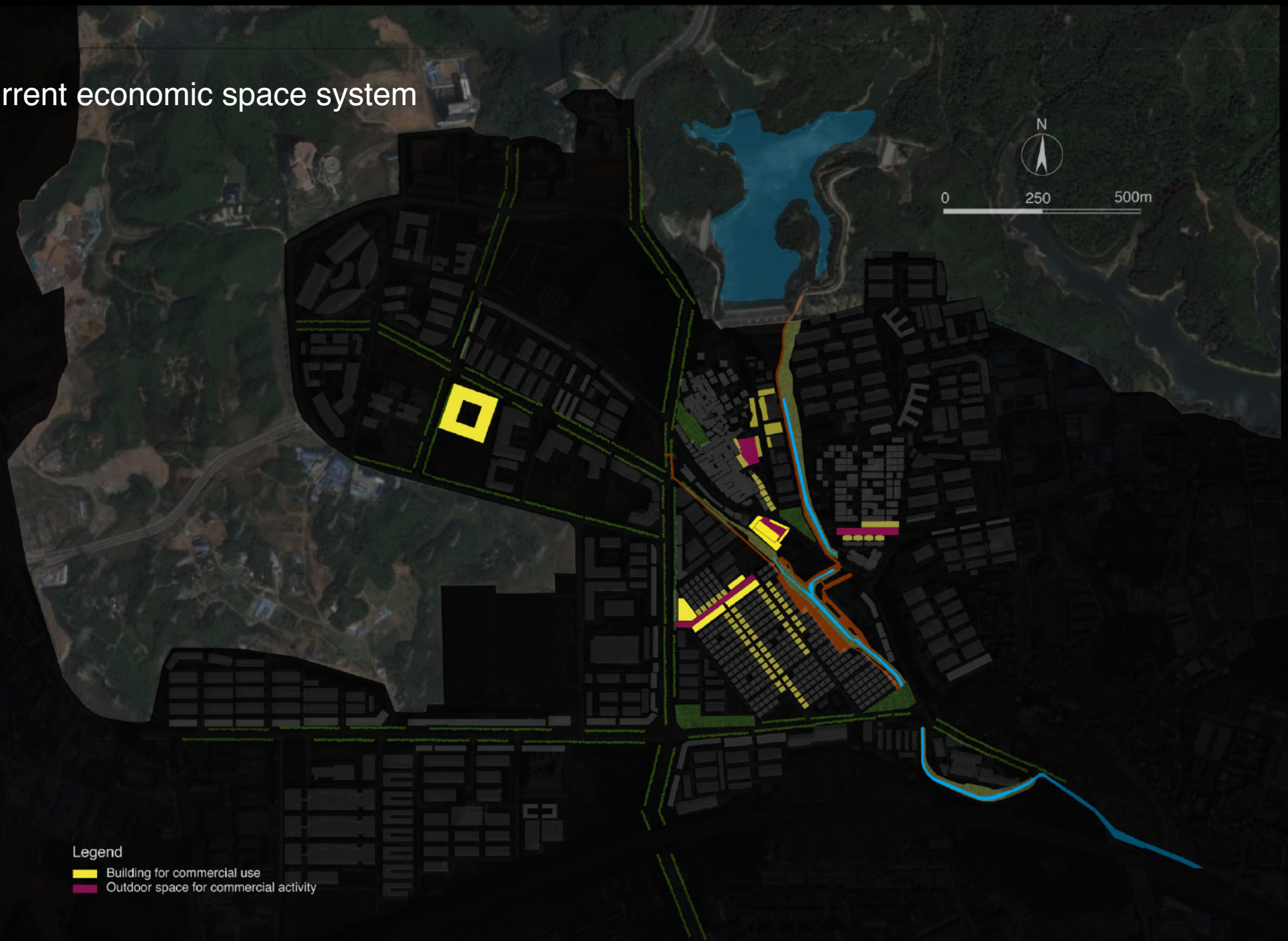
Improvement of green & blue system



Legend

Waterfront space

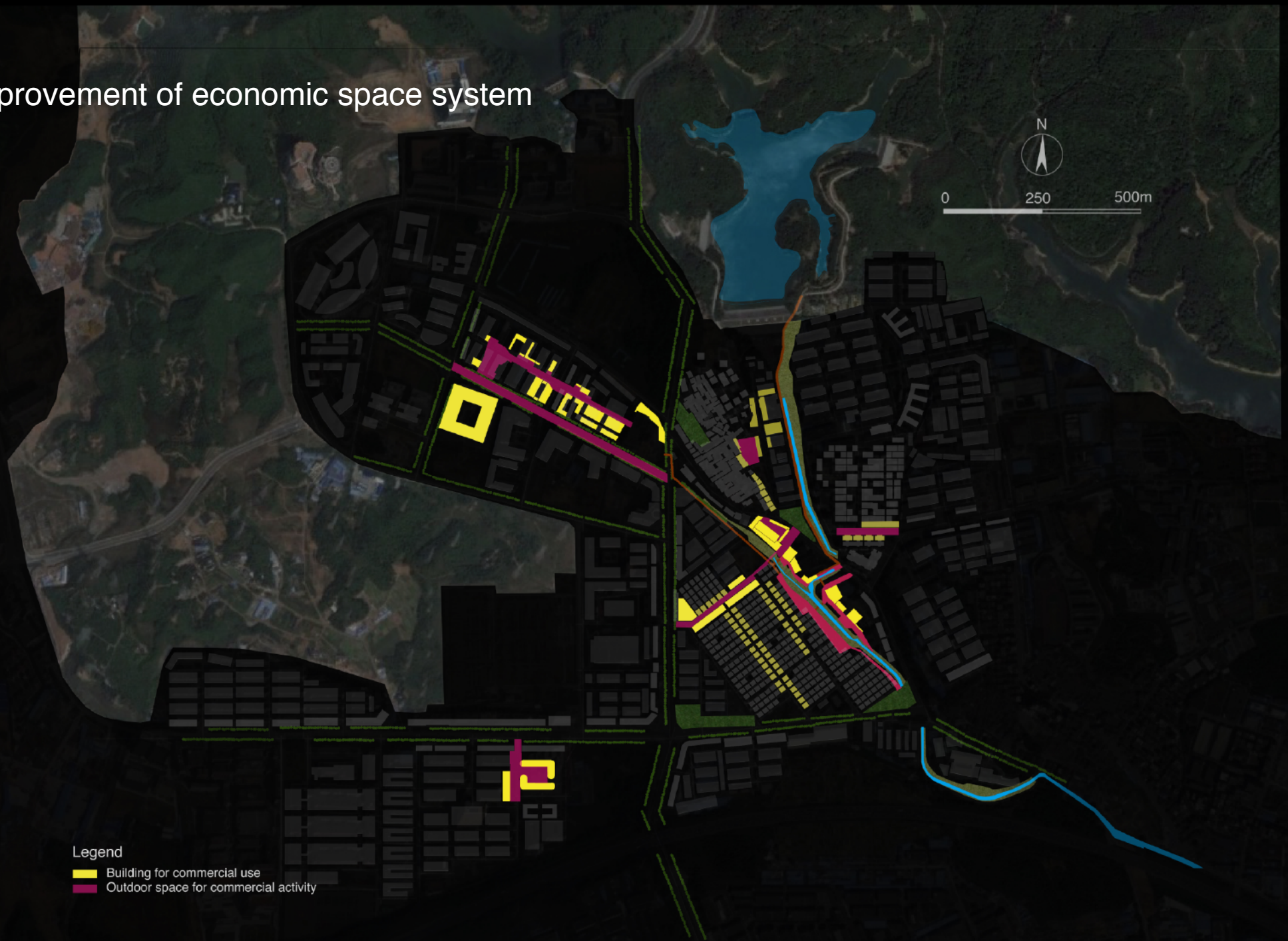
Current economic space system



Legend

- Building for commercial use
- Outdoor space for commercial activity

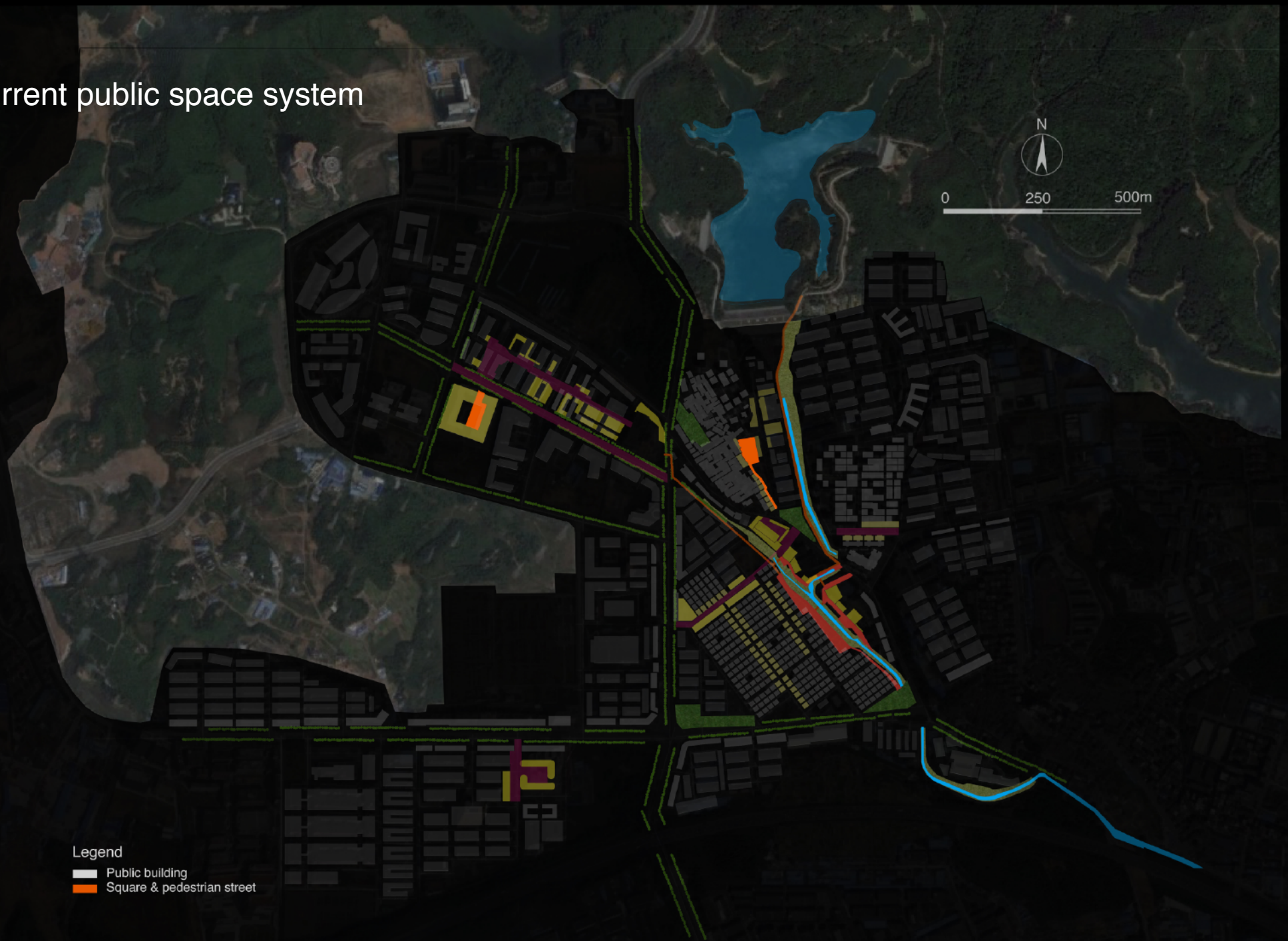
Improvement of economic space system



Legend

- Building for commercial use
- Outdoor space for commercial activity

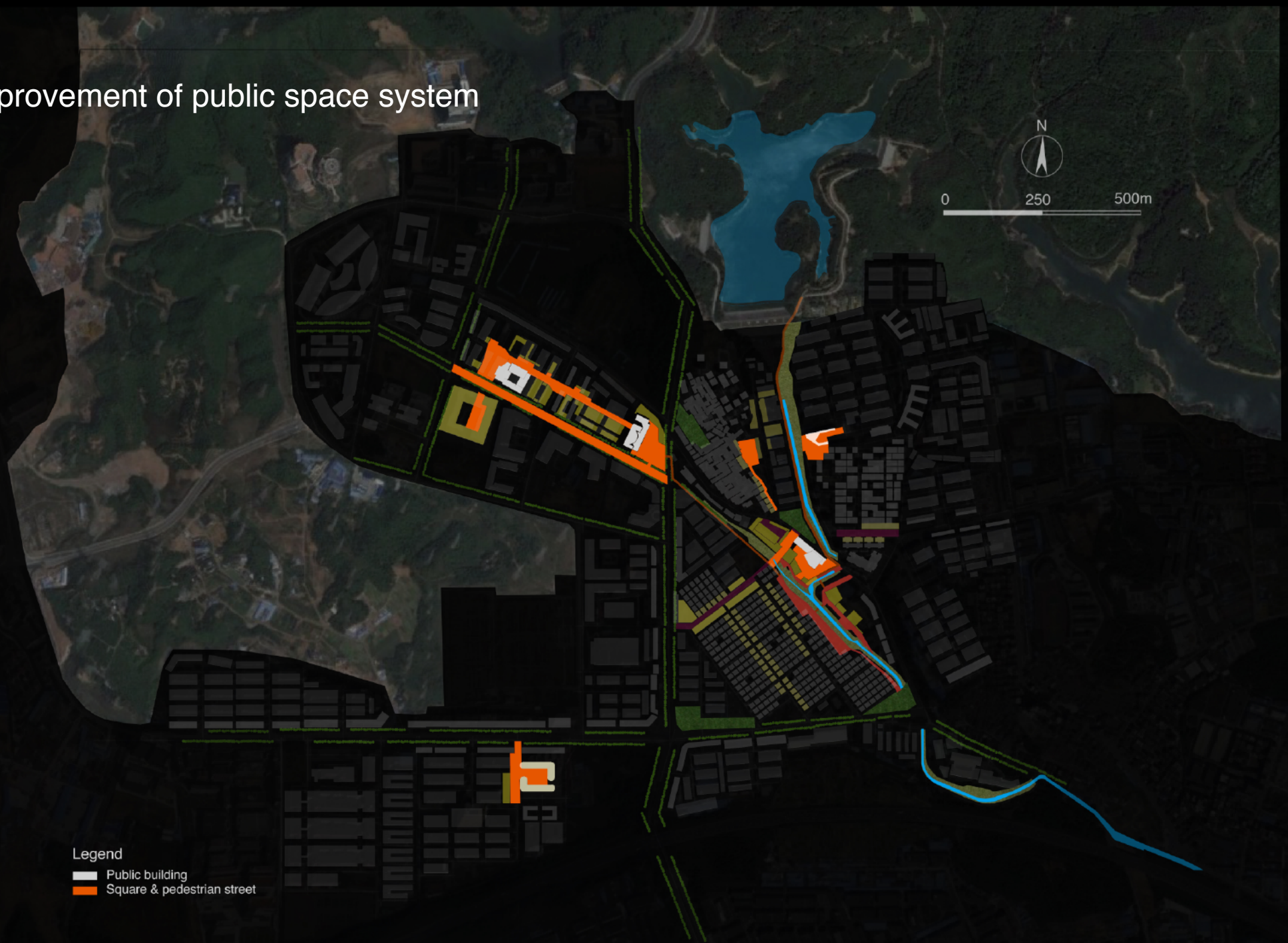
Current public space system



Legend

- Public building
- Square & pedestrian street

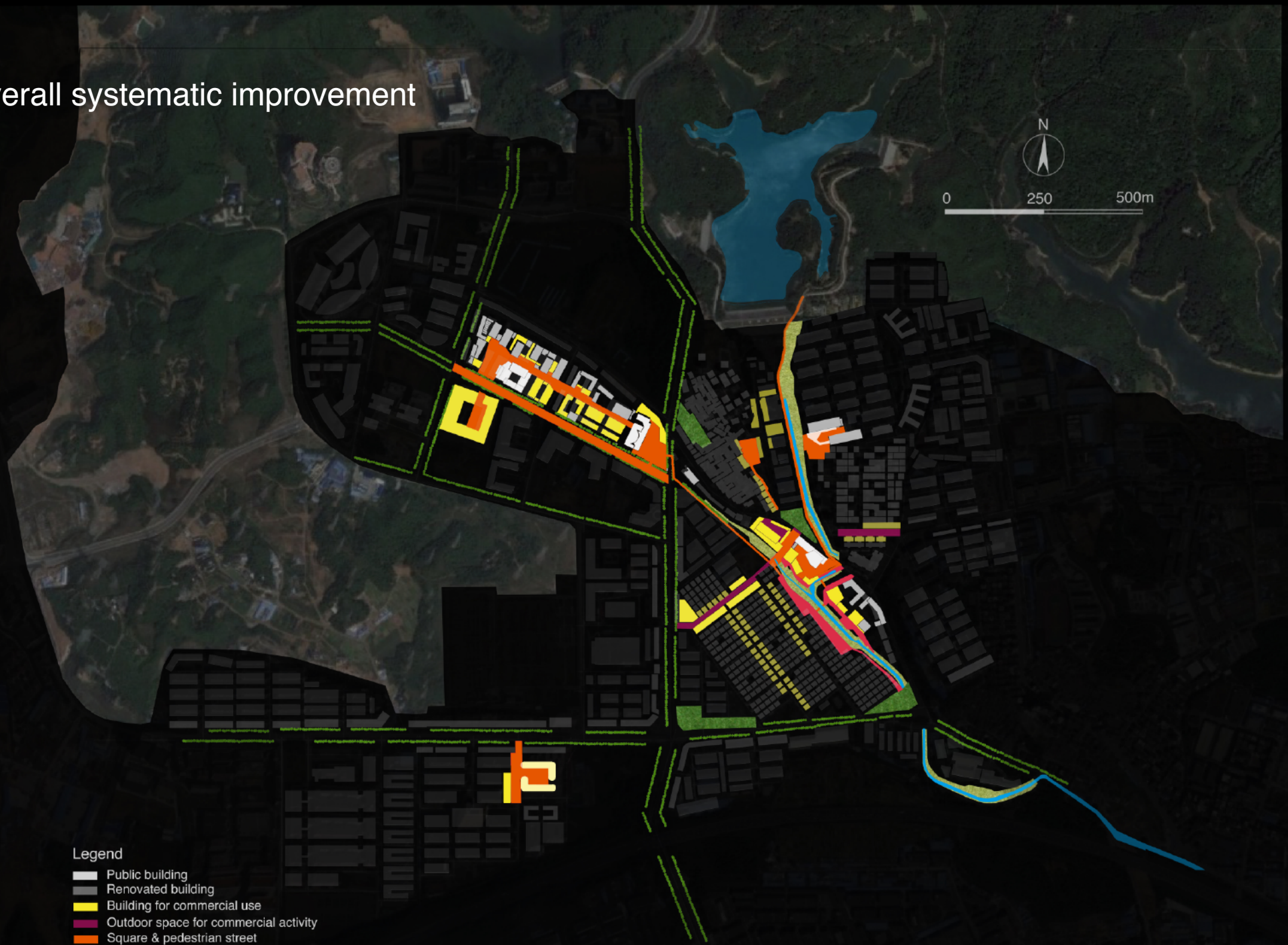
Improvement of public space system



Legend

- Public building
- Square & pedestrian street

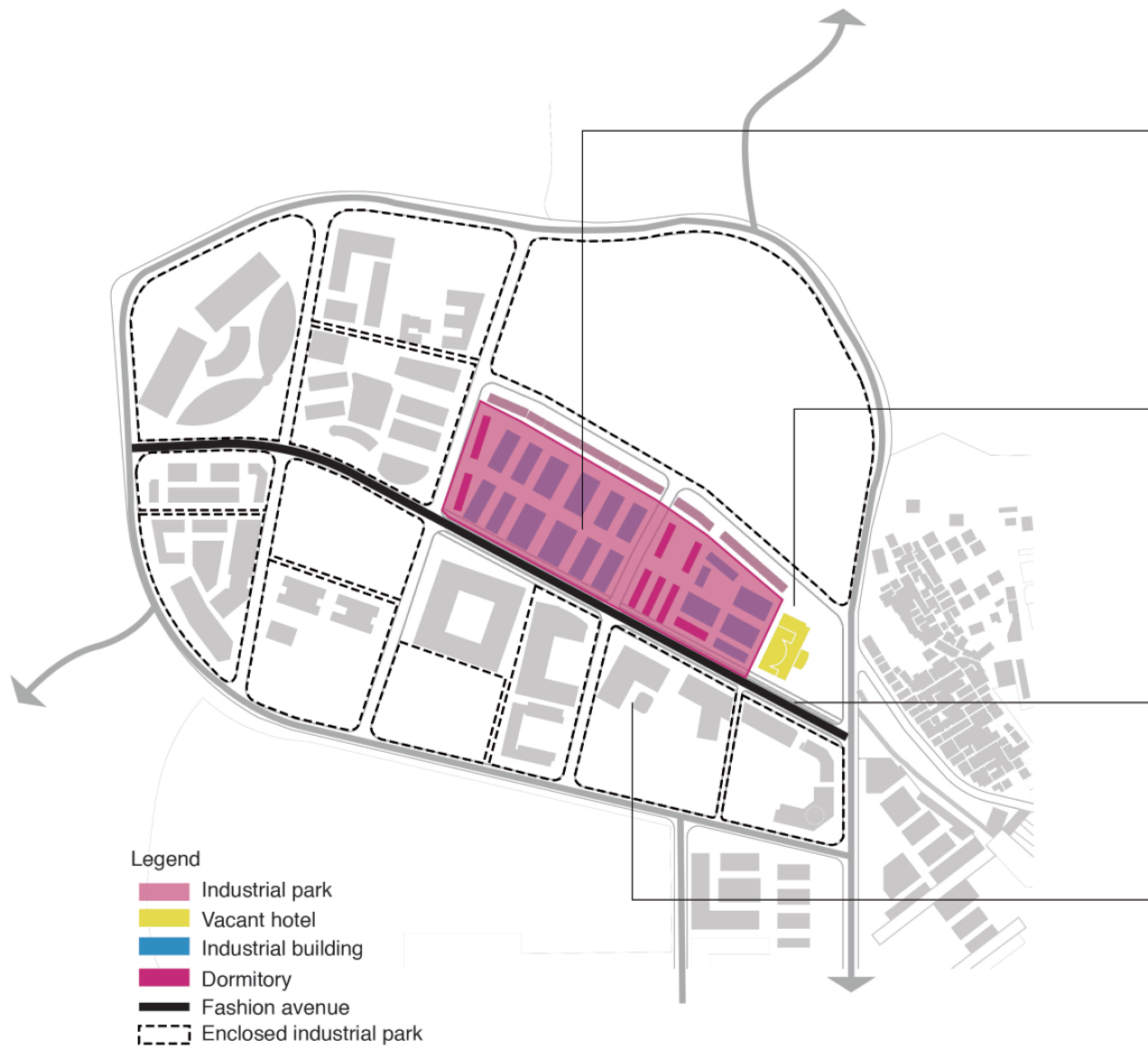
Overall systematic improvement



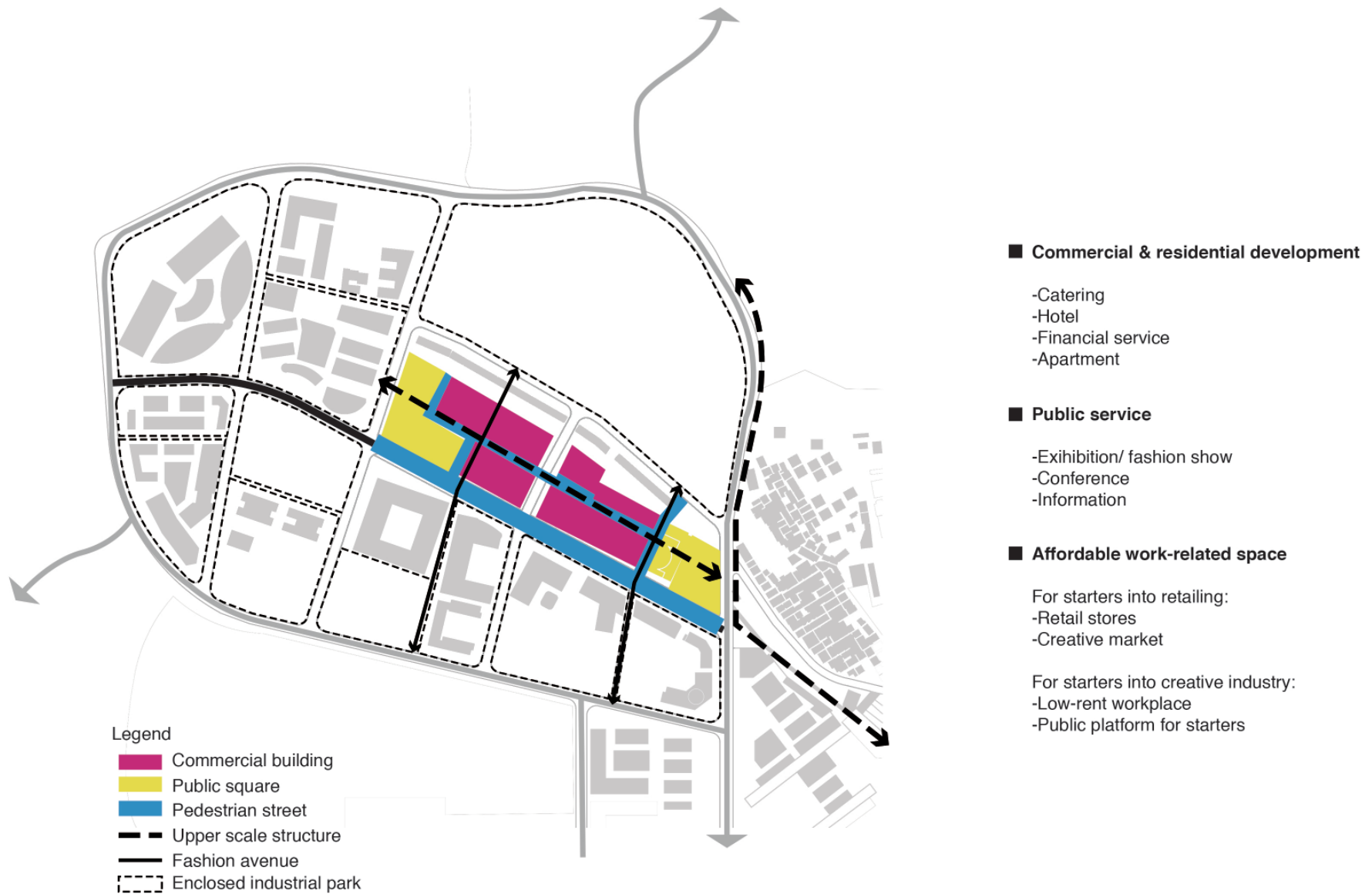
The locations of key interventions



Current situation of fashion valley



Upper scale structure & functional demand for a common vision



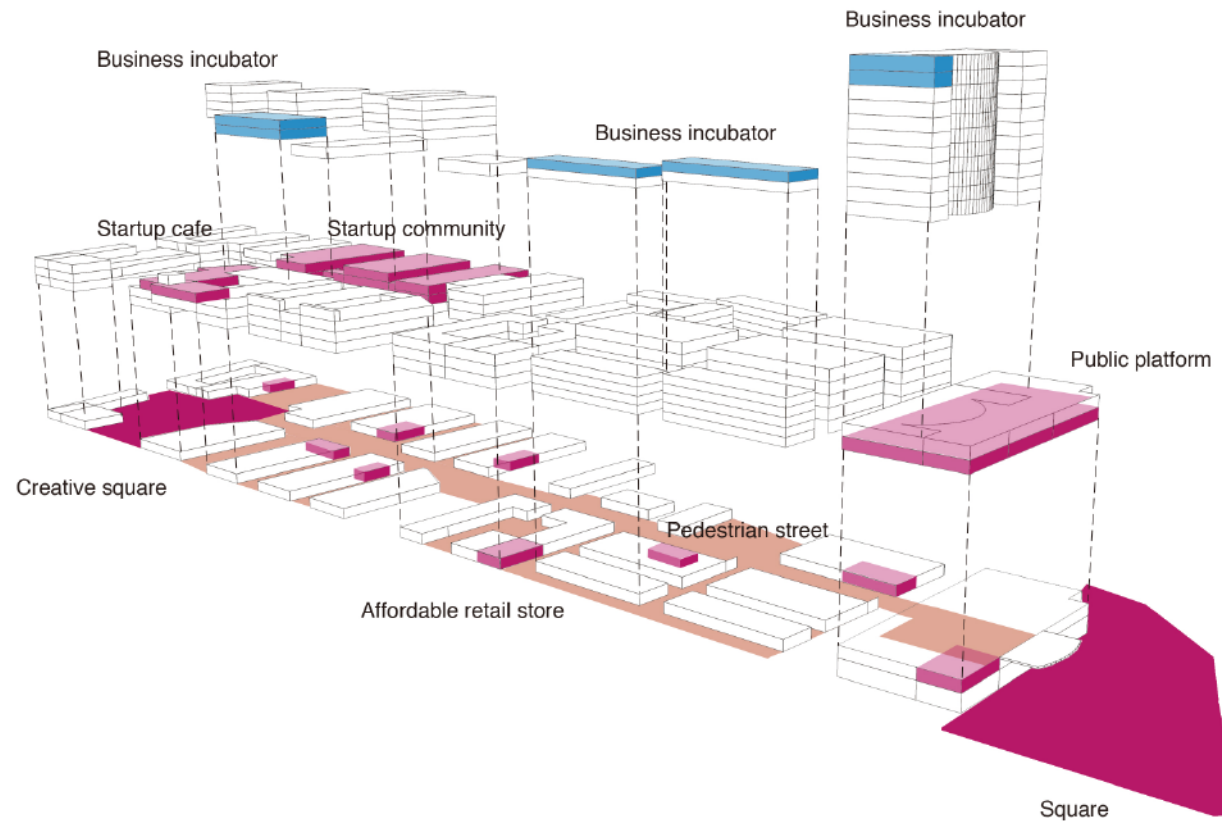
Plane before intervention



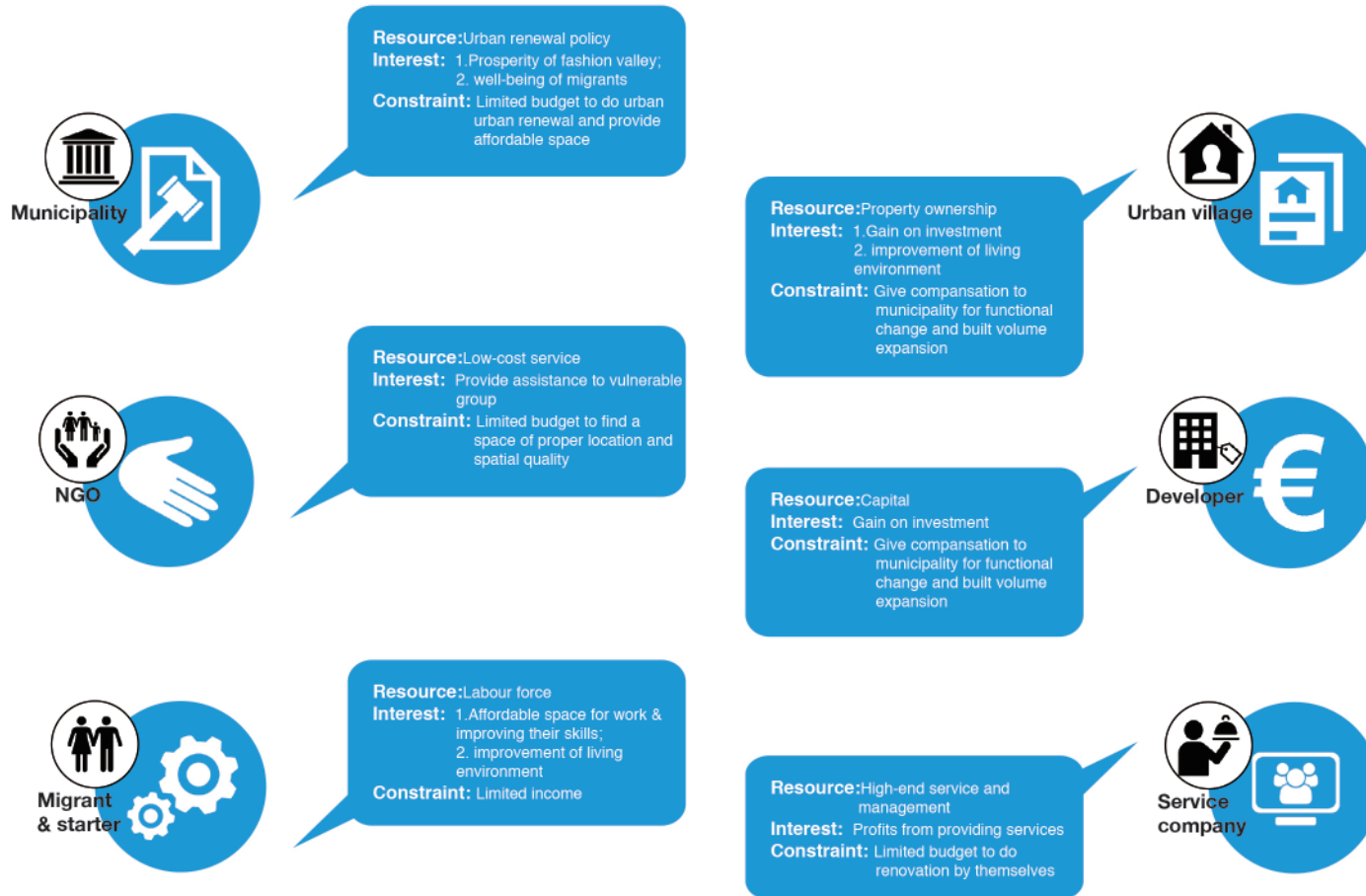
Plane after intervention



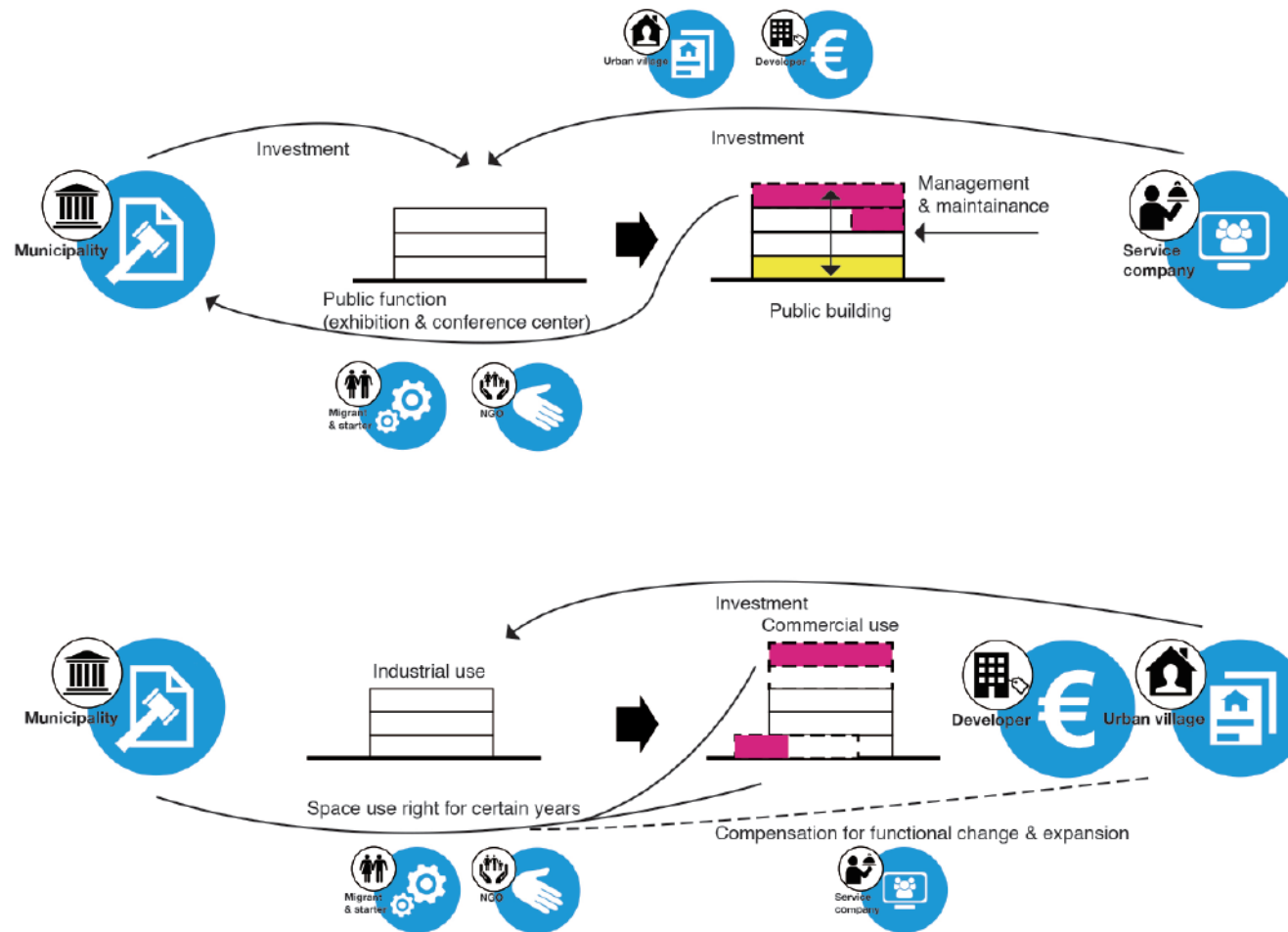
Multiple types of affordable work-related space



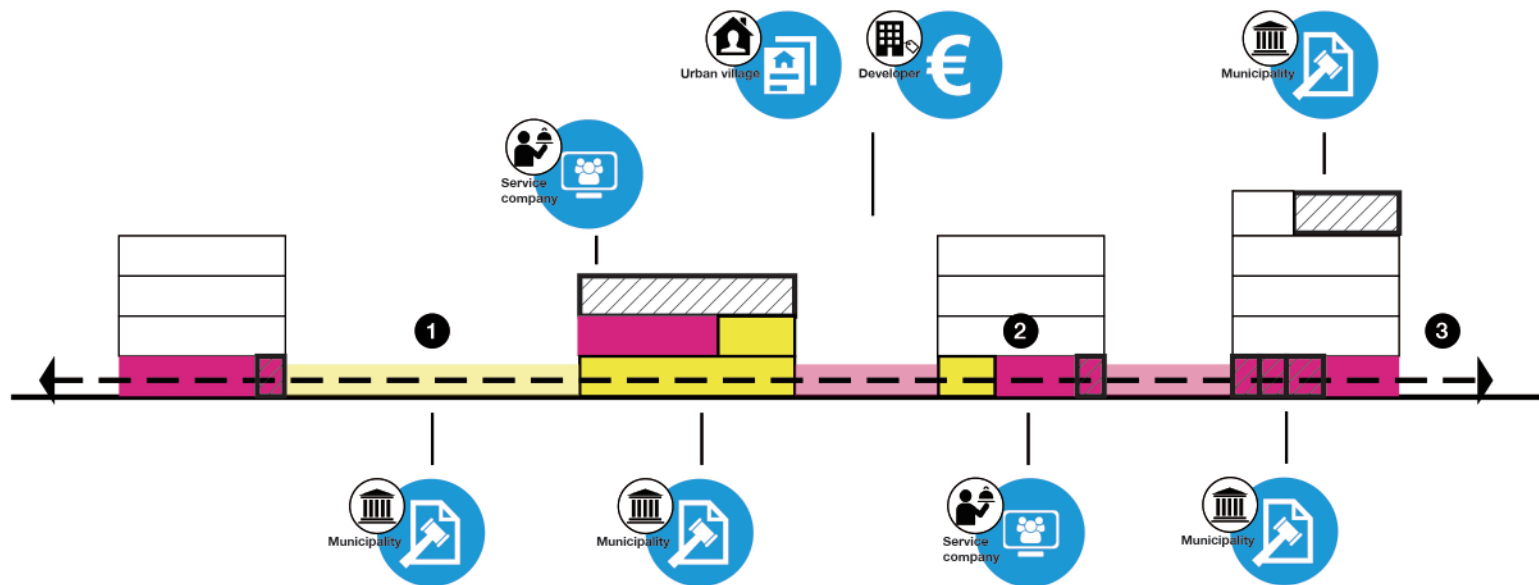
Stakeholders: resources, interests and constraints






Design & trade-offs between stakeholders



Rules for creating a vital urban environment by involving stakeholders

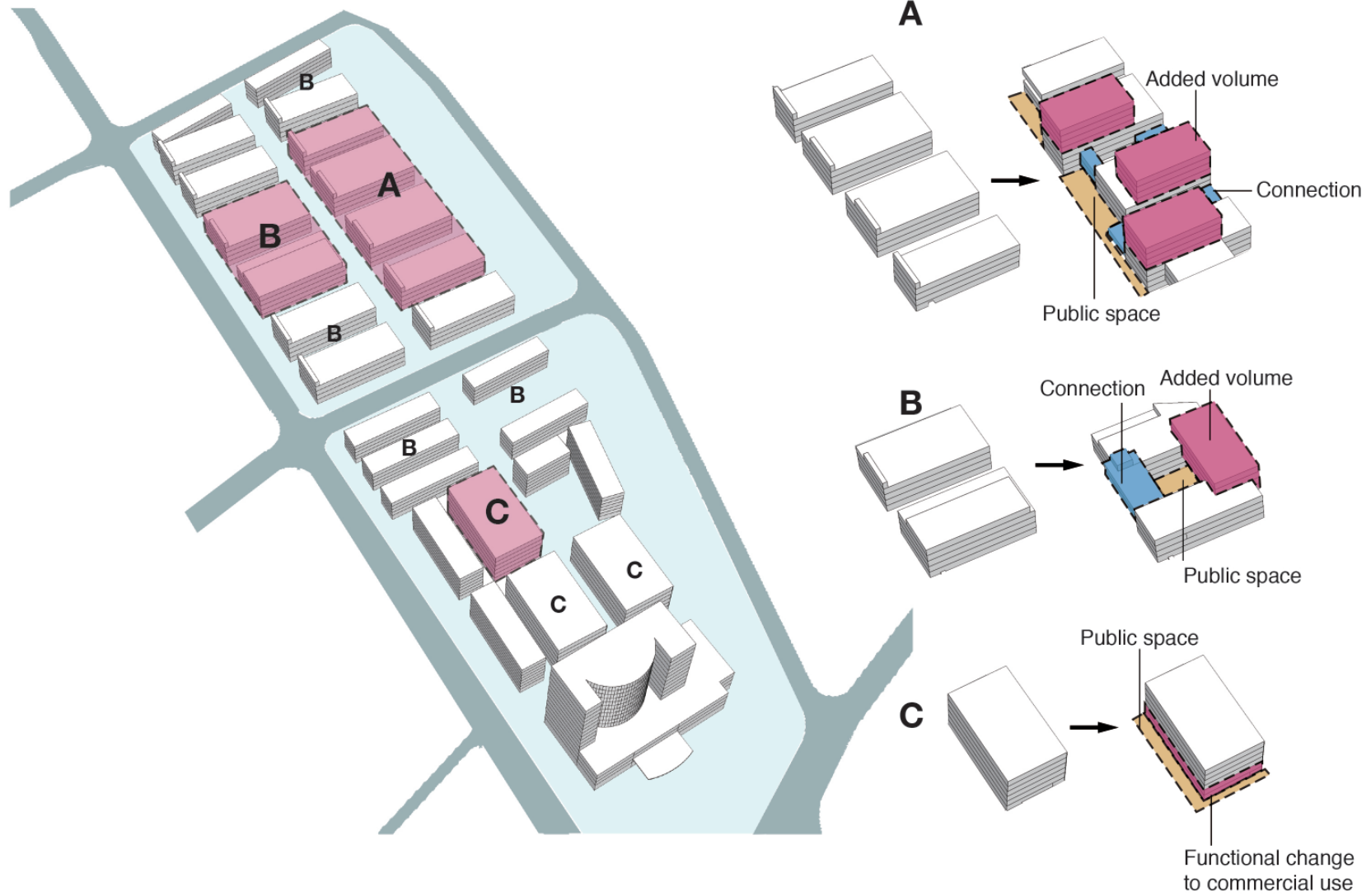


Legend

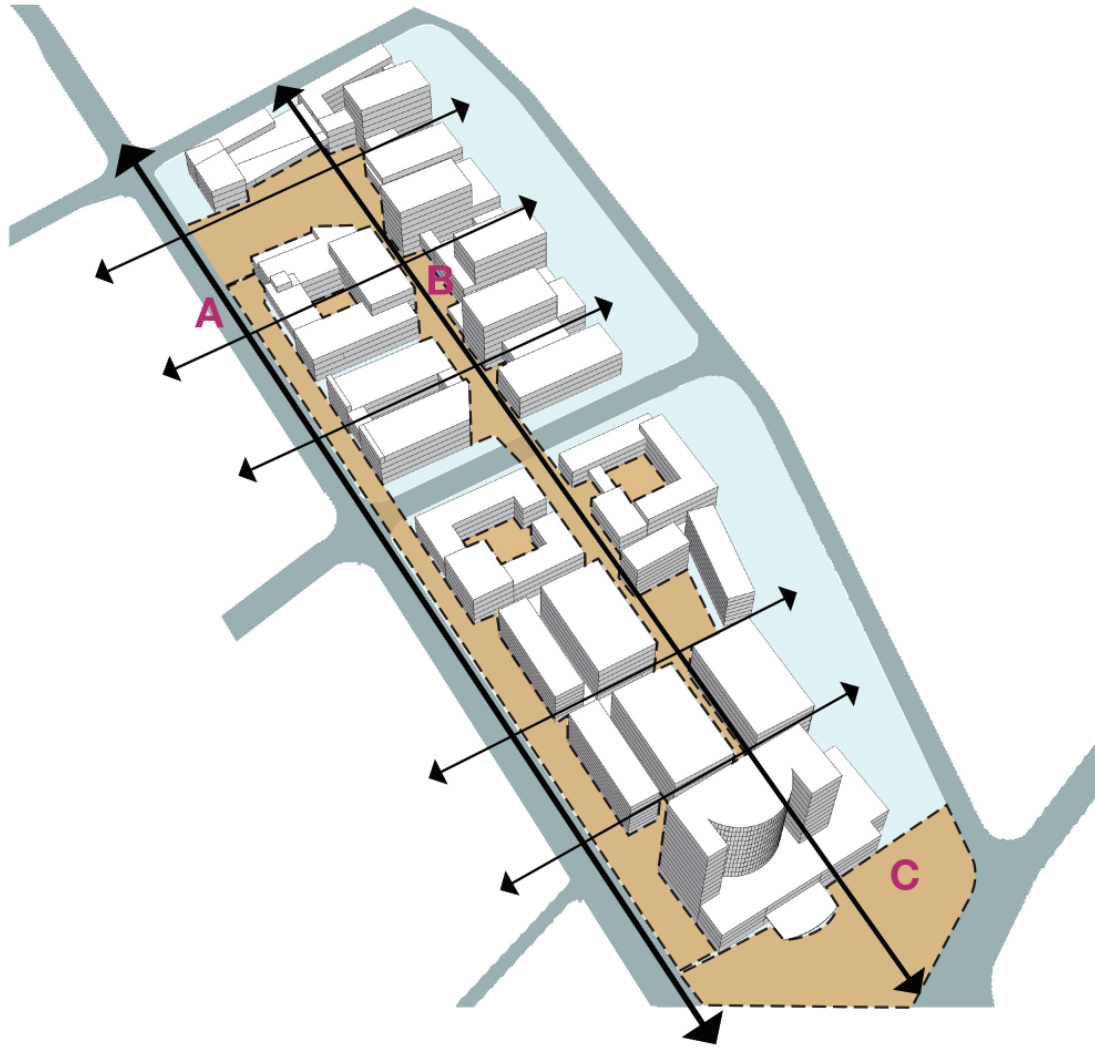
-  Public space
-  Commercial space
-  Affordable work-related space

- 1** Public square for multiple activities
- 2** Ground floor for public and commercial use
- 3** Continuous pedestrian street

Transformation approach



Public space & open network



Fashion avenue before intervention



Fashion avenue after intervention



Key elements and design guidelines



① Widening sidewalk

② Crosswalk & connection

③ Public building

④ Pedestrian space

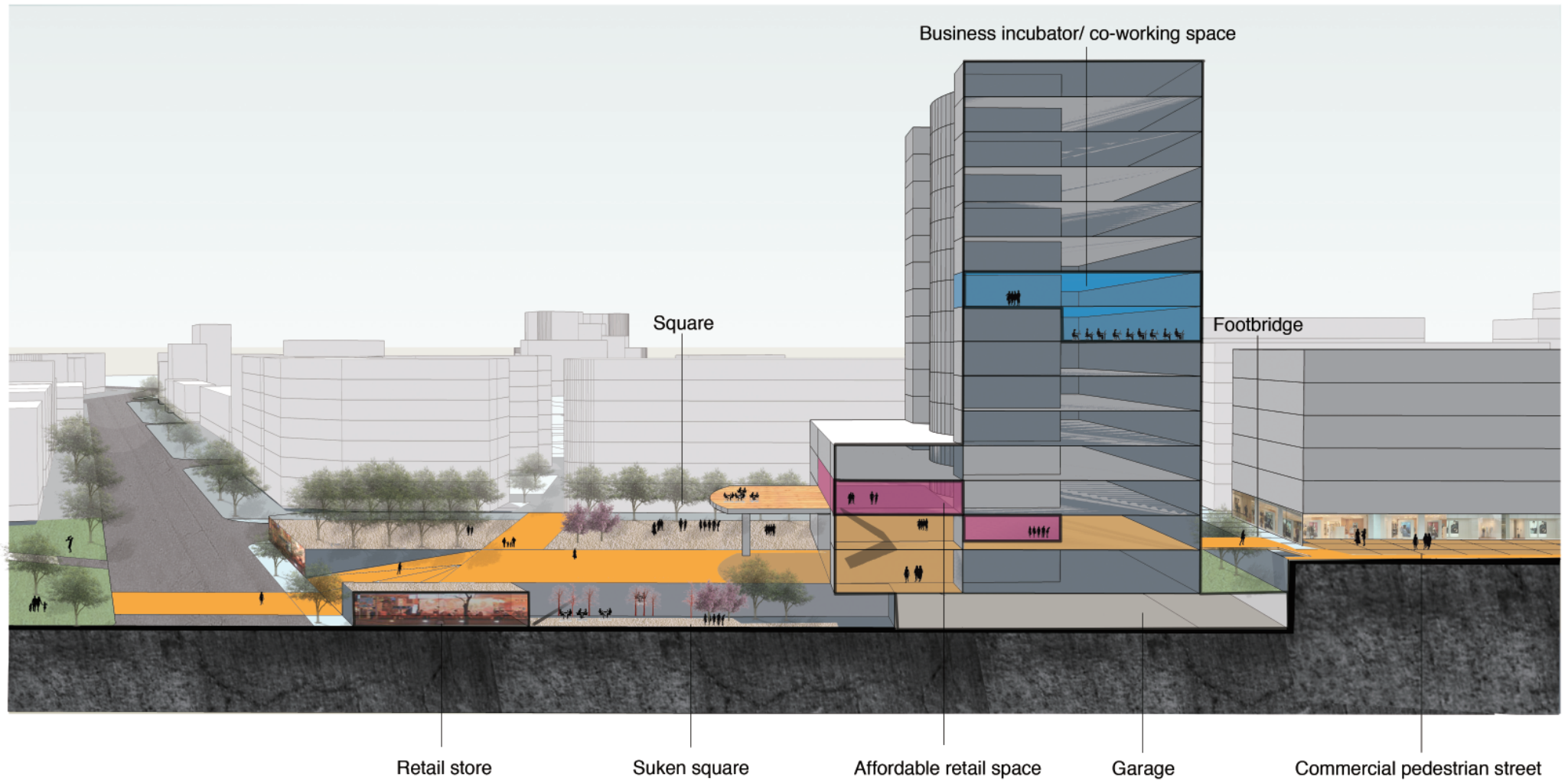
Street in industrial park before intervention



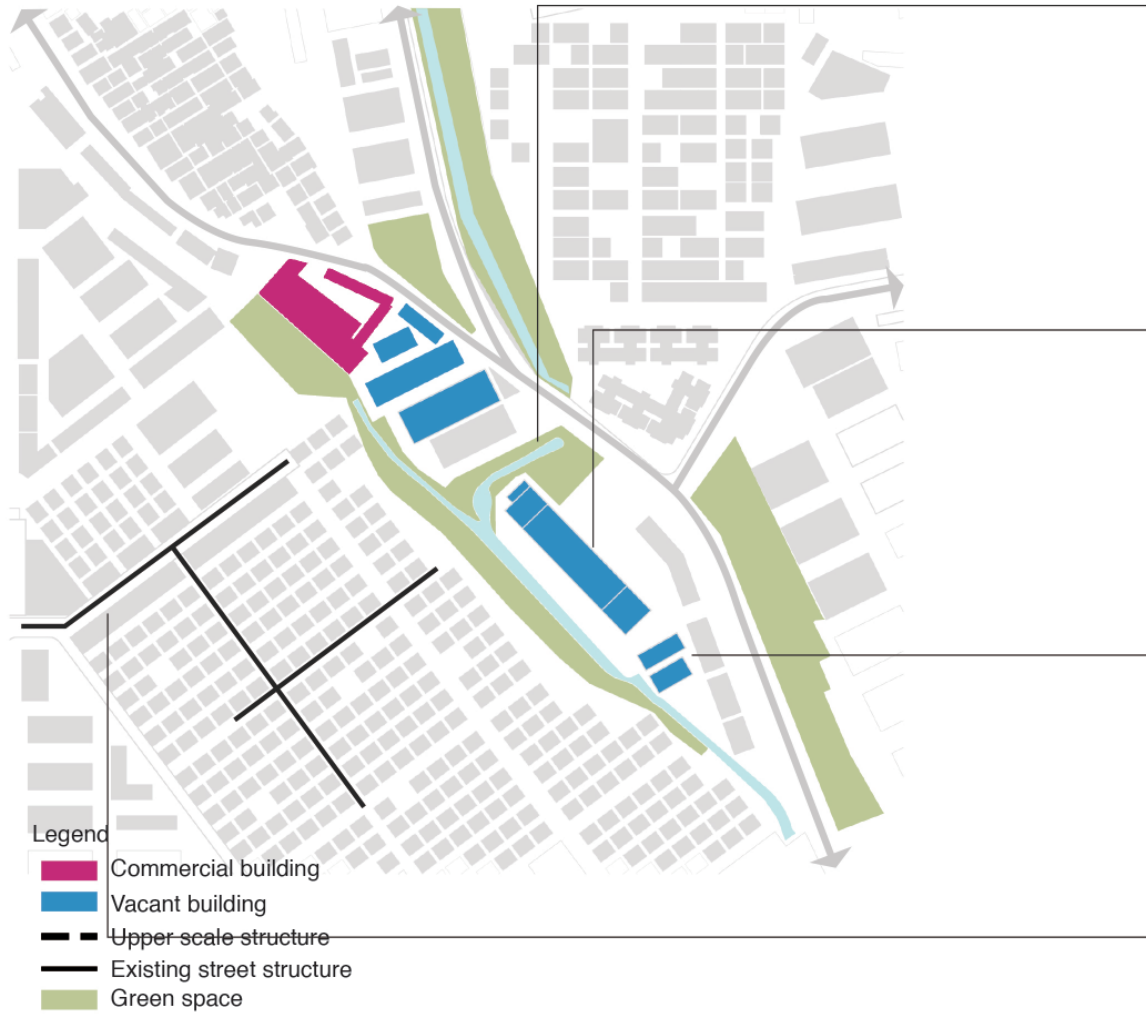
Pedestrian street after intervention



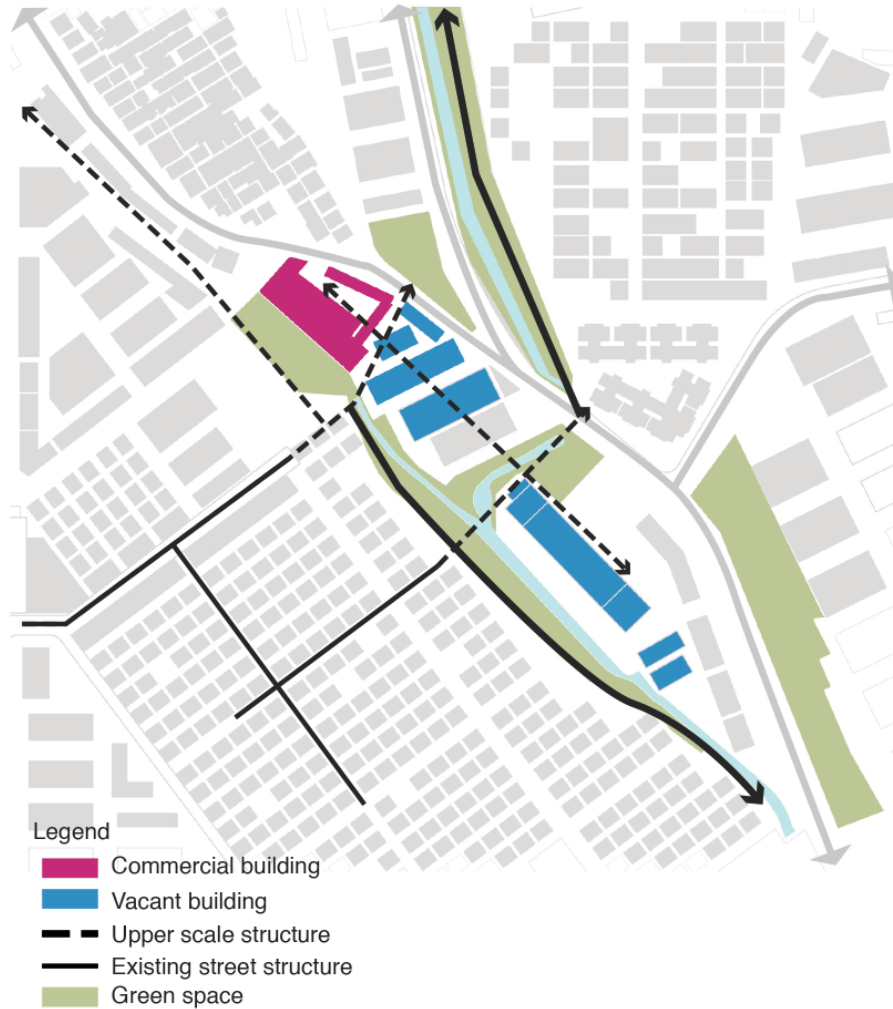
Key elements and design guidelines of vacant hotel



Current situation of neighborhood center



Upper scale structure & functional demand for a common vision



Commercial & residential development

- Catering
- Retailing
- Hotel
- Apartment, etc.

Community center

- Cultural center
- Training school
- Library, etc.

Affordable work-related space

- For starters into retailing:
- Retail stores
 - Vendors' space along waterfront pedestrian street

- For starters:
- Low-rent workplace
 - Training school, etc

Waterfront after intervention



Key elements and design guidelines



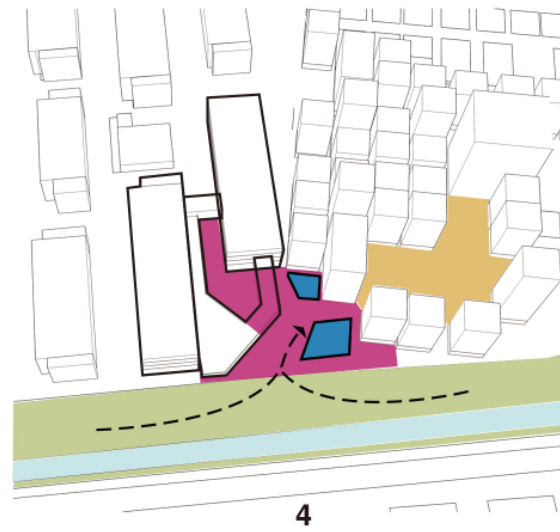
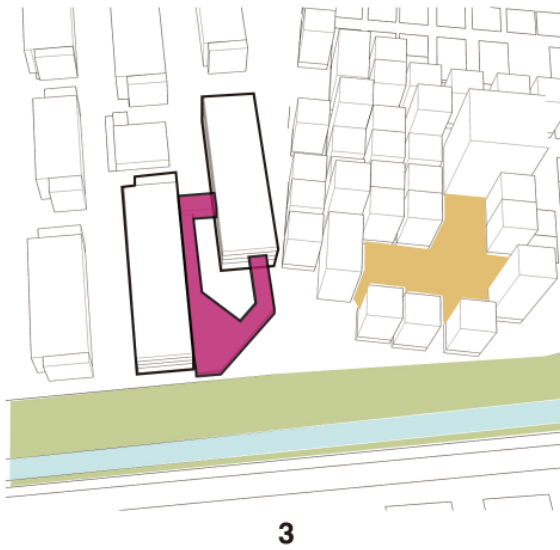
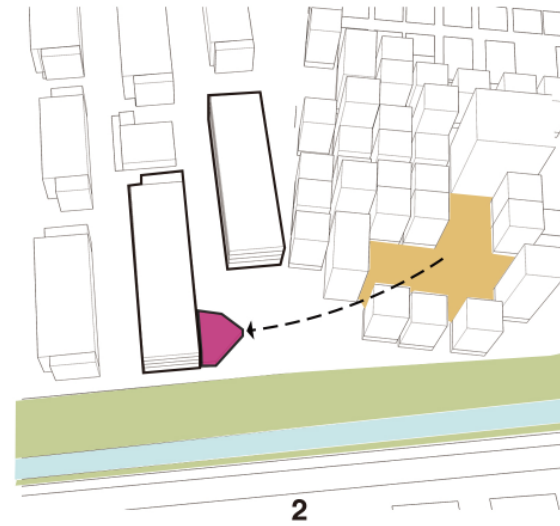
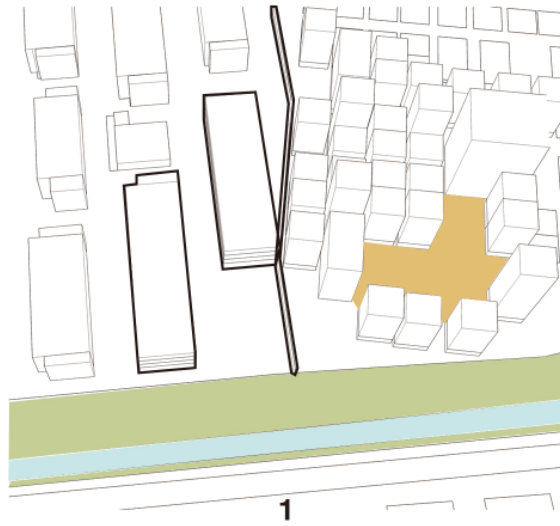
1 Renovation of waterfront

2 Footbridge & connection

3 Building for commercial use

4 Flexible space for vendors

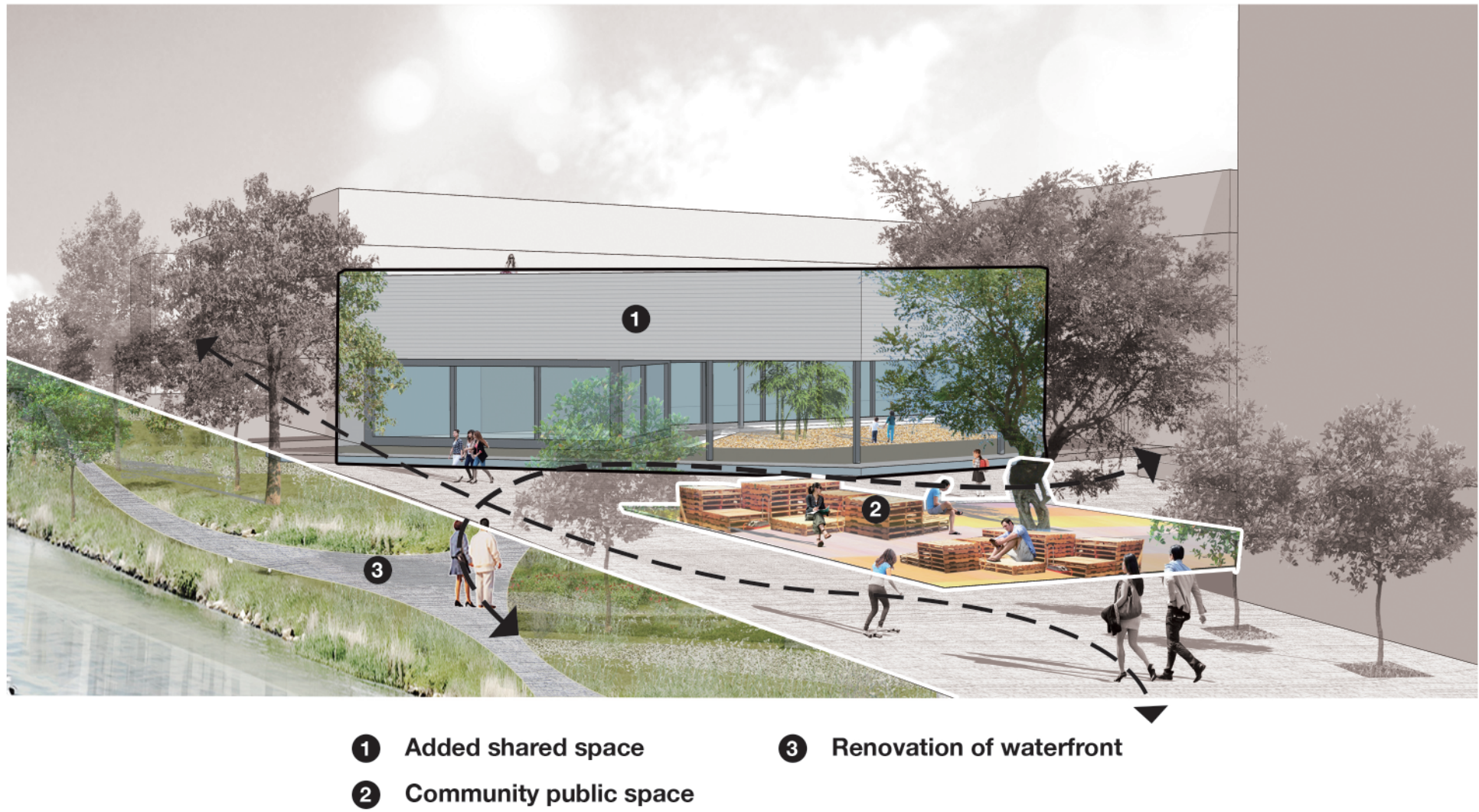
Bottom-up transformation of factories



Community space after intervention



Key elements and design guidelines



THANK YOU!