

REGENERATION FOR YOUNG GENERATION

PROMOTE LIVABILITY FOR YOUNG GRADUATES THROUGH URBAN REGENERATION IN SHENZHEN

Graduation studio Planning Complex Cities

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First mentor Dr. Lei Qu
Second mentor Dr. Tanja Herdt

Date 23.06.2022

CONTEXT
ECONOMIC
Growth

METHODOLOGY

NEWS

THEORETICAL FRAMEWORK

ANALYSIS

STRATEGY PROPOSAL

IMPLEMENTATION

Motivation: Chinese young people become a 'lay-flat' generation



Trend-Affordable rental housing plan targeting young people : Providing affordable well-located housing



ENGLISH.GOV.CN

THE STATE COUNCIL
THE PEOPLE'S REPUBLIC OF CHINA

HOME

STATE COUNCIL

PREMIER

NEWS

POLICIES

HOME >> NEWS >> POLICY BRIEFINGS

Rental housing plan targets young people

Zhao Yimeng

Updated: Jul 09, 2021 09:16 China Daily

Source: http://english.www.gov.cn/news/pressbriefings/202107/09/content_WS60e7a382c6d0df57f98dca52.html

"A new guideline aimed at accelerating the **development of affordable rental housing** is poised to ease the pressure on **new urban residents and young people**,"

"The new guideline underscores the need for multiple investors and channels for the supply of affordable rental housing and encourages them to use the **stock of land resources**,"

"Different from cheap public rental housing provided for low-income tenants, which is mainly located on city outskirts, ...the housing should be **located in downtown areas with convenient transportation**."

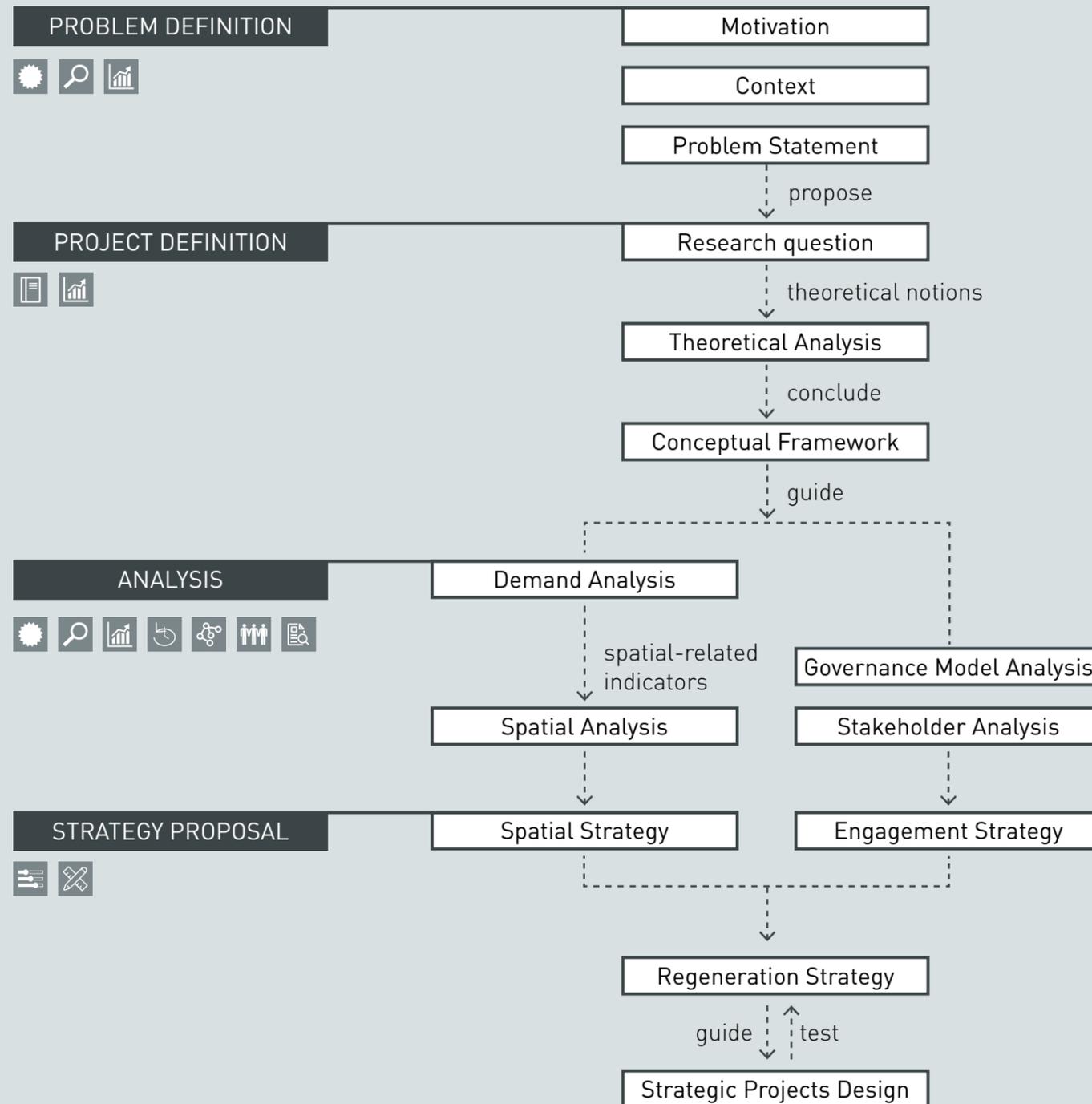
Challenge to spatial design and governance, often accompanied by residential displacement.



Research question

How to facilitate the implementation of **urban regeneration** in an **inclusive approach** to enhance **livability** for young graduates?

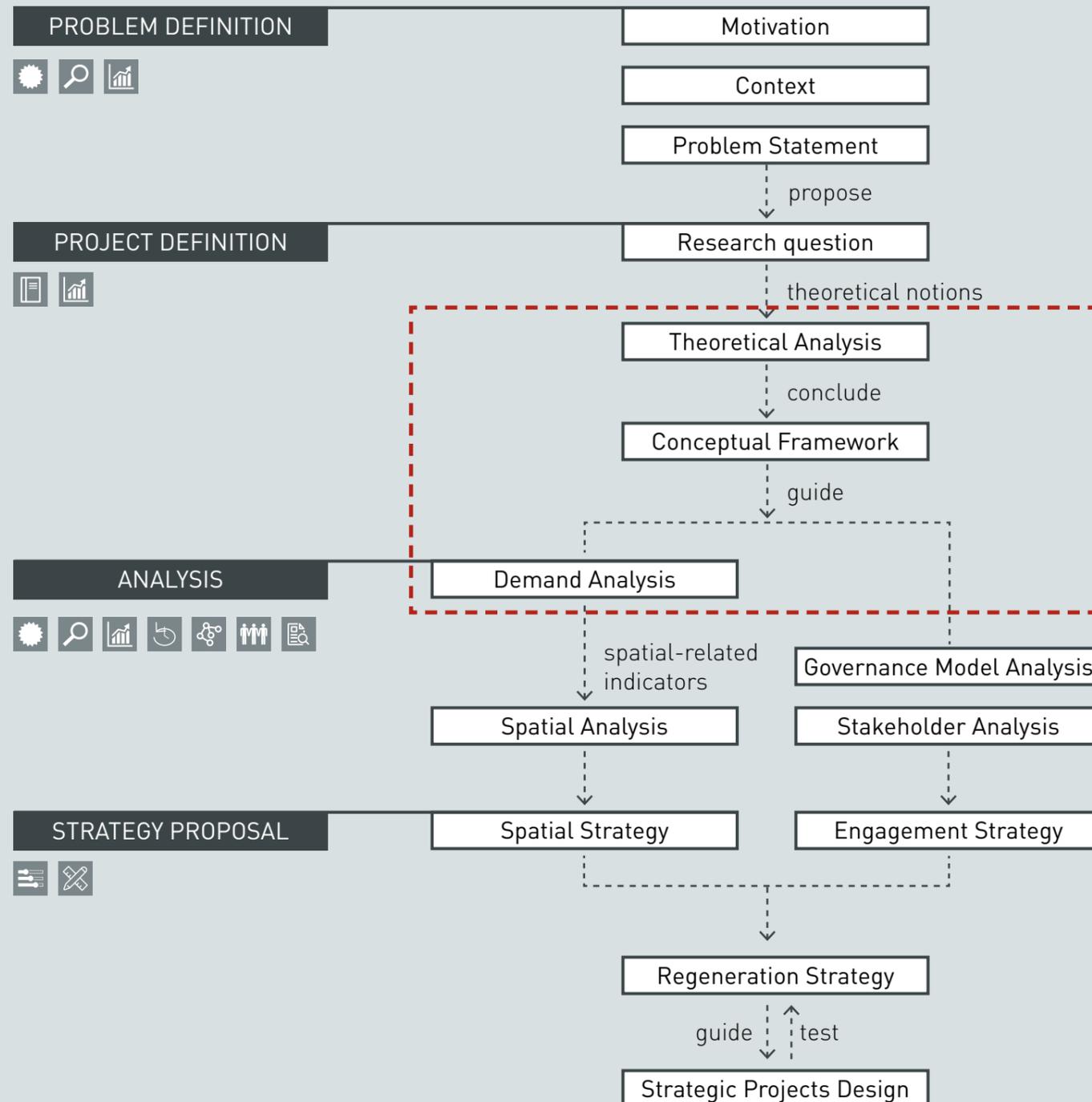
Methodology



Methods Used

-  Literature Review
-  Case study
-  Mapping
-  Reference Review
-  Stakeholder Analysis
-  Design
-  Data Collection
-  Historical Review
-  Scenario Building
-  Data Analysis

Methodology



Envision the preferable future

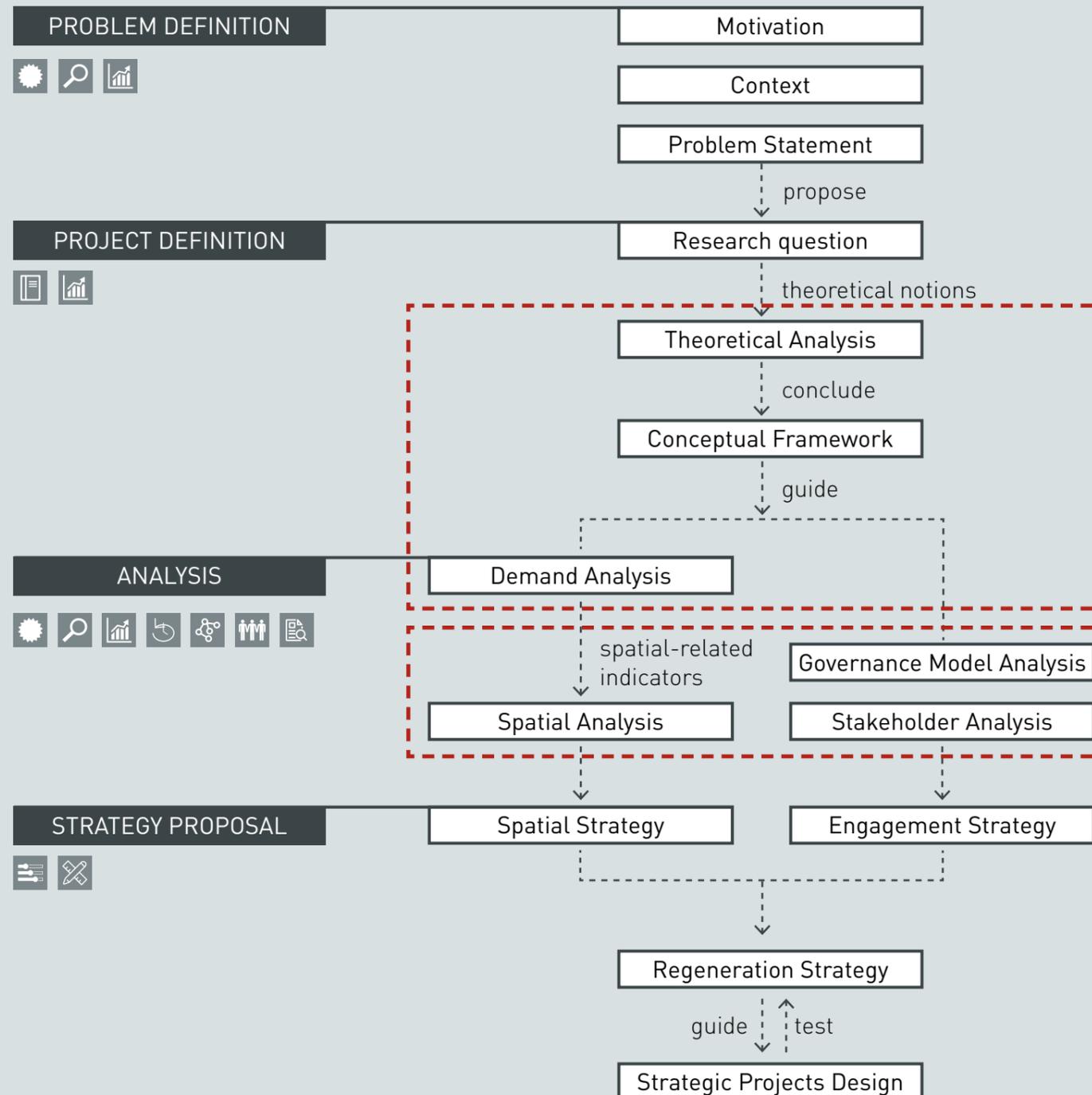
What is the goal?

What are the demands and expectations?

Methods Used

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Methodology



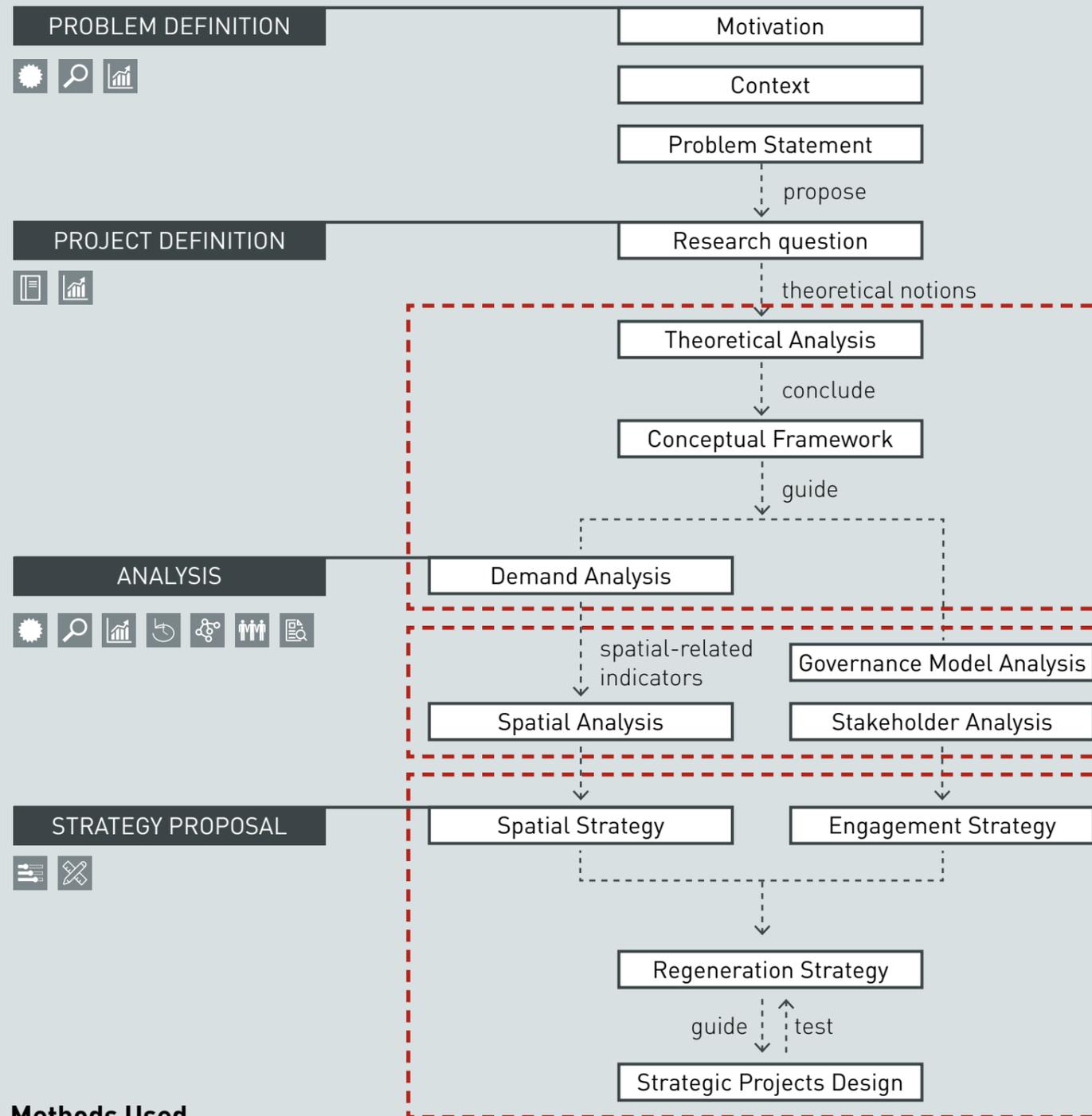
Envision the preferable future
 What is the goal?
 What are the demands and expectations?

Evaluate the current situation
 What should to be reserved/ transformed?

Methods Used

- Literature Review
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Methodology



Envision the preferable future

What is the goal?
What are the demands and expectations?

Evaluate the current situation

What should to be reserved/ transformed?

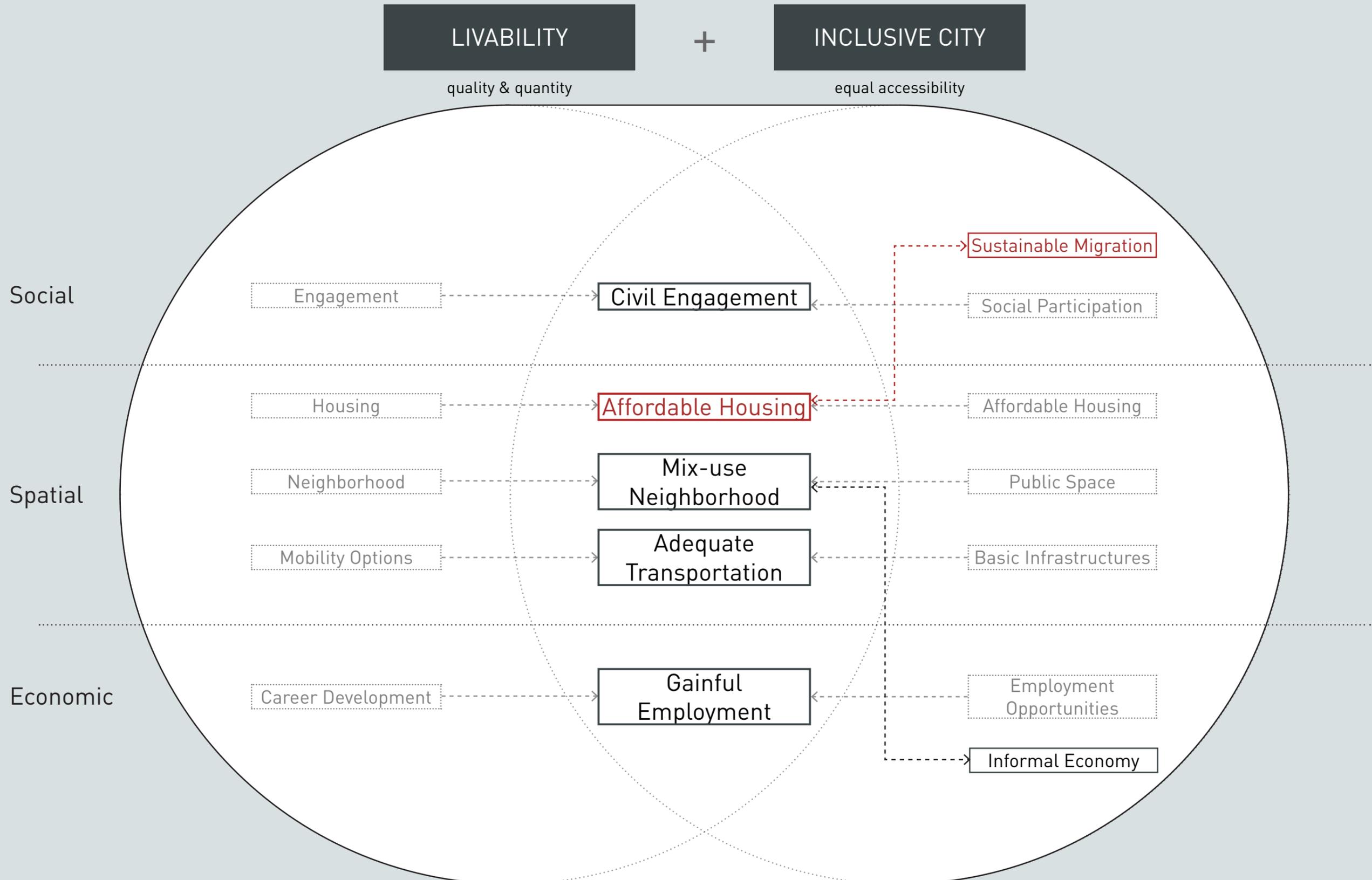
Mend the gap between current situation & preferable future

How to regenerate?

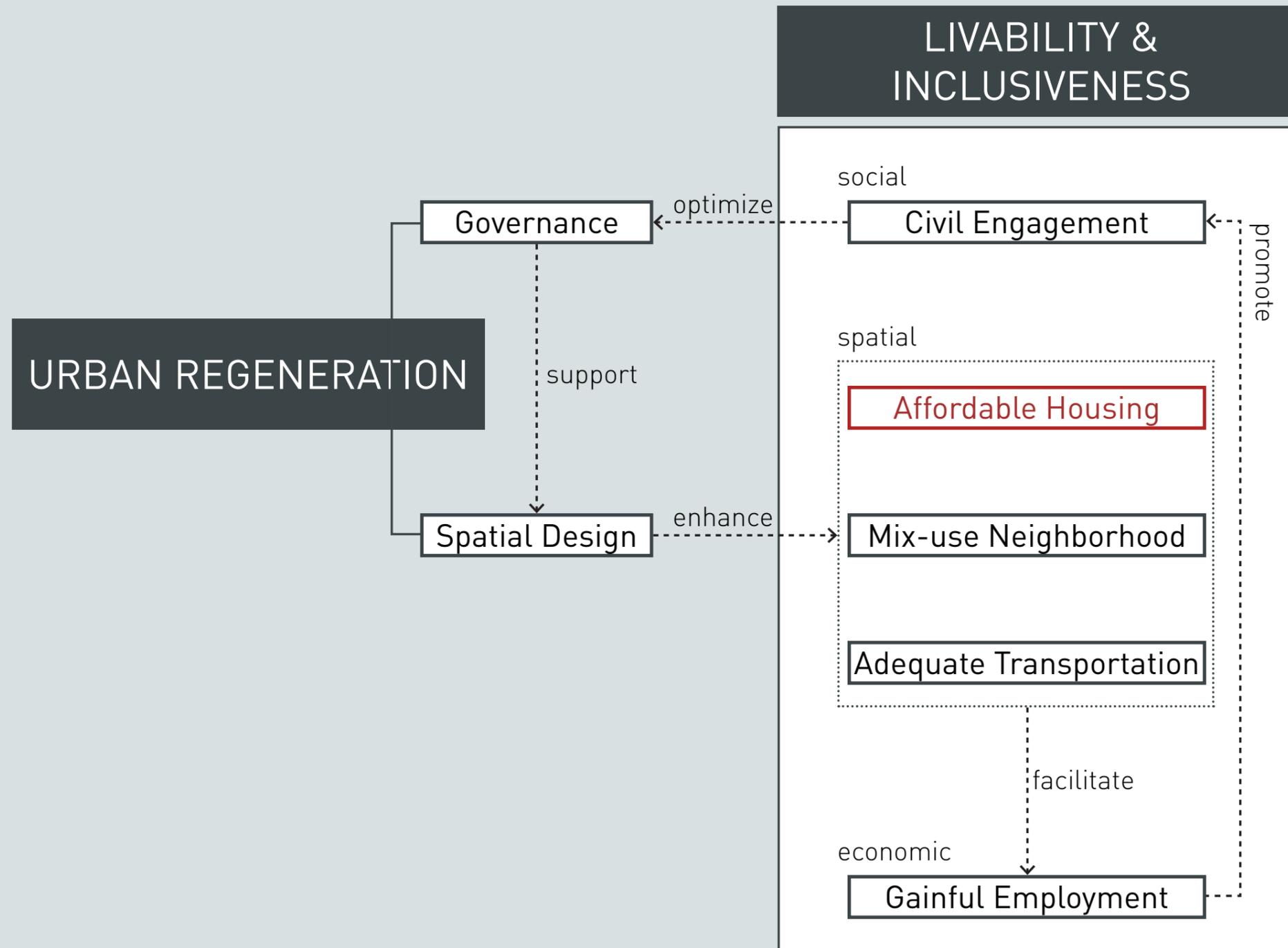
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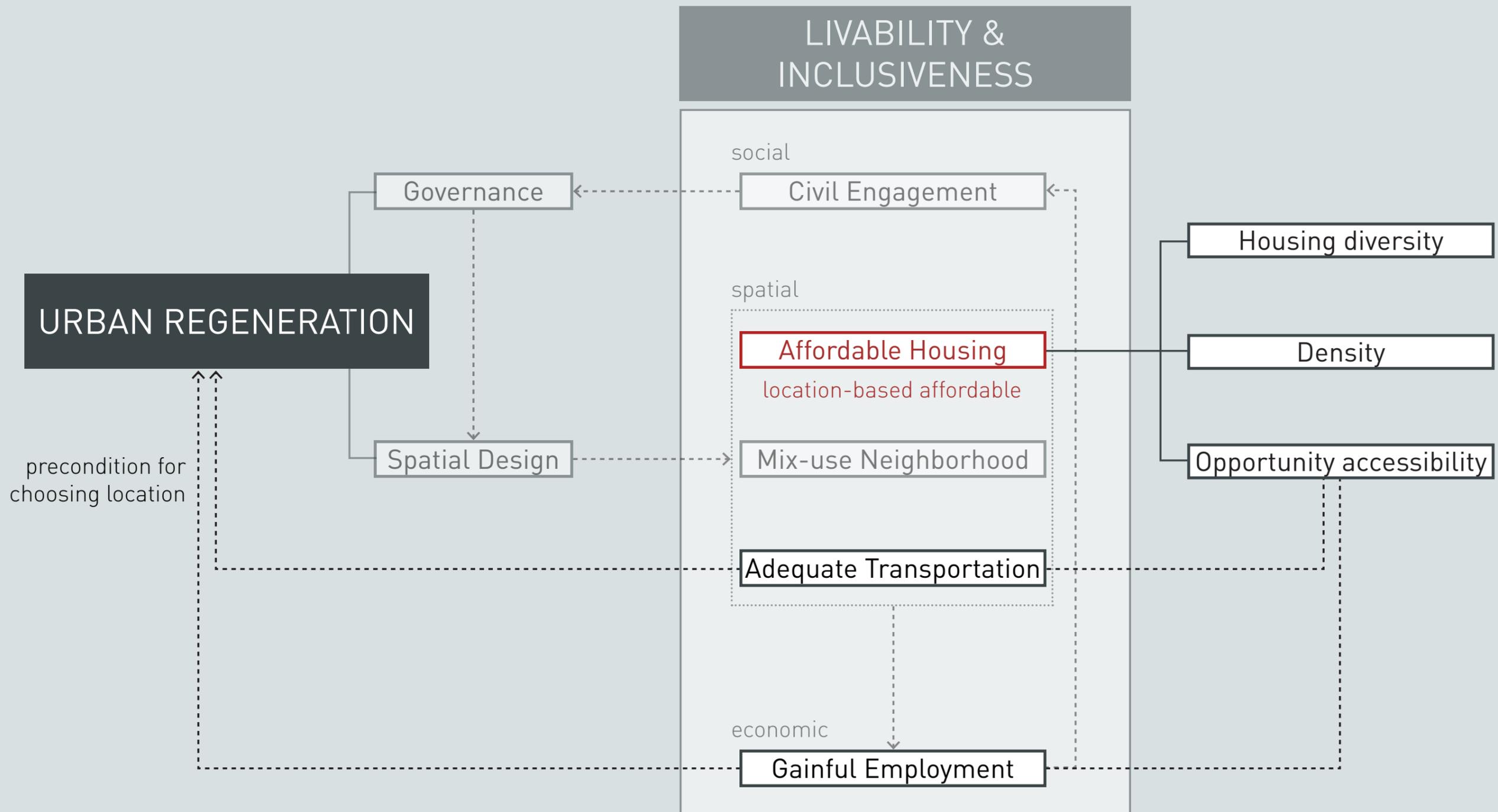
Theoretical Notion: Two notions share similar indicators with different focuses



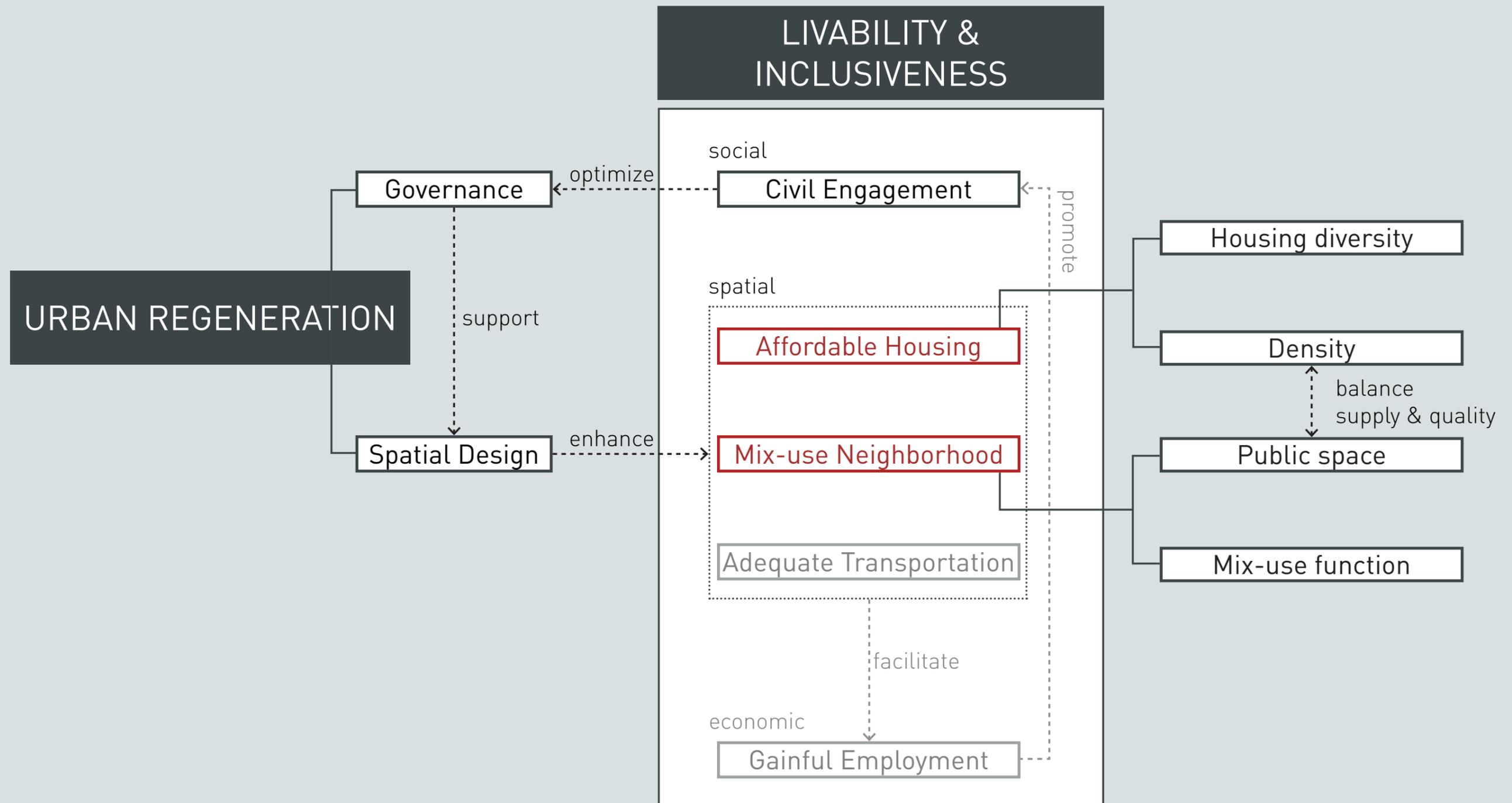
Conceptual Framework



Conceptual Framework



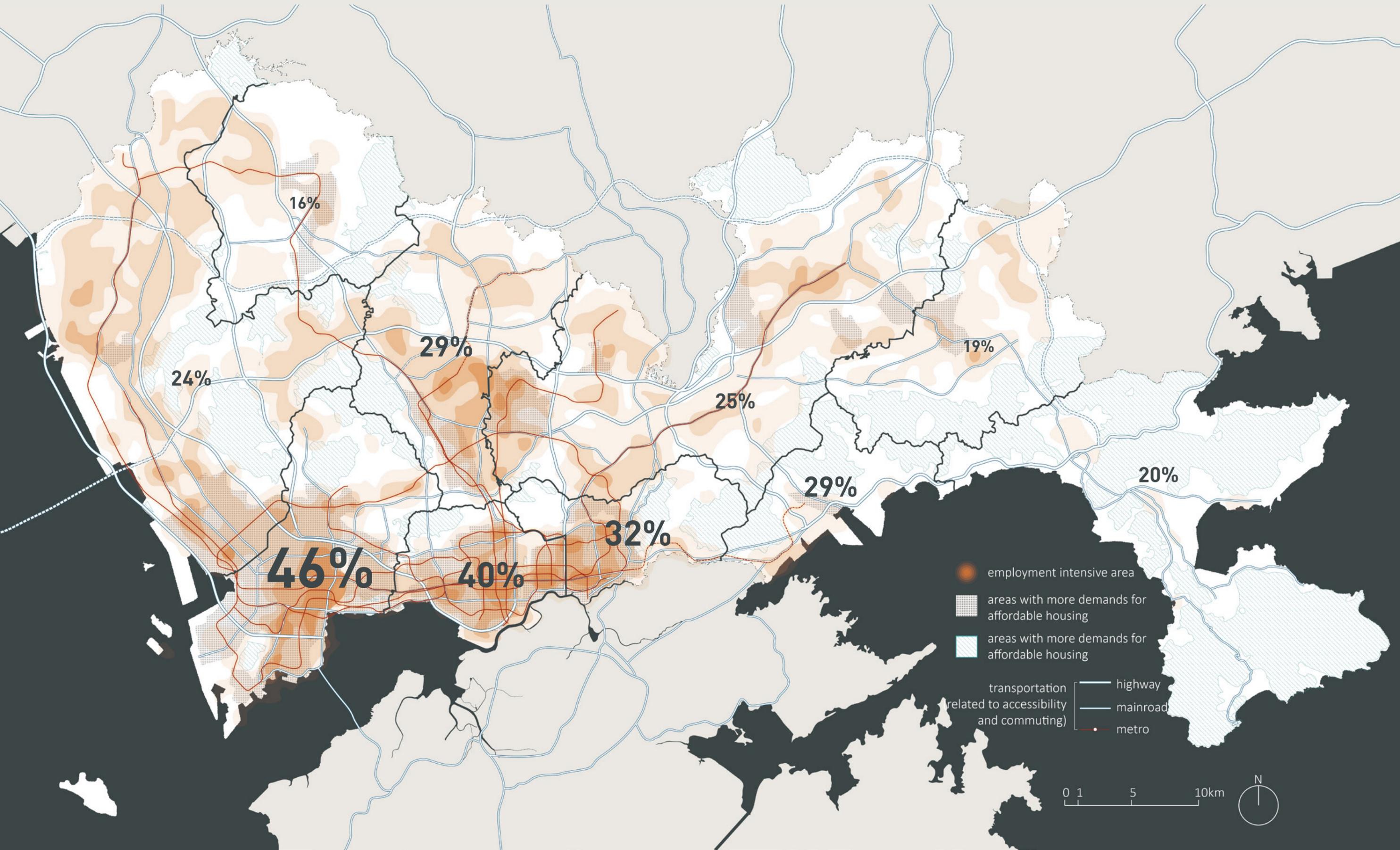
Conceptual Framework



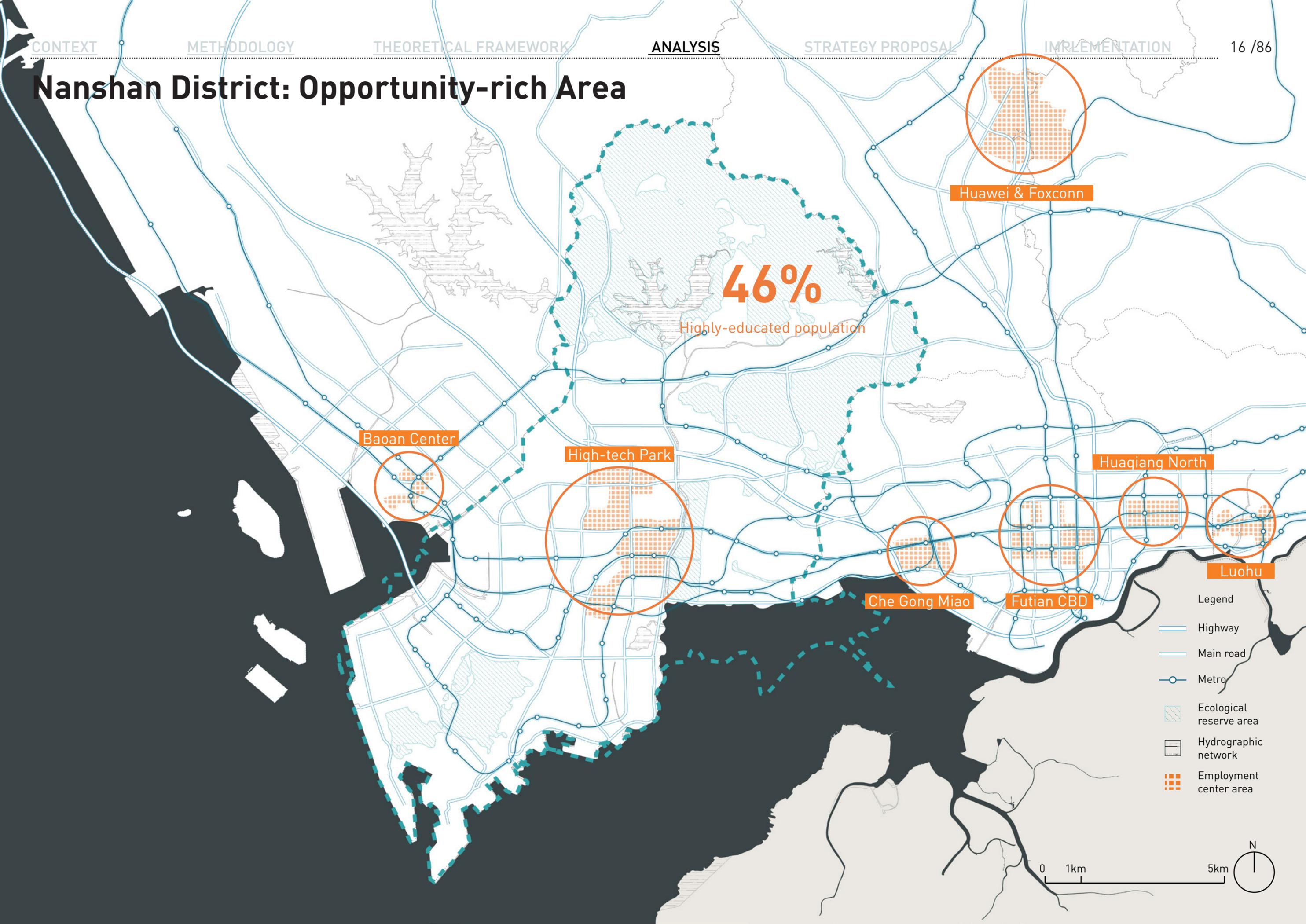
WHERE ARE THE POTENTIAL?

Spatial Analysis - City & District Scale

Spatial Analysis: Opportunity-rich Area



Nanshan District: Opportunity-rich Area



46%

Highly-educated population

Huawei & Foxconn

Baoan Center

High-tech Park

Huaqiang North

Che Gong Miao

Futian CBD

Luohu

Legend

Highway

Main road

Metro

Ecological reserve area

Hydrographic network

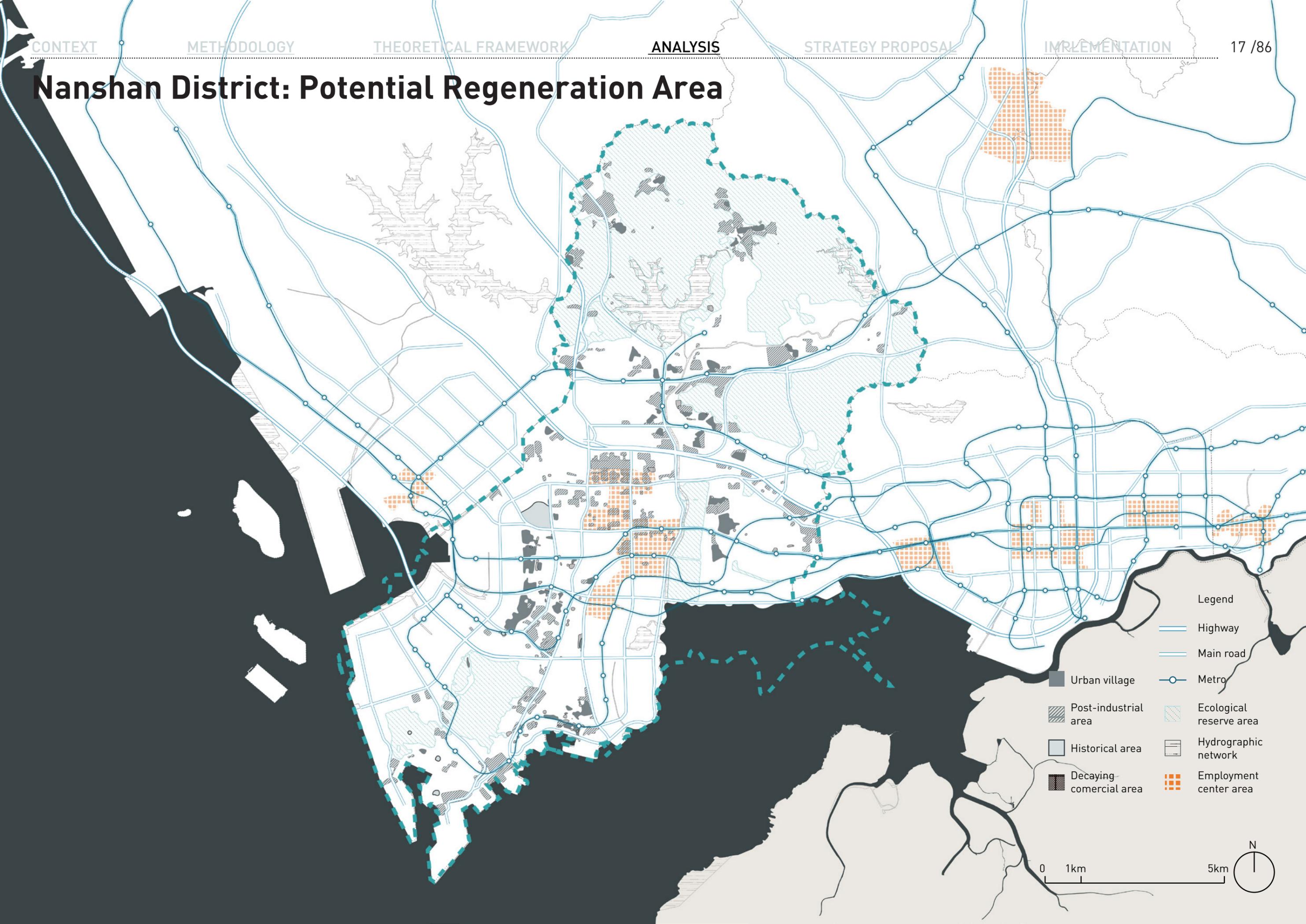
Employment center area

0 1km

5km

N

Nanshan District: Potential Regeneration Area



Legend

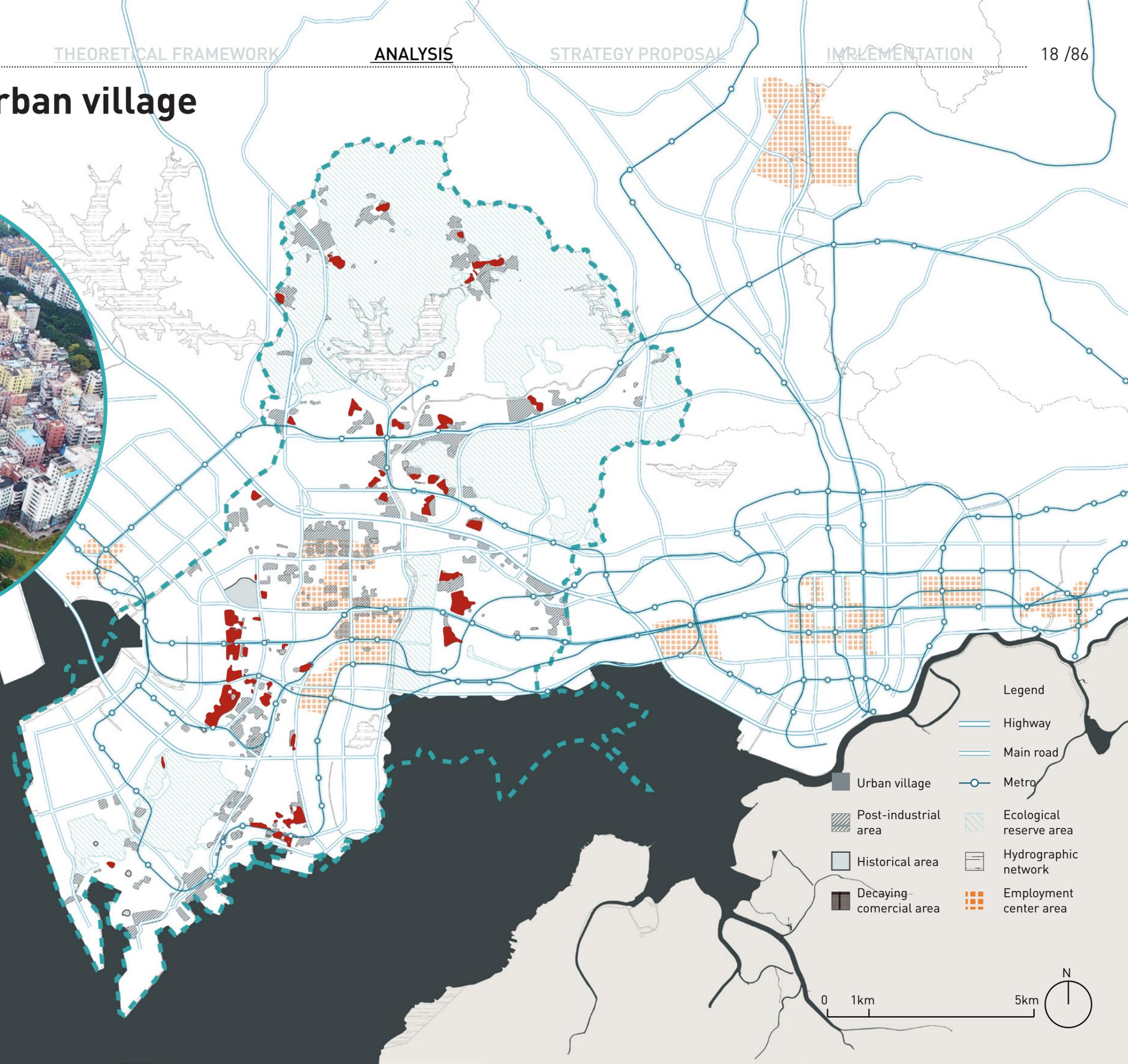
- Highway
- Main road
- Metro
- Urban village
- Post-industrial area
- Historical area
- Decaying commercial area
- Ecological reserve area
- Hydrographic network
- Employment center area

0 1km

5km



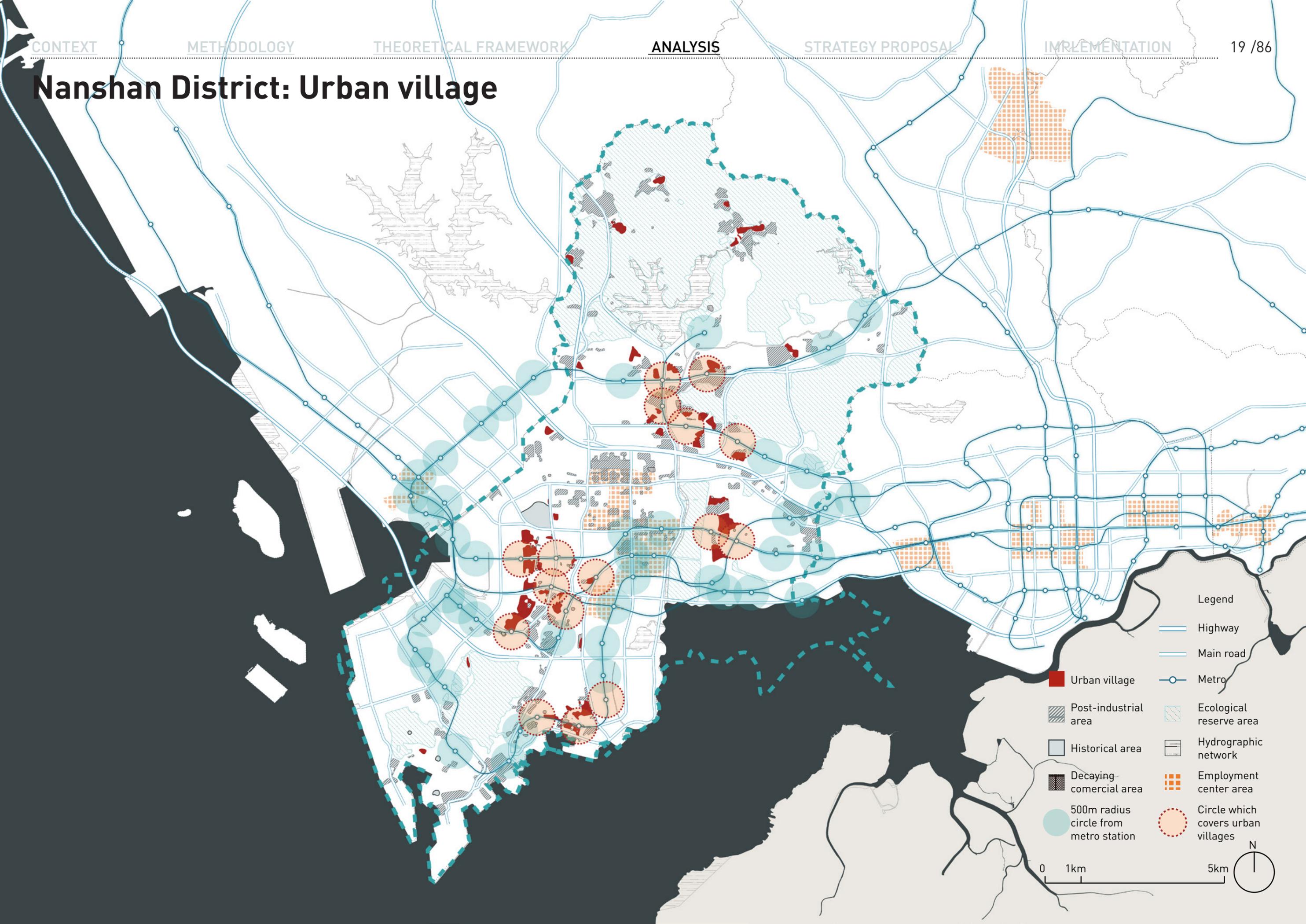
Nanshan District: Urban village



- Legend
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Nanshan District: Urban village



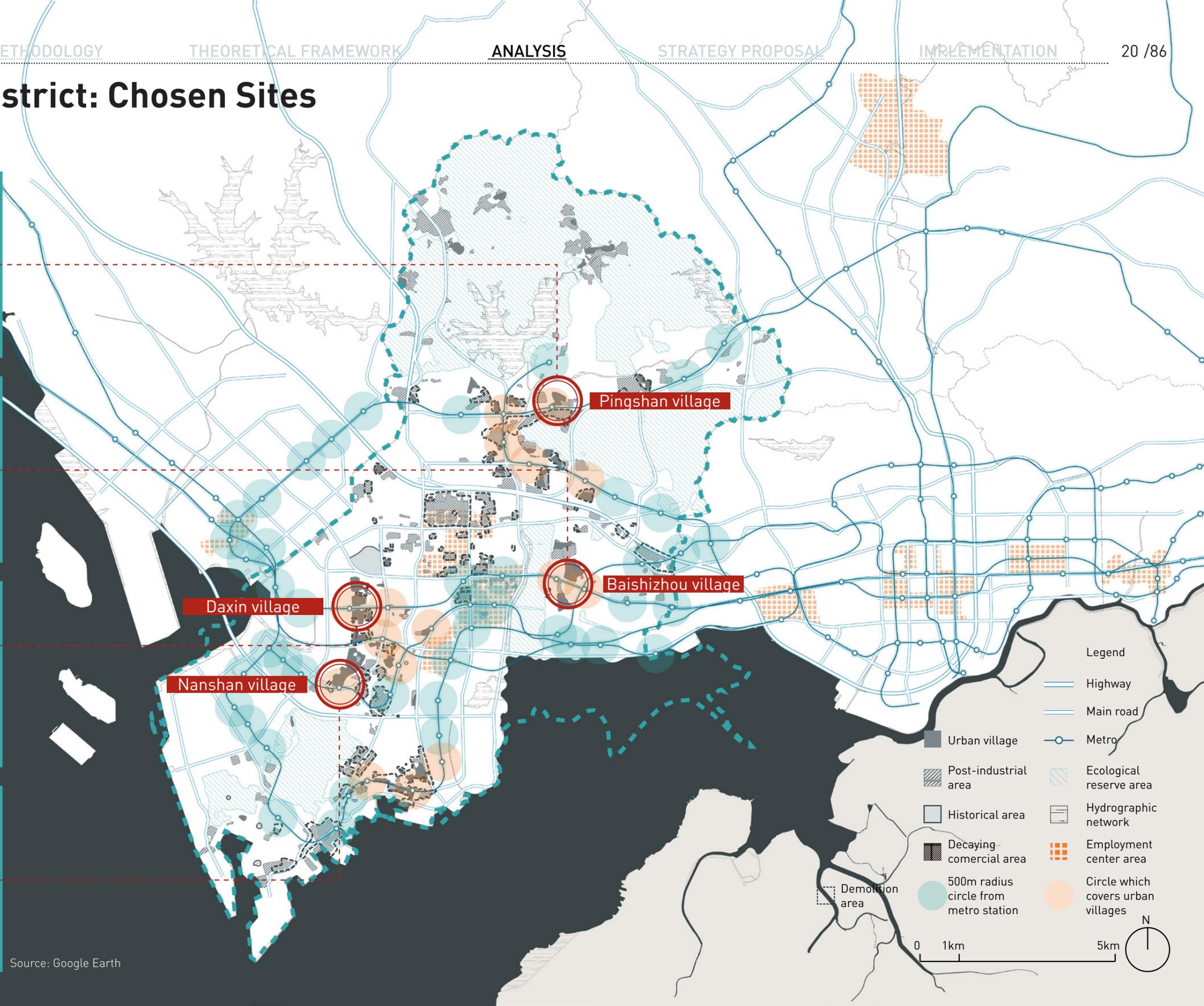
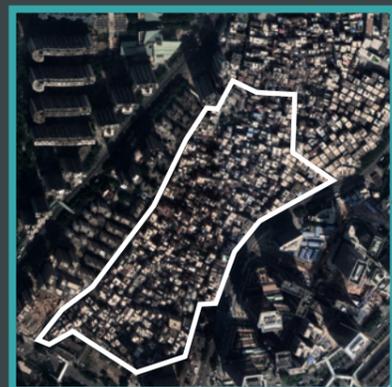
Legend

- Highway
- Main road
- Metro
- Urban village
- Post-industrial area
- Historical area
- Decaying-commercial area
- 500m radius circle from metro station
- Circle which covers urban villages
- Ecological reserve area
- Hydrographic network
- Employment center area

0 1km 5km



Nanshan District: Chosen Sites



Daxin village

Pingshan village

Baishizhou village

Nanshan village

Legend

- Highway
- Main road
- Metro
- Urban village
- Post-industrial area
- Historical area
- Decaying-commercial area
- Demolition area
- Ecological reserve area
- Hydrographic network
- Employment center area
- Circle which covers urban villages

0 1km 5km

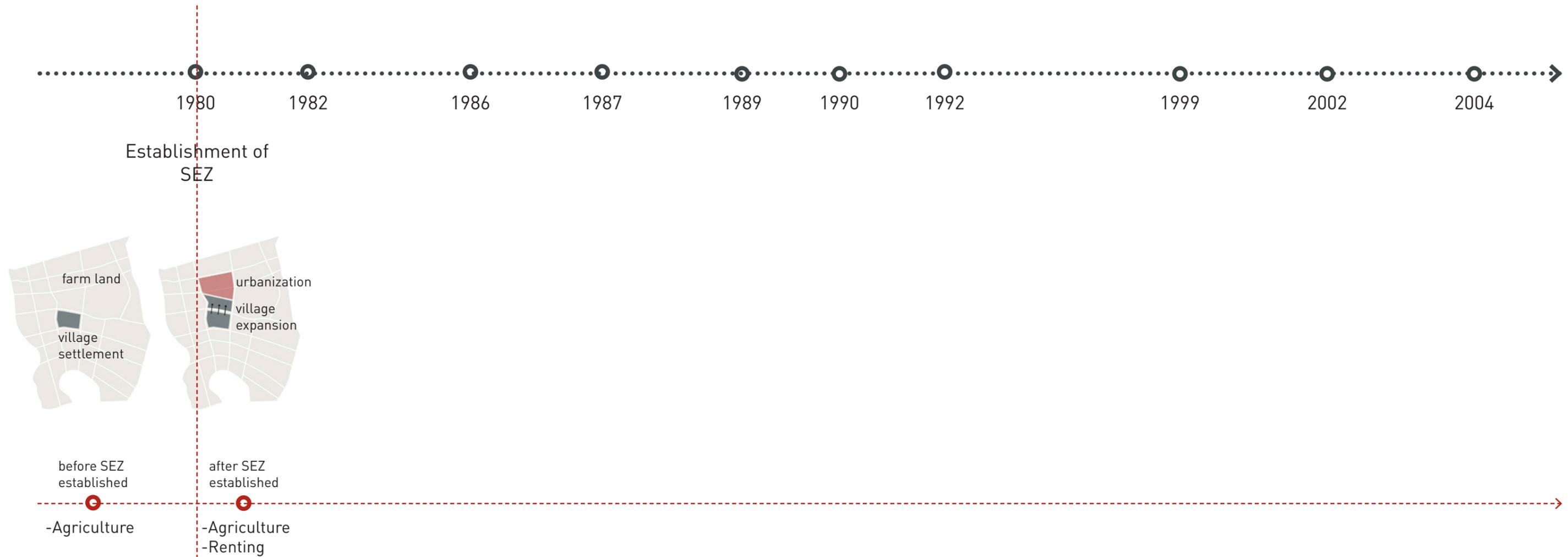
N

Source: Google Earth

HOW DO URBAN VILLAGES LOOK LIKE?

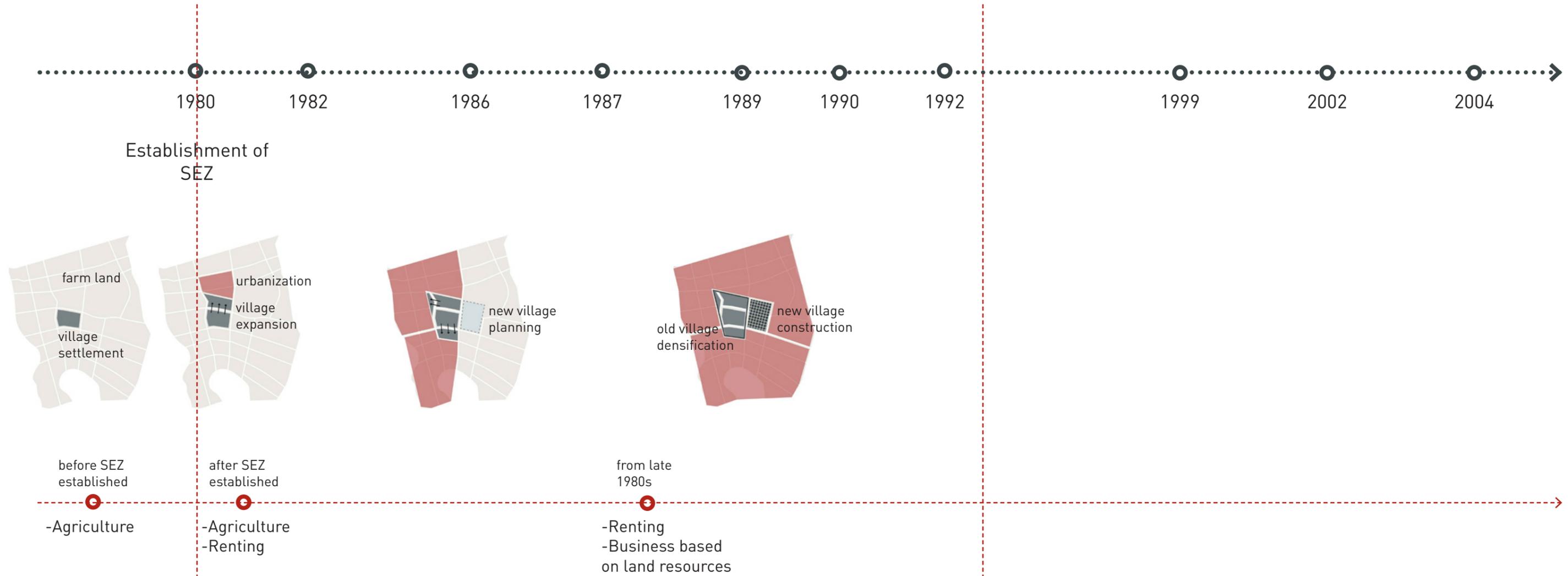
Spatial Evaluation - Local Scale

Historical Development: Urban villages are providing affordable well-located housing for migrant workers

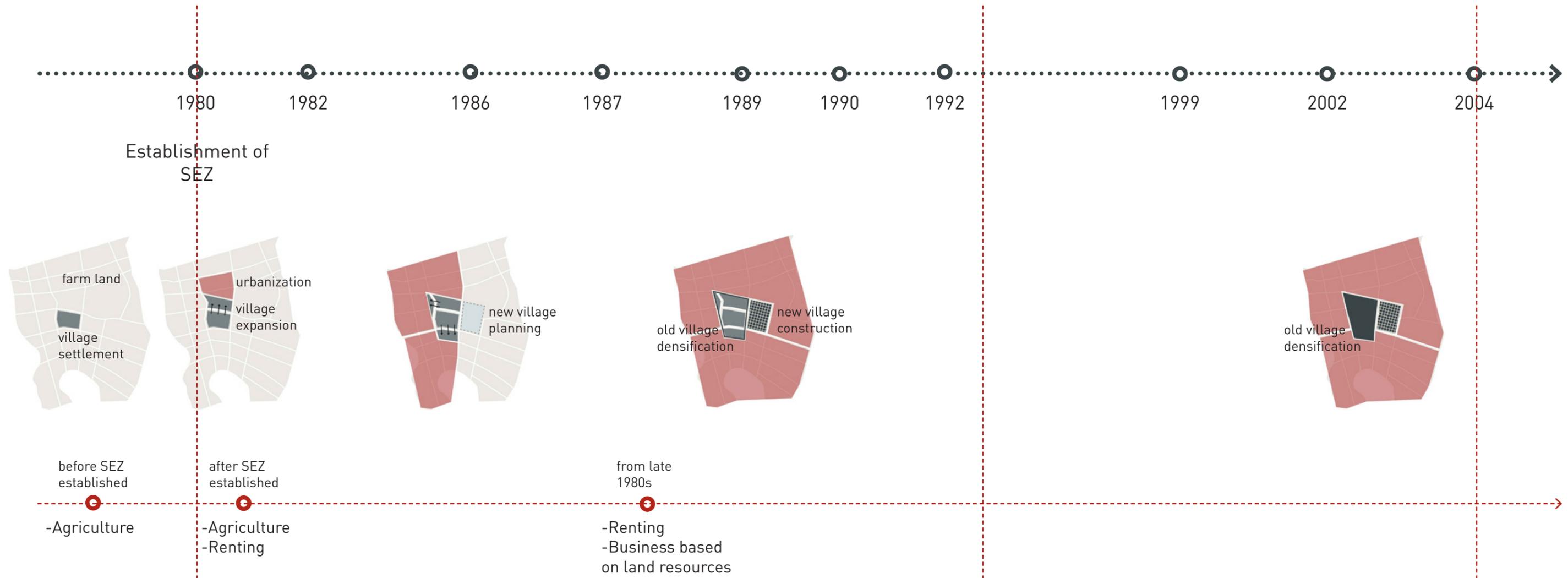


Source: https://www.sohu.com/a/230394490_355757

Historical Development: Urban villages are providing affordable well-located housing for migrant workers



Historical Development: Urban villages are providing affordable well-located housing for migrant workers



Demands Analysis: Can they satisfy the demand and expectation of young graduates?



Report of Rental Market in Graduation Season

Source: <https://www.meadin.com/yj/230513.html>



New Youth Ideal Housing Survey Report

Source: <https://research.ke.com/121/ArticleDetail?id=457>

From theory	From report		Conclude: spatial element	
transportation	metro station		metro station	
employment	(distance to) work place		office buildings	
housing	construction year		housing typology	
	distance between buildings			
	building quality			
neighborhood	surrounding environment	play ground	play ground	
		green space	green space	
		park	park	
	commercial area	food street	commercial street inside the village	
		supermarket		
		salon		
		commercial center		shopping mall
		entertainment center		
		gymnasium		
	educational institution	kingdagarten	kingdagarten	
			school	
	Others	parking lot	parking lot	
		bank and post office	bank and post office	
hospital		hospital		

Distance to job and transportation

Building form

Surrounding environment

Living facilities

Spatial Evaluation

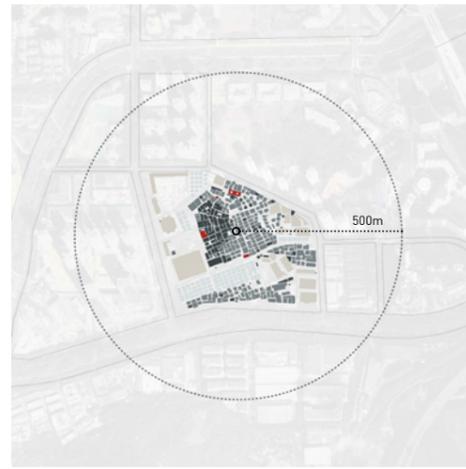
Distance to job and transportation

Building form

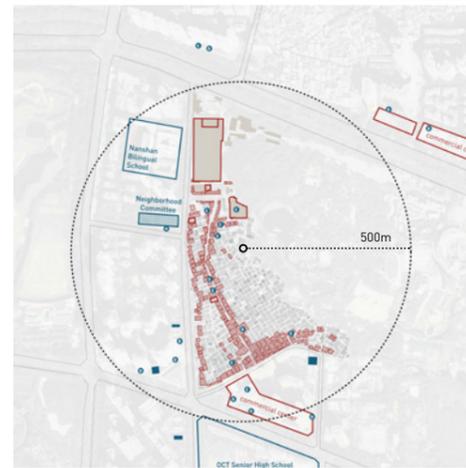
Surrounding environment

Living facilities

Pingshan village



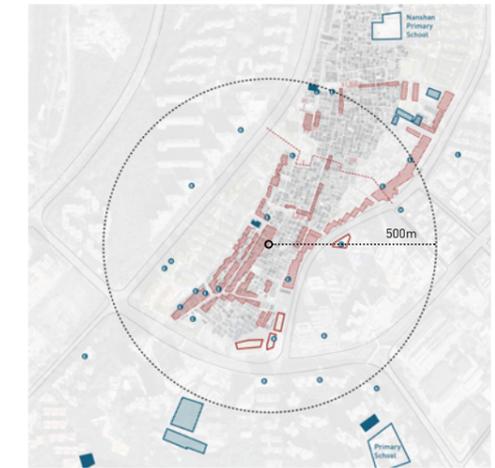
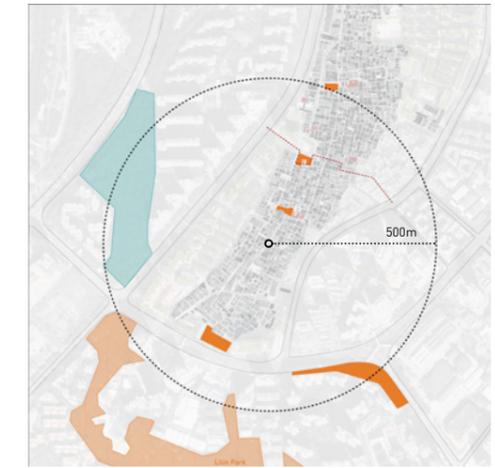
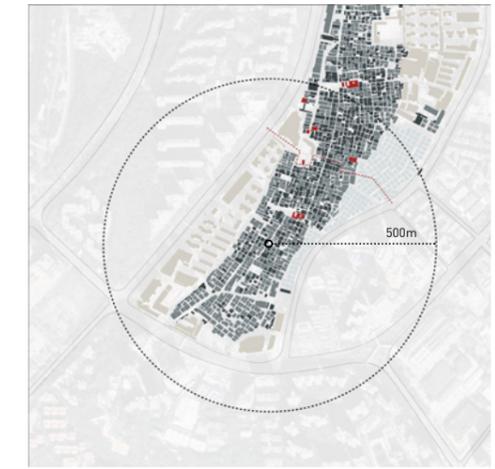
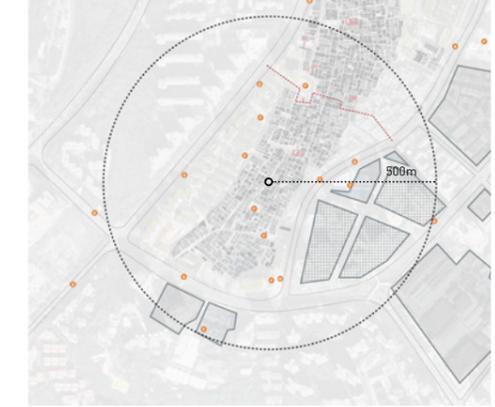
Baishizhou village



Daxin village



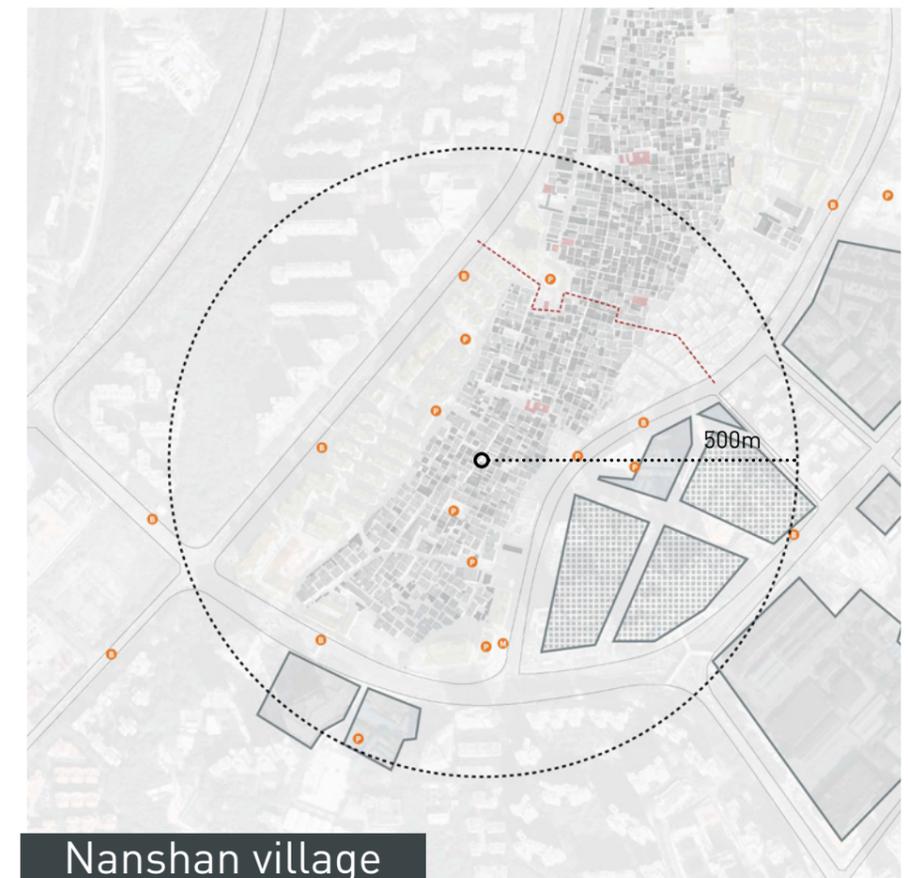
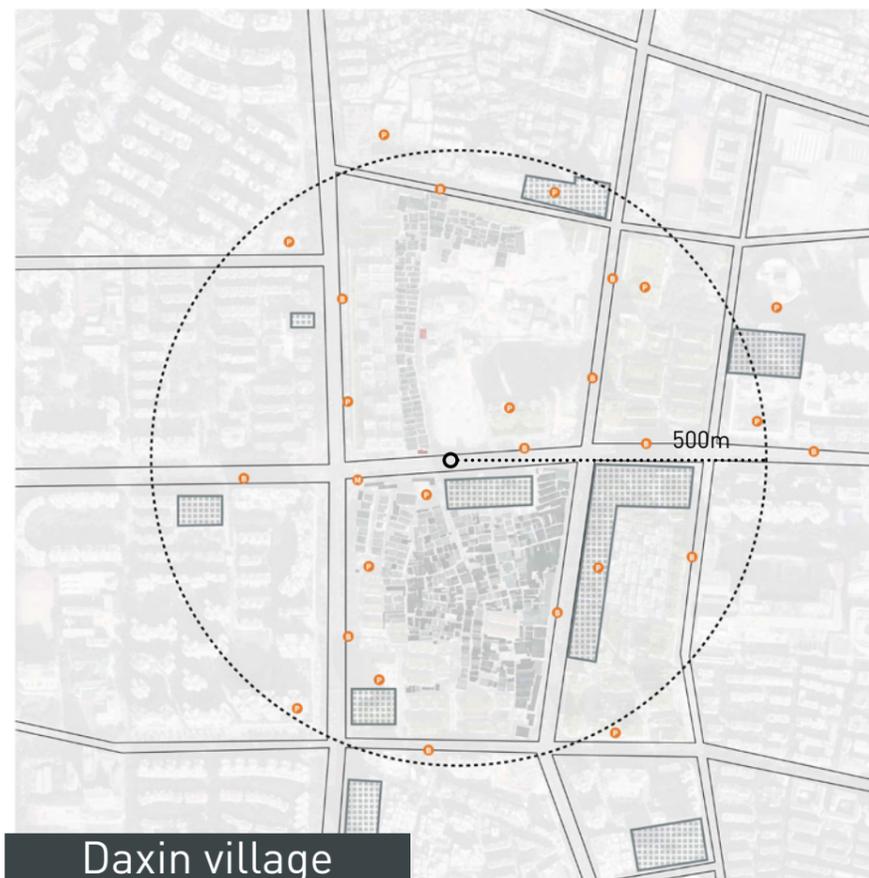
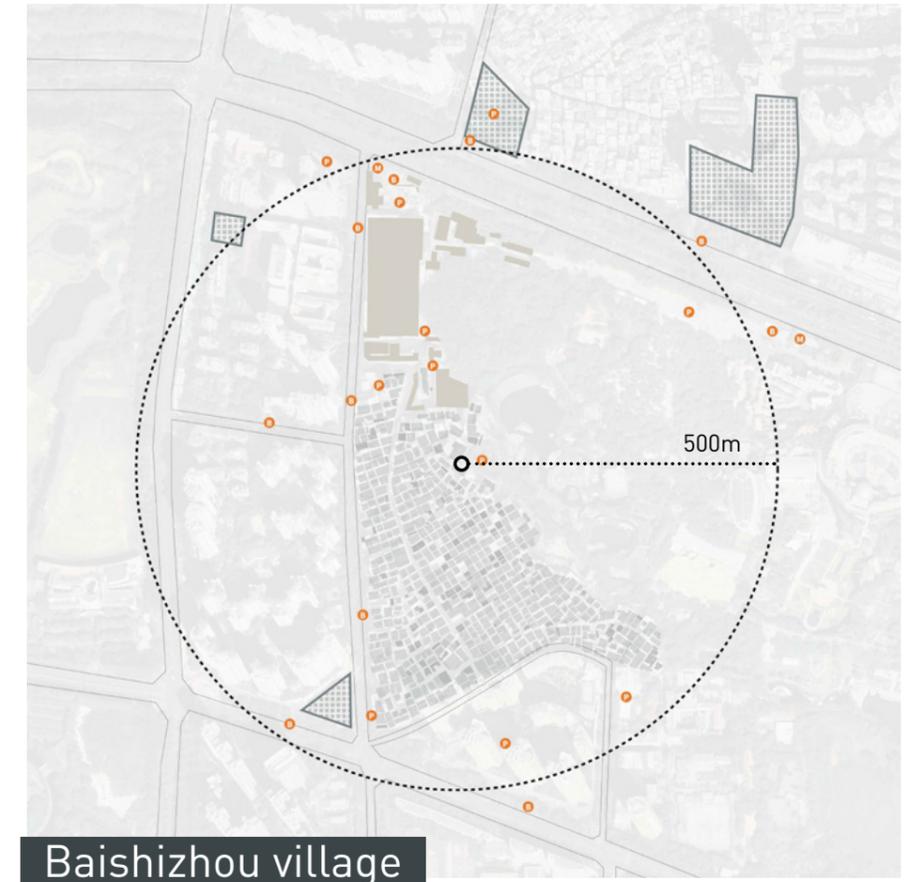
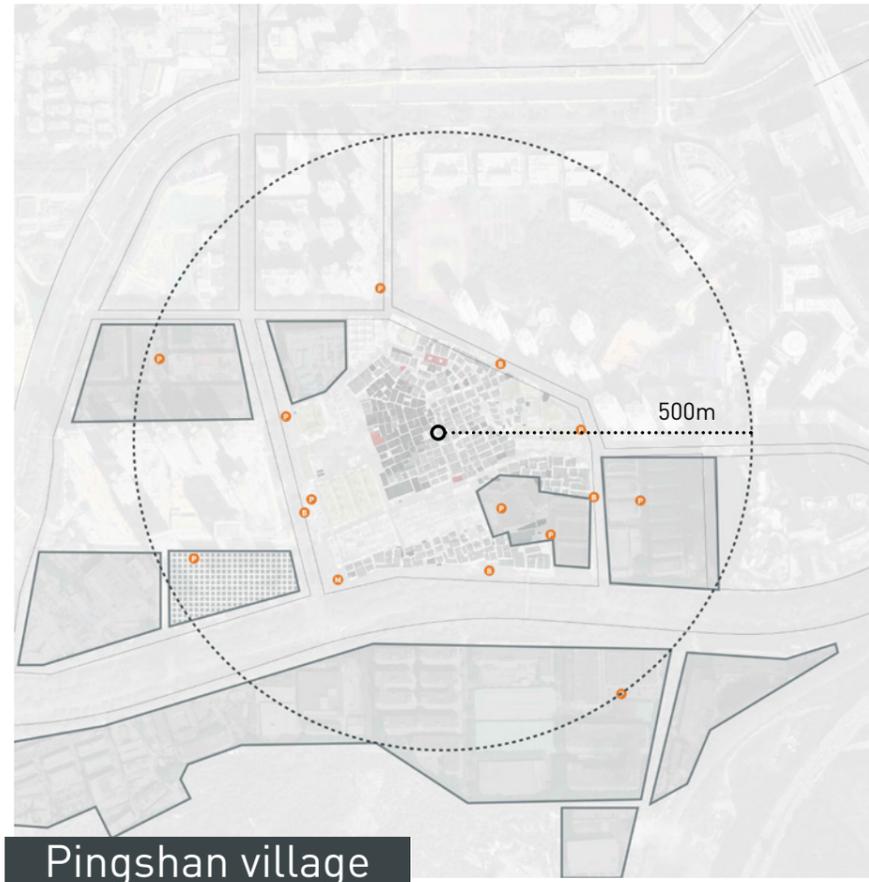
Nanshan village



Conclusion

Distance to job and transportation

· Well-located with great opportunity accessibilities

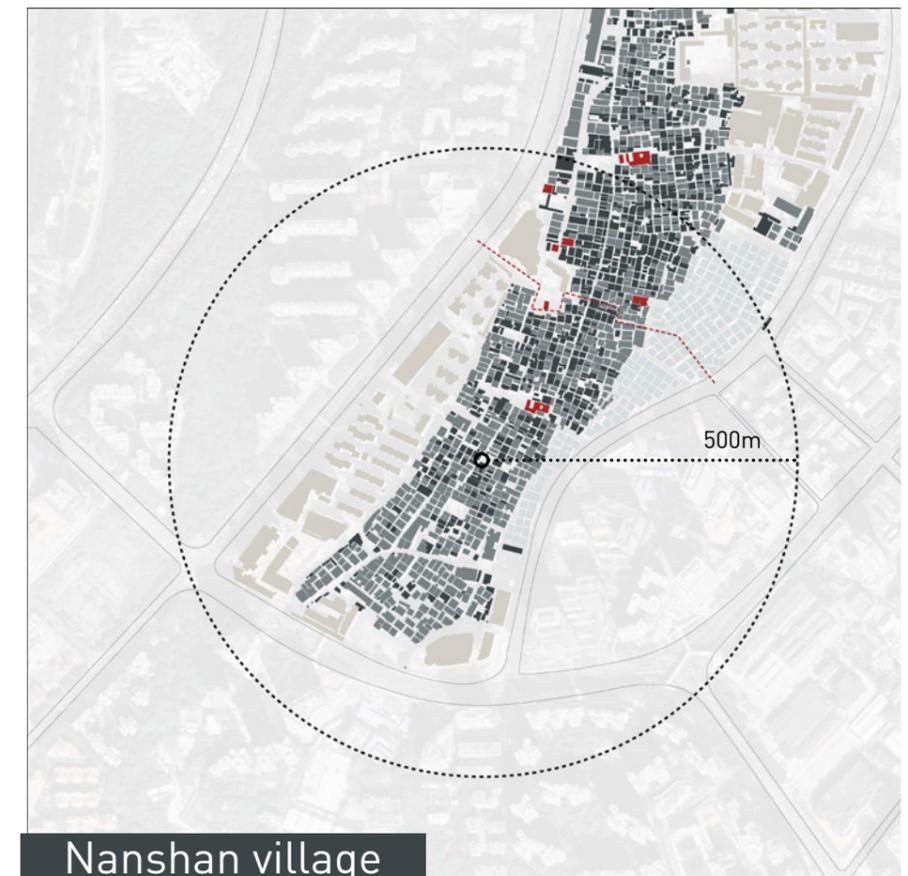
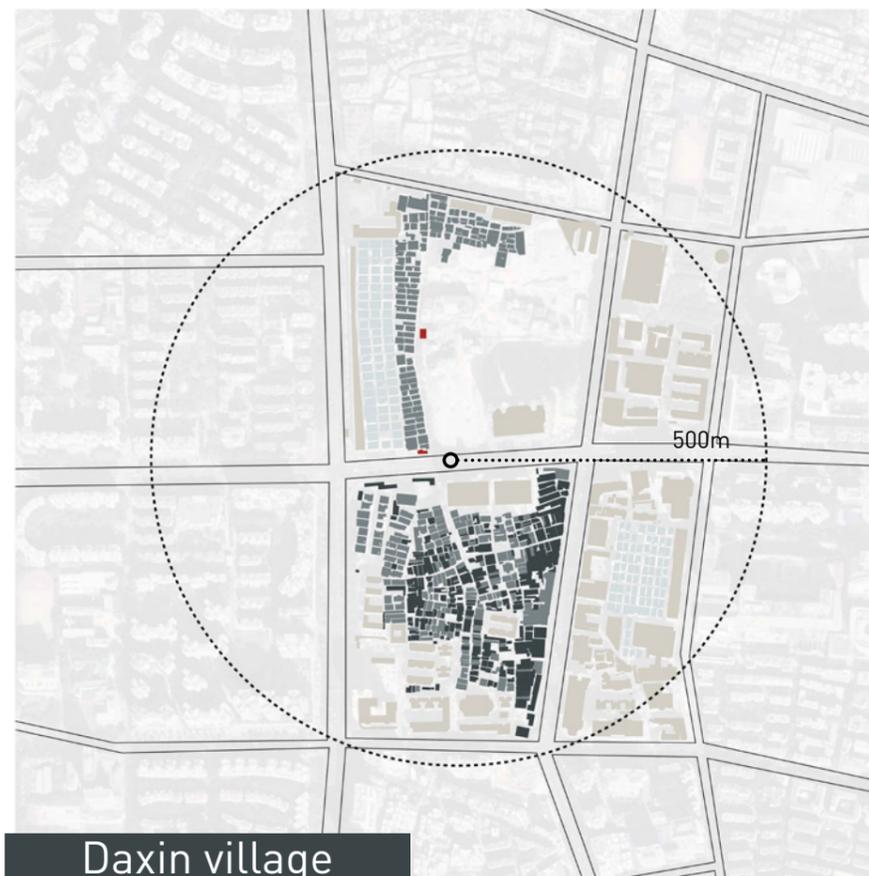
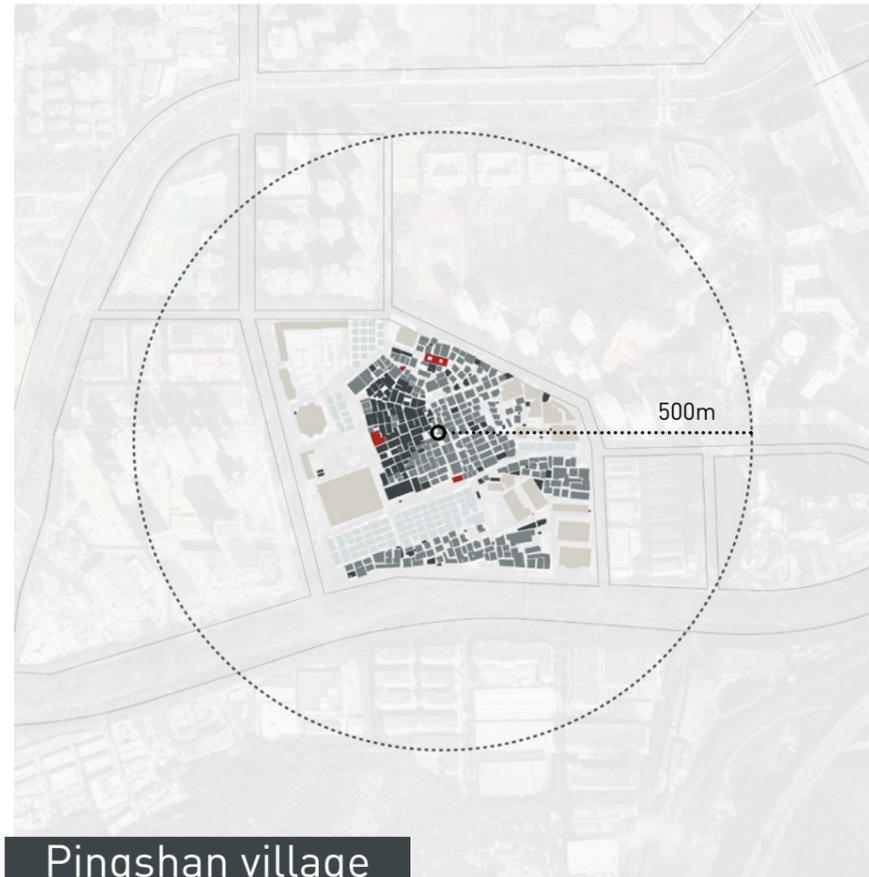


- transportation **M** metro station
- B** bus station
- P** parking lot
- workspace **■** industrial area
- office building area

Conclusion

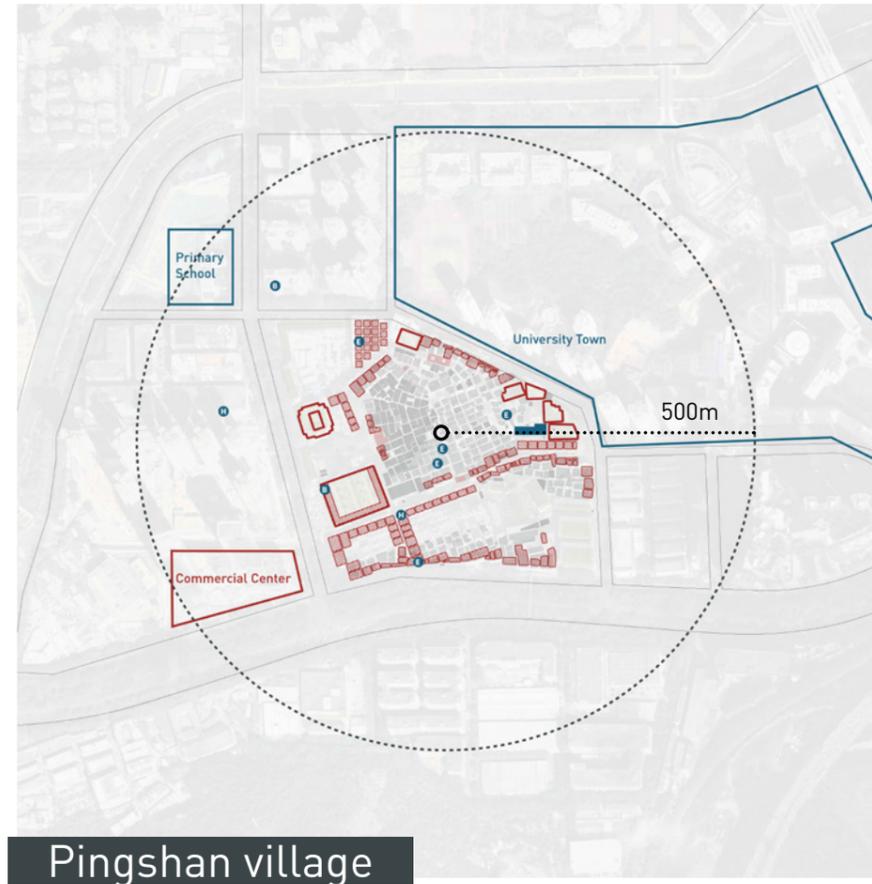
Building form

- Dense built environment;
- Small apartment for rental business is the main housing type

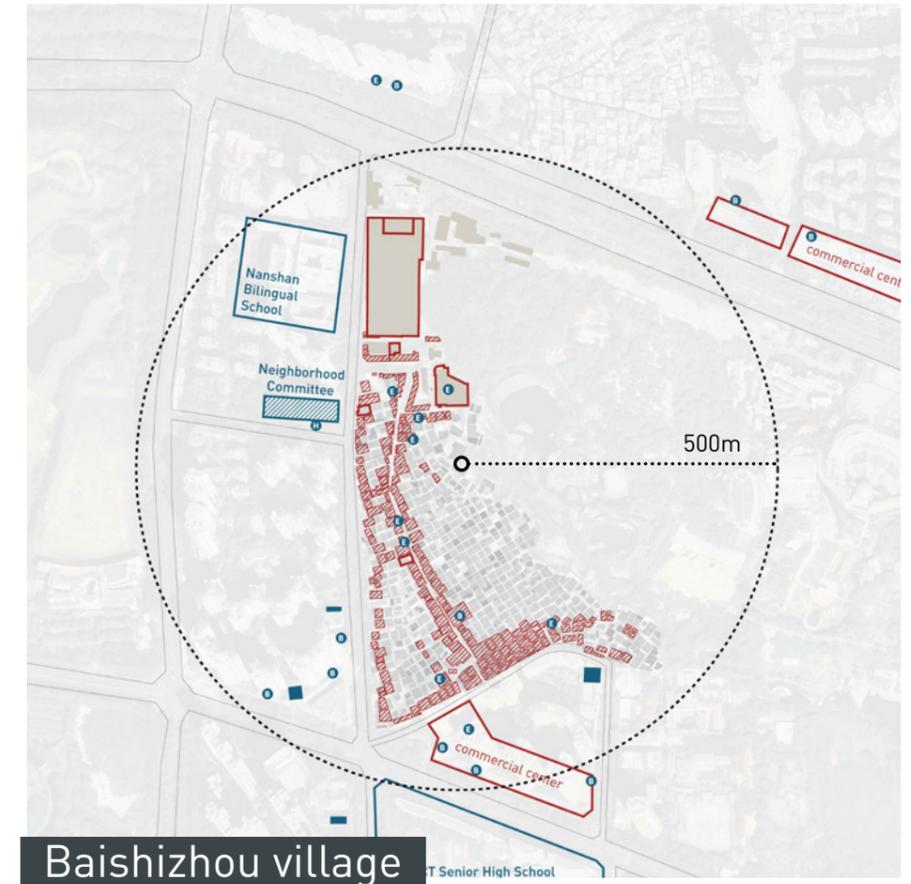


- initial type (<=3 storeys)
- mix type
- new village type
- other building
- historical building

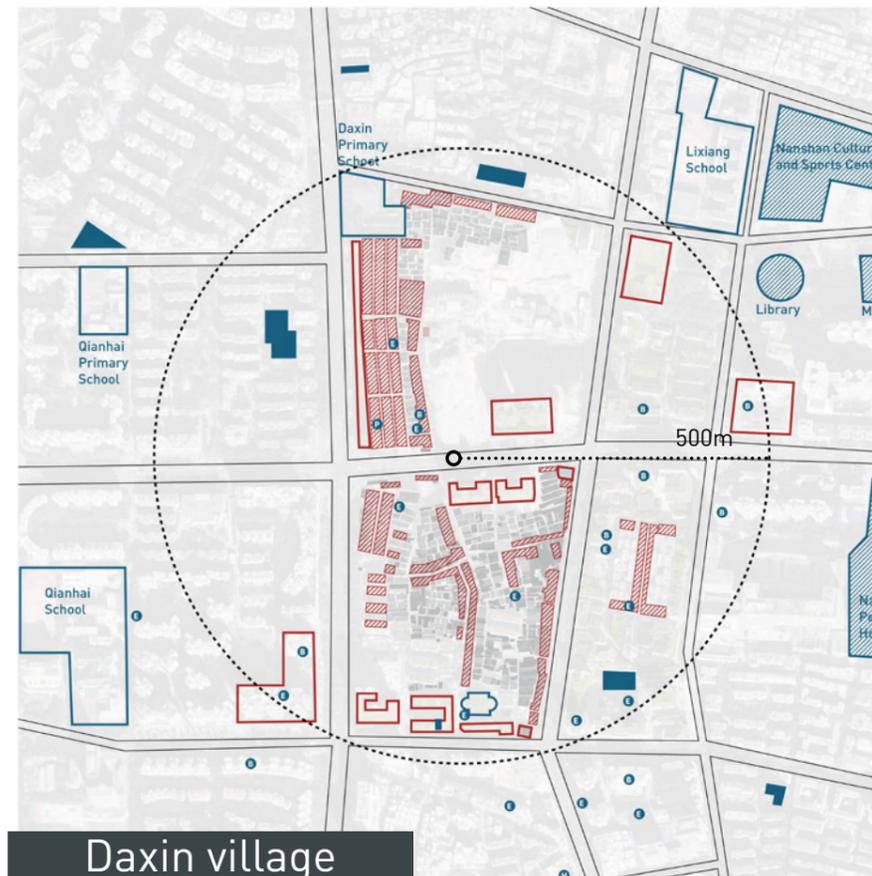
Conclusion



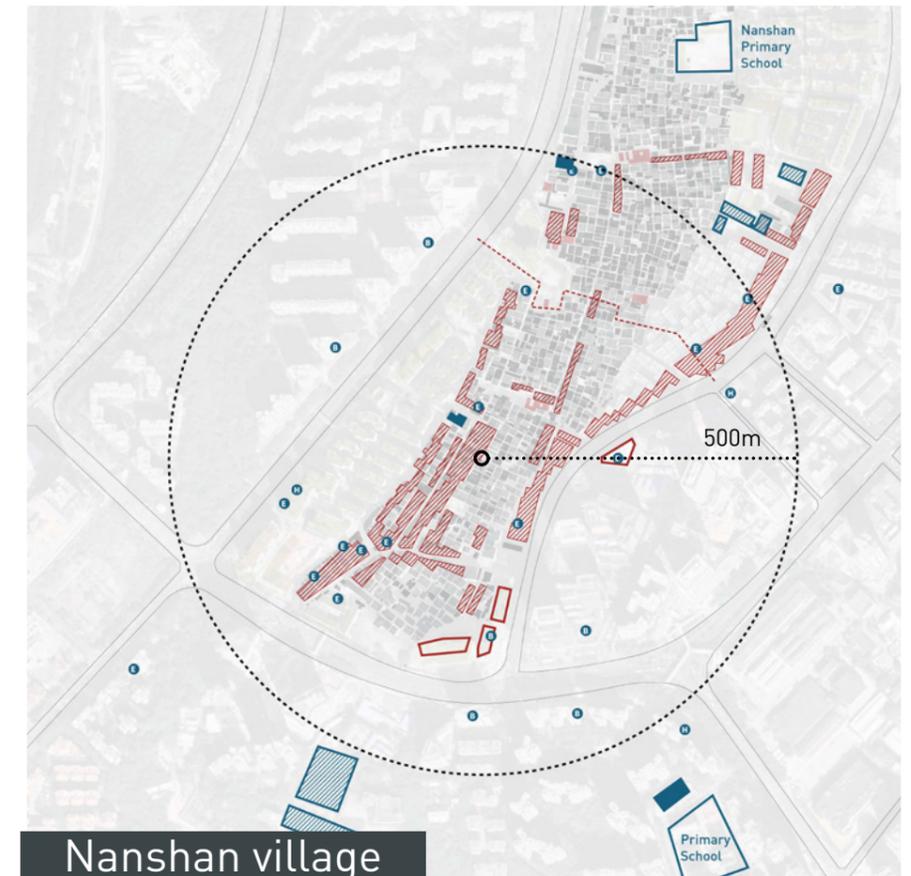
Pingshan village



Baishizhou village



Daxin village



Nanshan village

- commercial
 - commercial on ground floor
 - centralized commercial
- educational
 - education institution
 - kindergarten
 - culture and sport facility
- others
 - hospital
 - bank
 - express
 - post office

Living facilities

- Mix use function;
- Basically can fulfill young graduates' daily demands

Conclusion

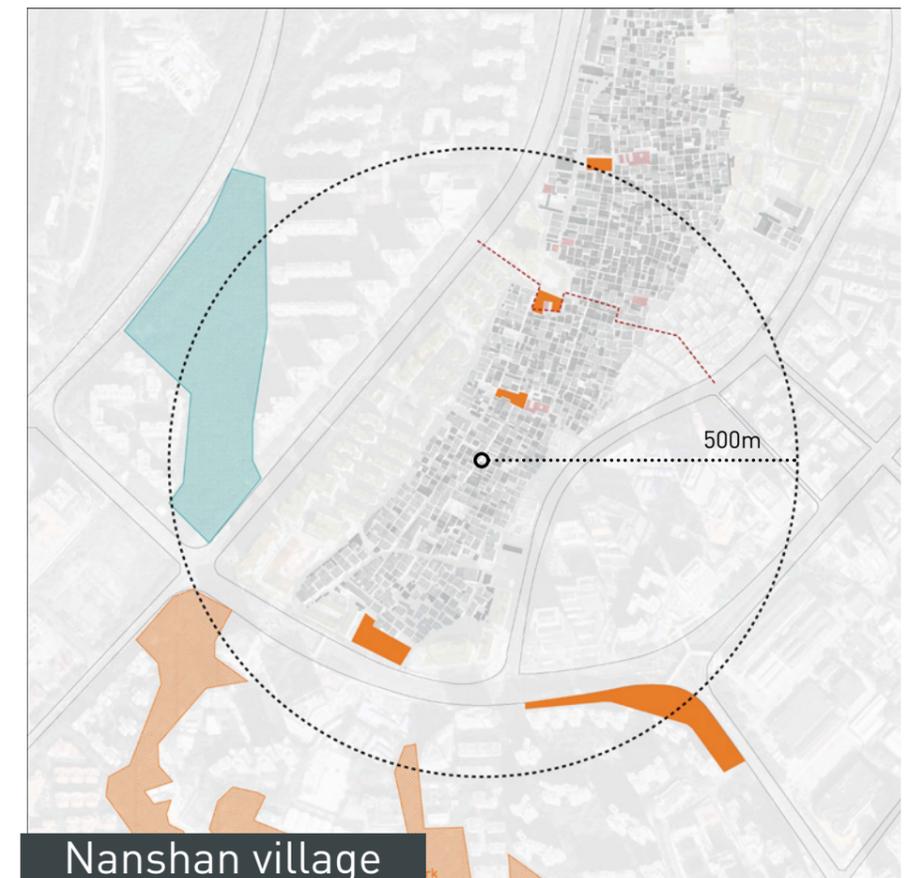
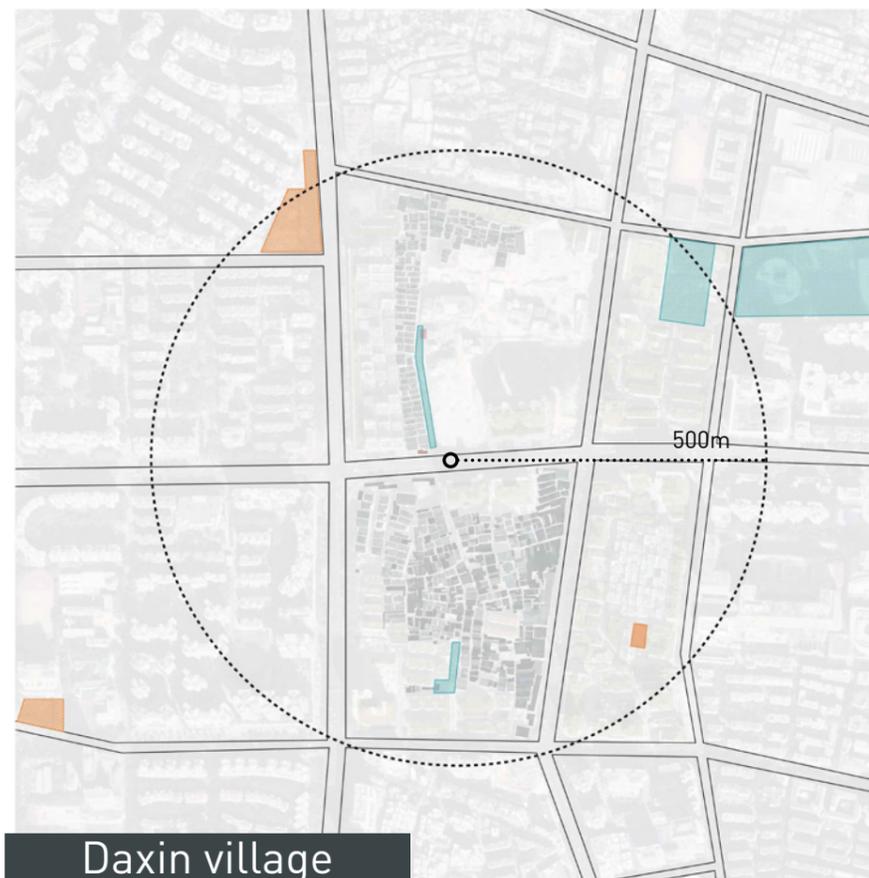
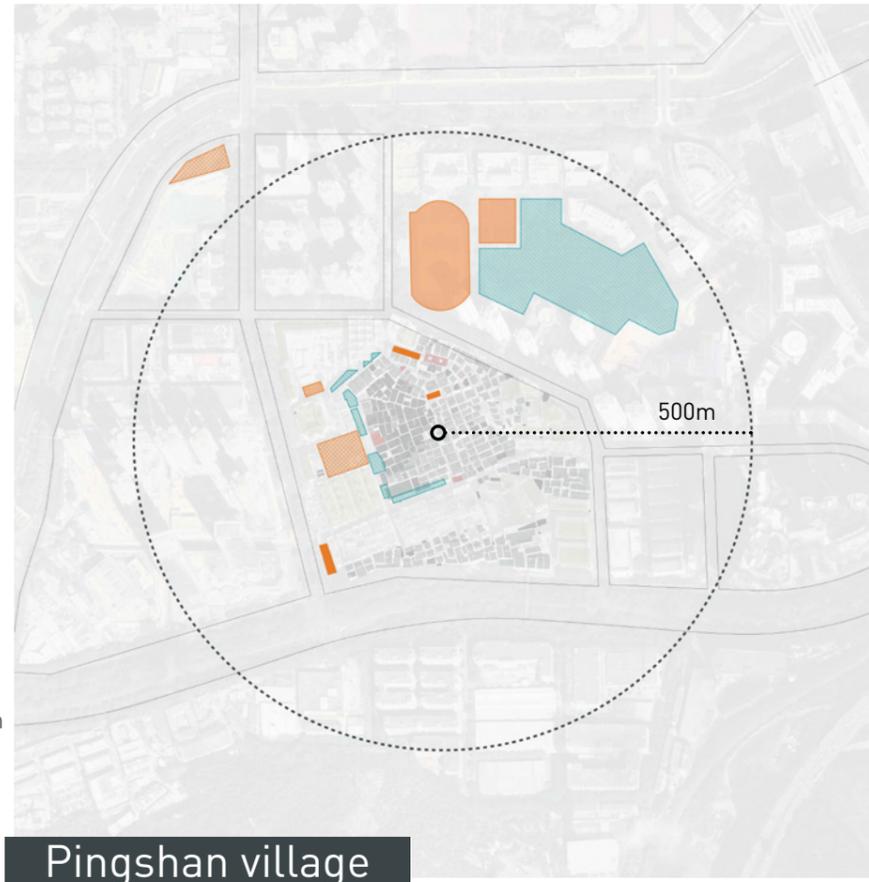


source: Study on the Spontaneous Transformation of the Roadway Space in Pingshan Village, Shenzhen, Sun, 2019

Surrounding environment

- Limited open space;
- Footpath connection may be occupied for daily and social activities

-  green space
-  park
-  playground
-  open space



Conclusion

Distance to job and transportation

Building form

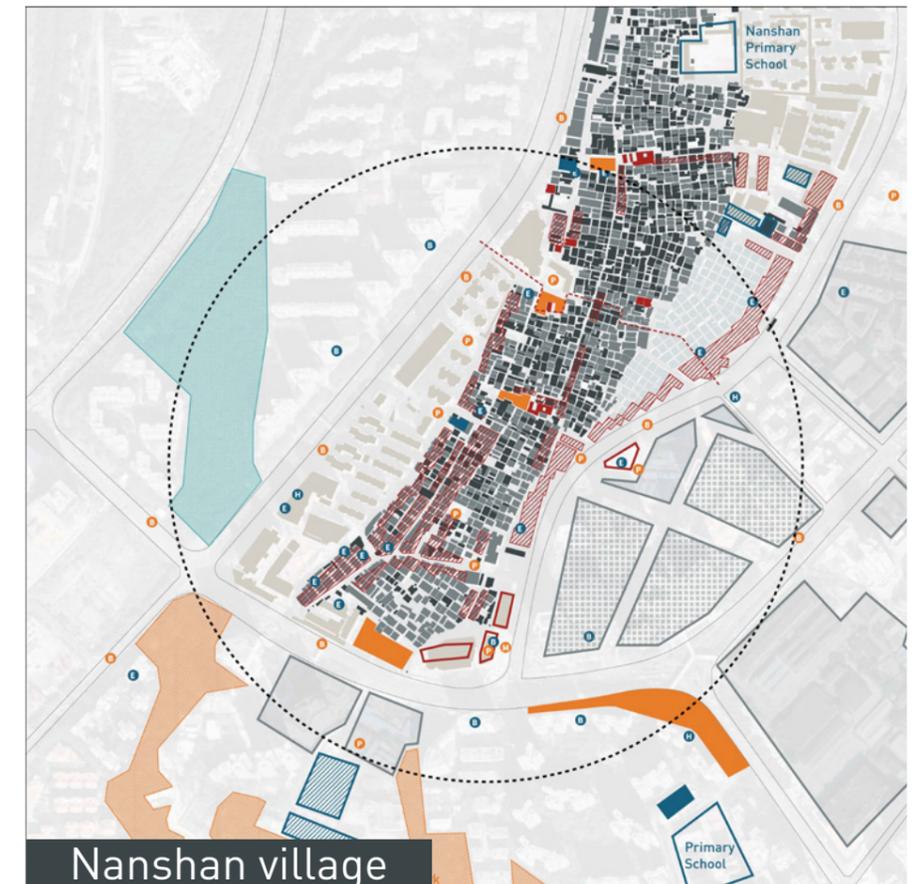
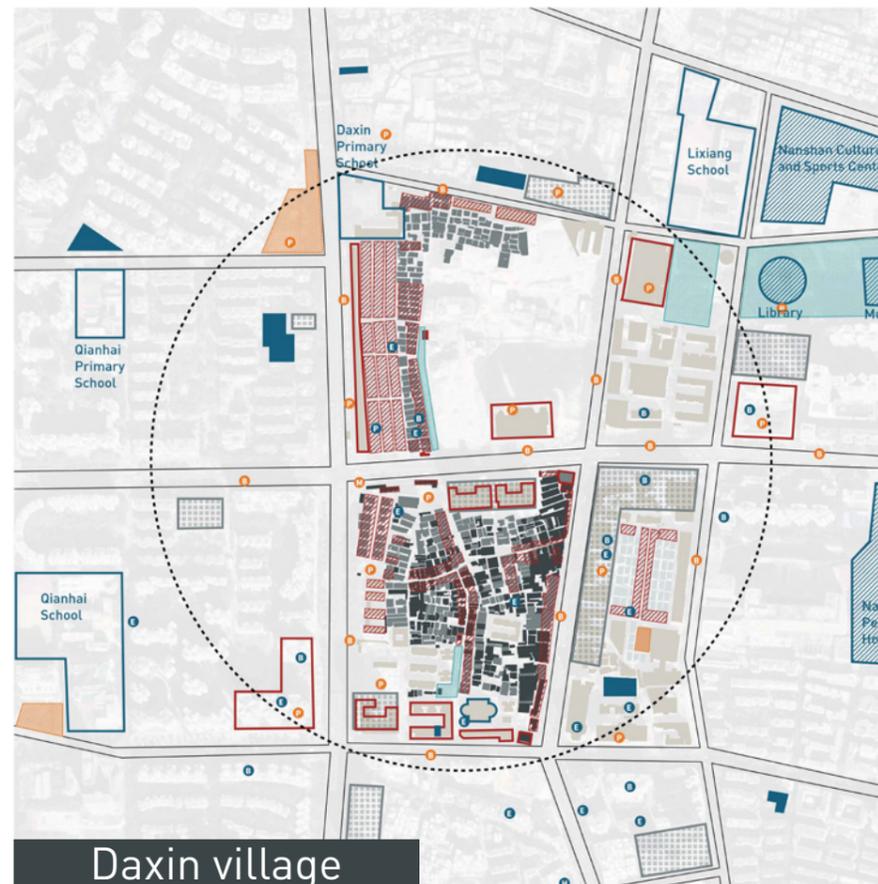
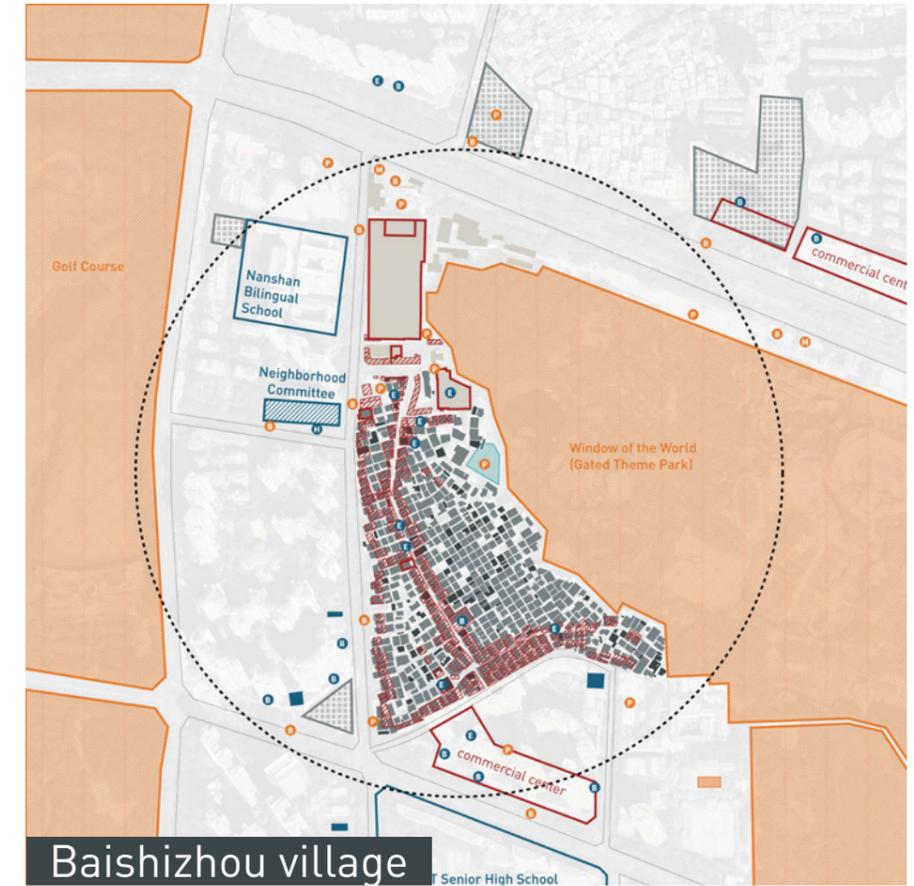
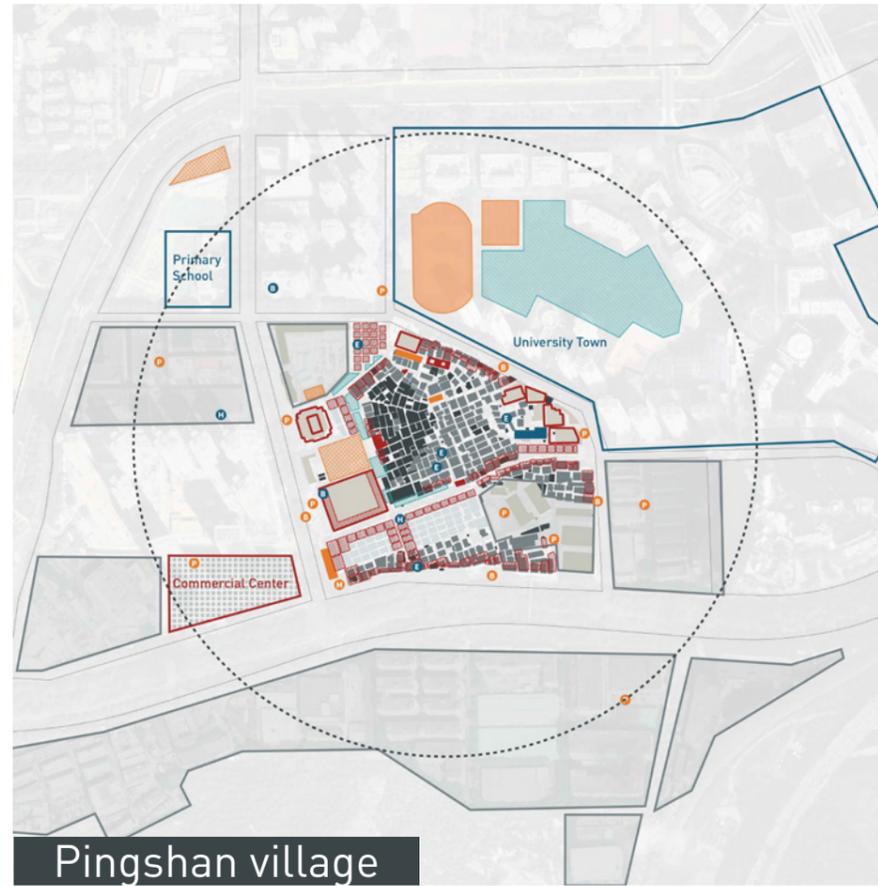


- Balance density & open space;
- Improve living environment



Surrounding environment

Living facilities



HOW ARE URBAN VILLAGES BEING REGENERATED?

Governance Model Analysis

Stakeholder Involved

PUBLIC SECTOR

Government

PRIVATE SECTOR

village
collective

Joint-stock company

Indigenous villager

Developer

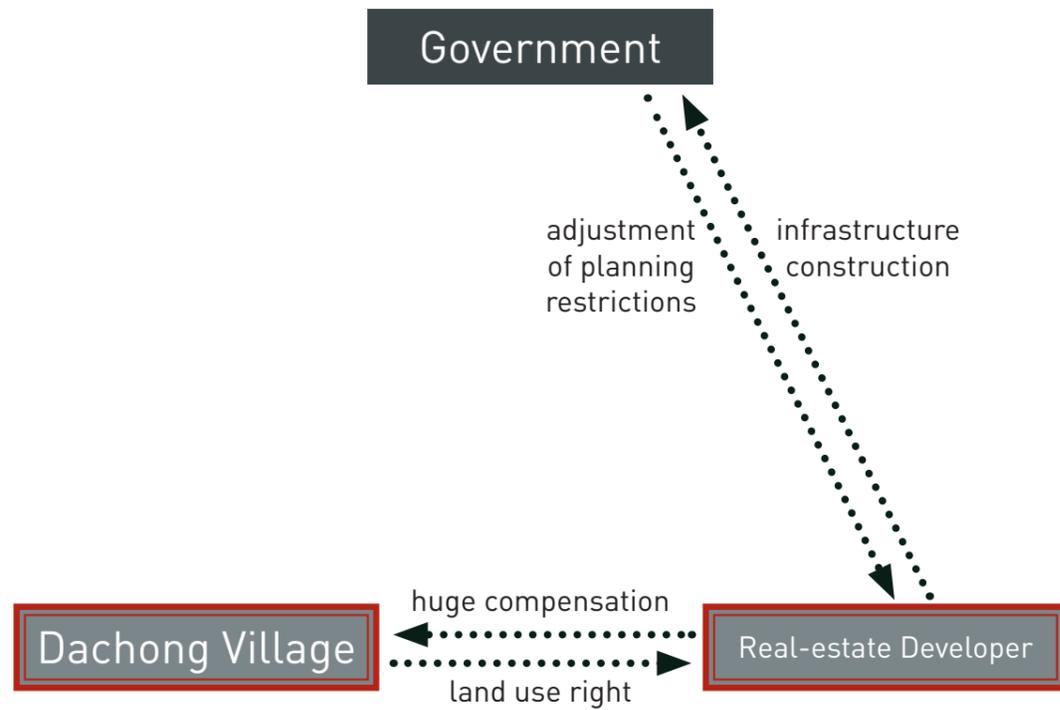
CIVIL SOCIETY

Bussiness owner

Tenant

Demolition and Reconstruction

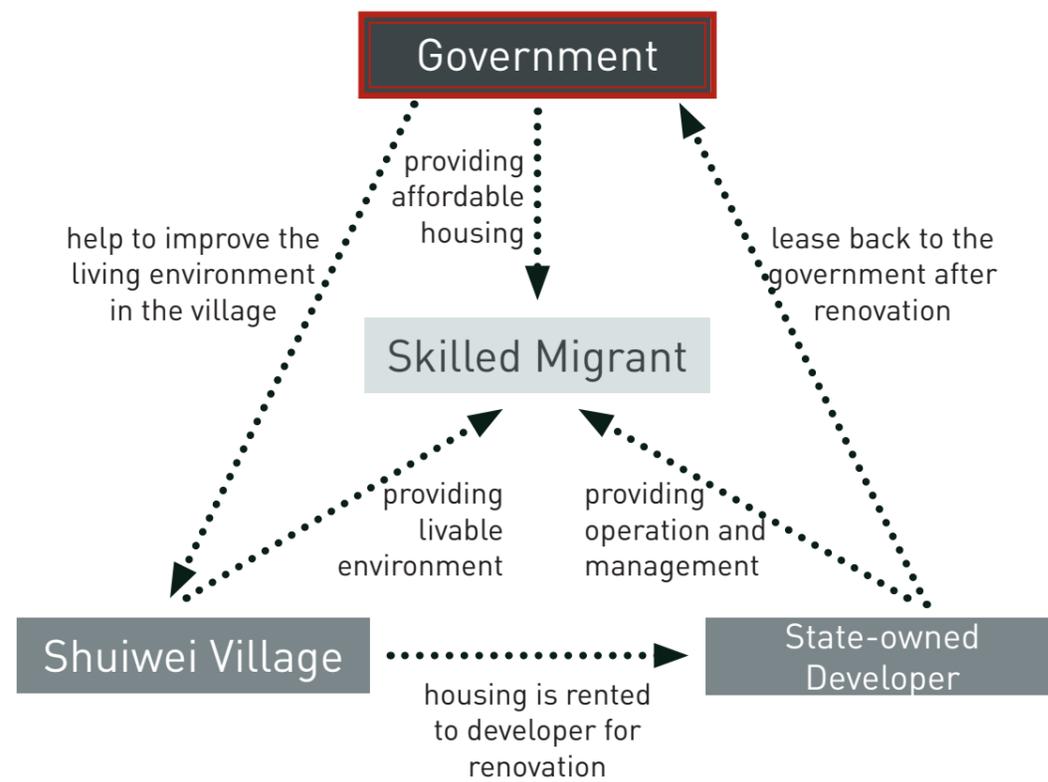
Dachong Village



Source: Google picture

"GENTRIFICATION"

Comprehensive approach-Rent and regenerate as a whole



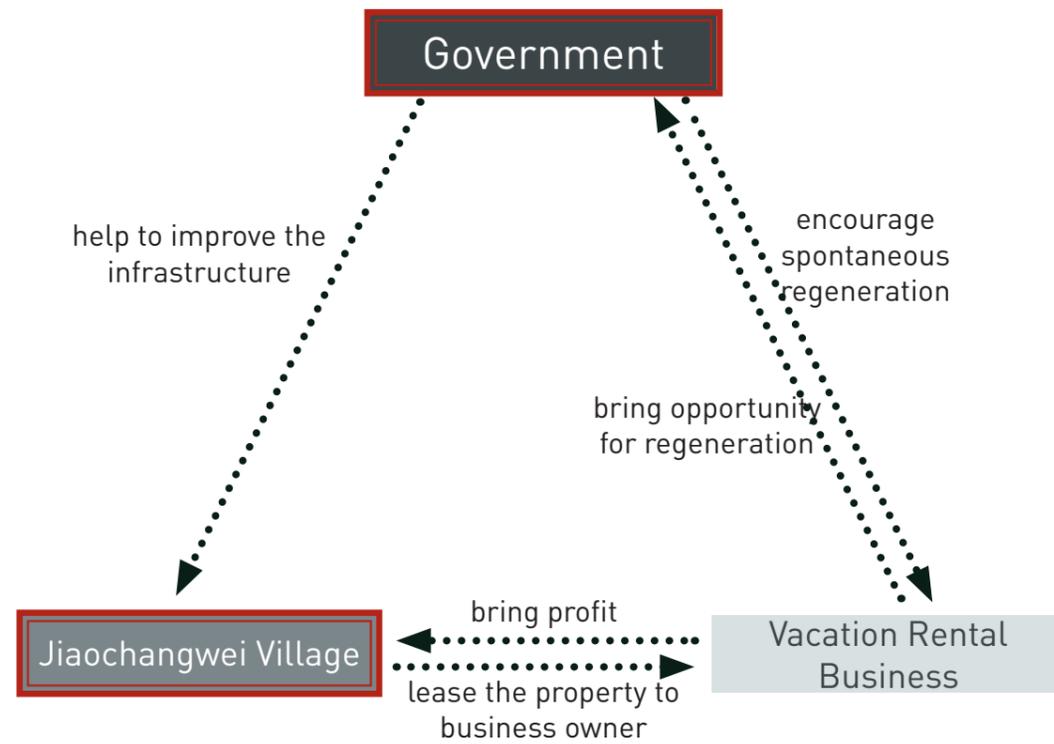
Shuiwei Village



Source: <https://www.goood.cn/lm-youth-community-china-by-doffice.htm>

"RESIDENT DISPLACEMENT"

Comprehensive approach-Exploration for spontaneous regeneration



Jiaochangwei Village



Source: Google picture

"IMPROVEMENT"

HOW TO REGENERATE IN THE FUTURE?

Strategy Proposal



ENGLISH.GOV.CN
THE STATE COUNCIL
THE PEOPLE'S REPUBLIC OF CHINA

HOME STATE COUNCIL PREMIER NEWS POLICIES

HOME >> STATE COUNCIL >> MINISTRIES

China bans 'mass demolition' in urban-renewal projects

Updated: Aug 31,2021 21:10 Xinhua

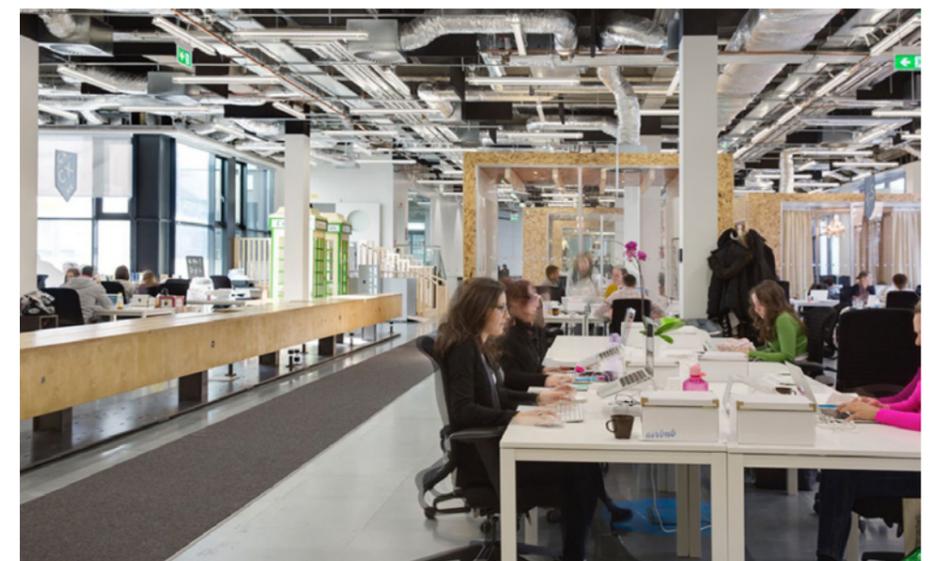


Source: http://www.news.cn/english/2021-08/31/c_1310159851.htm

Development of Urban Village: Adapting the changing demand



Development of Urban Village: Adapting the changing demand



Instead of regenerate the urban villages from a top-down perspective, **guiding the villagers to regenerate their property spontaneously** so that the village can **adapt to the changing demand** may be an approach for the future regeneration.

HOW CAN WE PROMOTE THE SPONTANEOUS REGENERATION?

GOVERNANCE

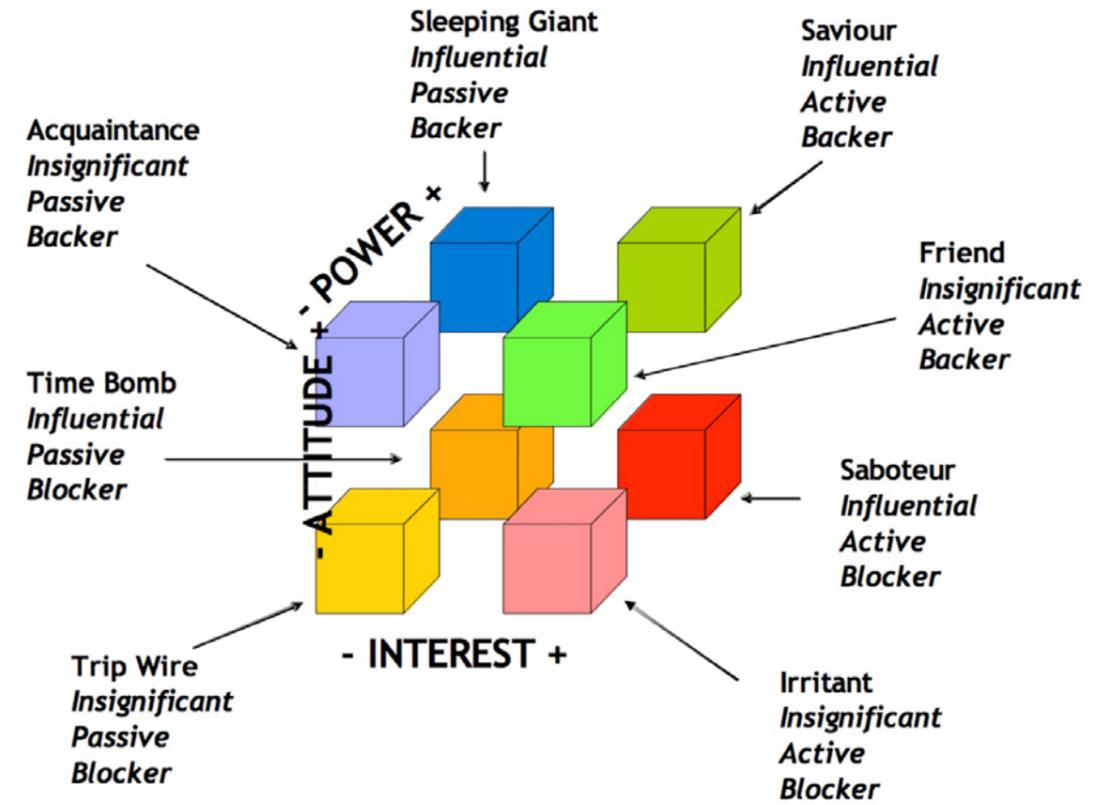
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SPATIAL STRATEGY

Stakeholder analysis

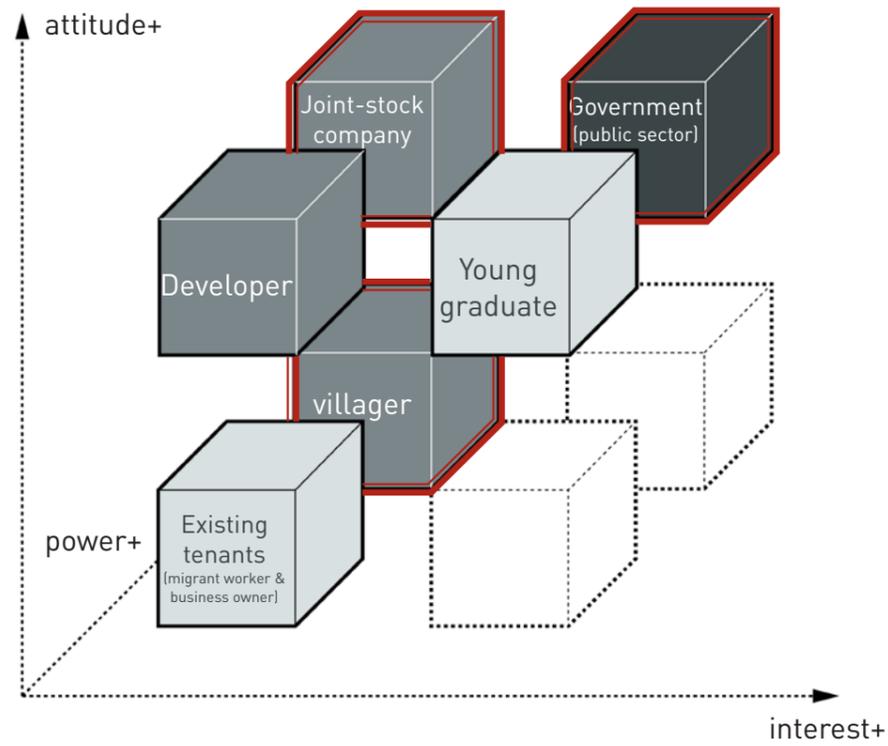
	STAKEHOLDER	GOAL/ INTEREST	RESOURCE/ POWER
PUBLIC	MUNICIPALITY	promote infrastructure integrate urban village into urban environment/ system (structure & management) settle the migrants industrial upgrading	power for policy making
	HOUSING DEPARTMENT	increase affordable housing provision	funding for affordable housing construction making regulation for affordable rental housing market
PRIVATE	JOINT-STOCK COMPANY	economic income increase property value	co-decision making power to distribute profit and welfare
	VILLAGER	long-term livelihood increase property value	land use right
	DEVELOPER	make profit opportunity for new business	experience: development & management capital
CIVIL	NEIGHBORHOOD COMMITTEE		
	BUSINESS OWNER	make profit tenure security	
	MIGRANT WORKER	affordable housing tenure security family migration	guide public opinion
	YOUNG GRADUATE	affordable housing tenure security across social stratification	

- production power
- blocking power
- diffuse power



source: Power-interest-attitude matrix of Murray-Webster and Simon

Stakeholder analysis



village collective

Private interest for regeneration

+long-term livelihood (rental income)



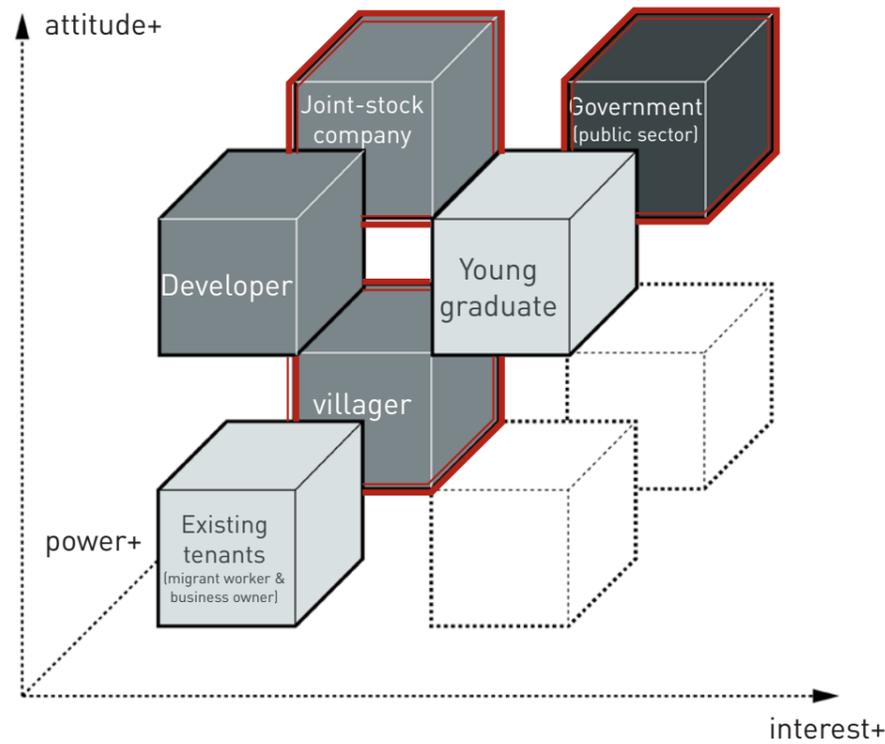
different

government

Public interest for regeneration

+affordable housing +living environment

Stakeholder analysis



village collective

Private interest for regeneration

+long-term livelihood (rental income)

property legalization



government

Public interest for regeneration

+affordable housing +living environment

Type of property right	Land ownership	Payment of fee	Certificate issued by	Right for commercial activities (mortgage etc.)	Housing type	Tenure of use
full property rights	state-owned	land transfer fees	state government housing department	yes (different for different housing type: affordable housing/ social housing may also have limited rights)	commercial housing; affordable housing; capped-price housing etc.	70 years for residential use
limited property rights	collective-owned	none	village government	no	regular housing	no specific time; can be terminated at any time

Legalization mechanism

Planning tools applied

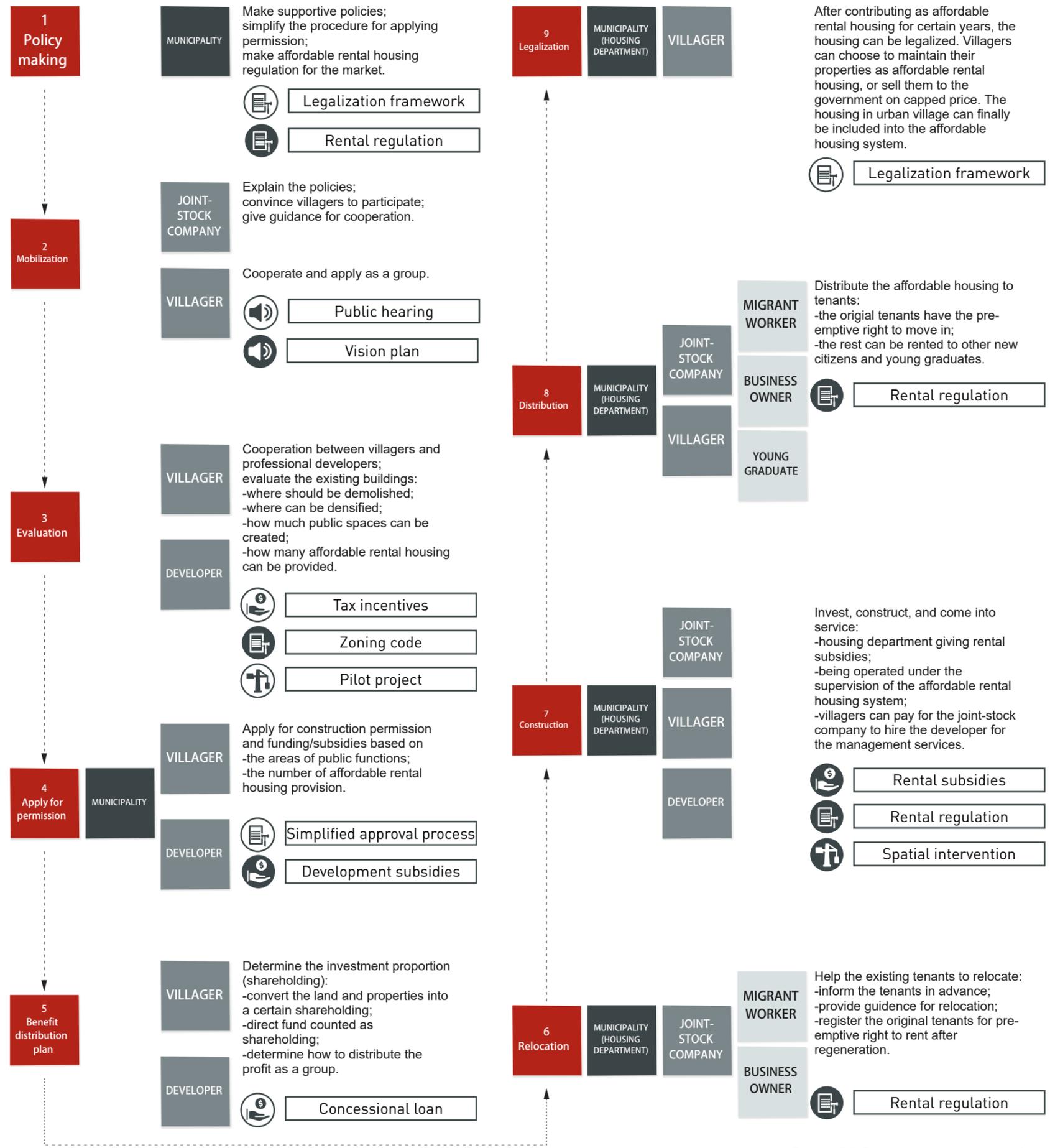
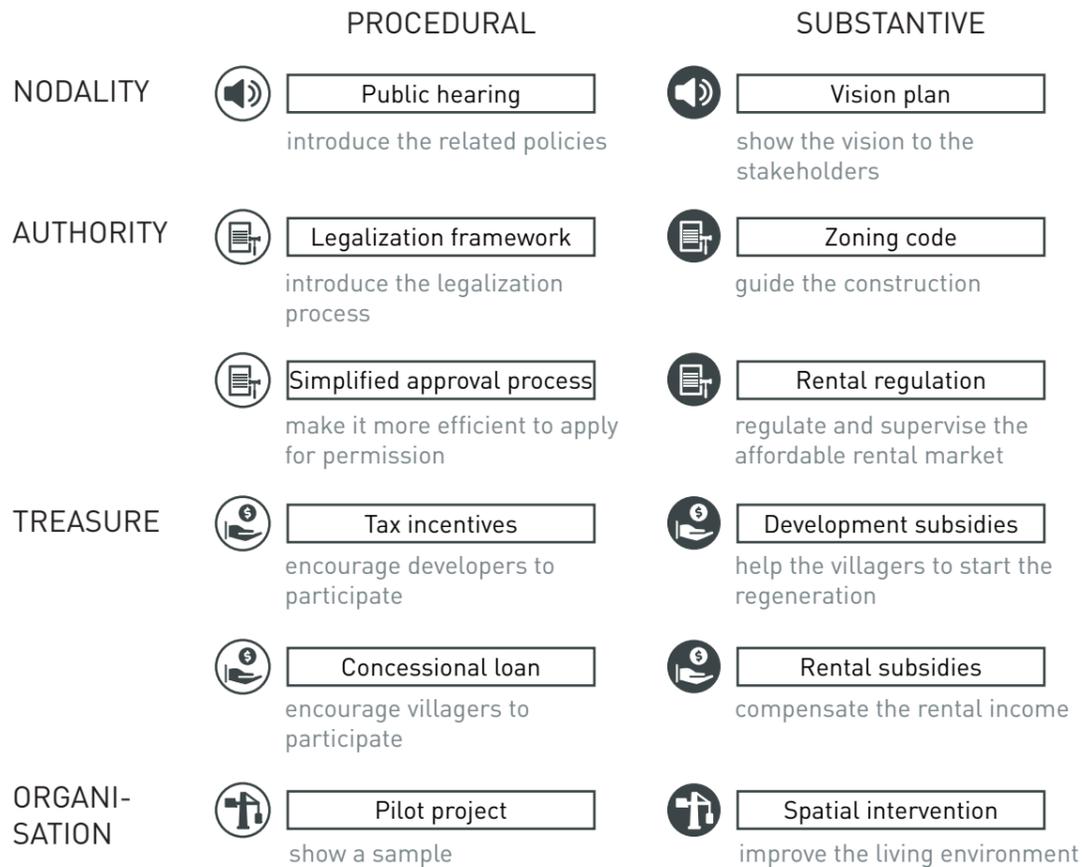


Figure 5.2.5: Legalization mechanism

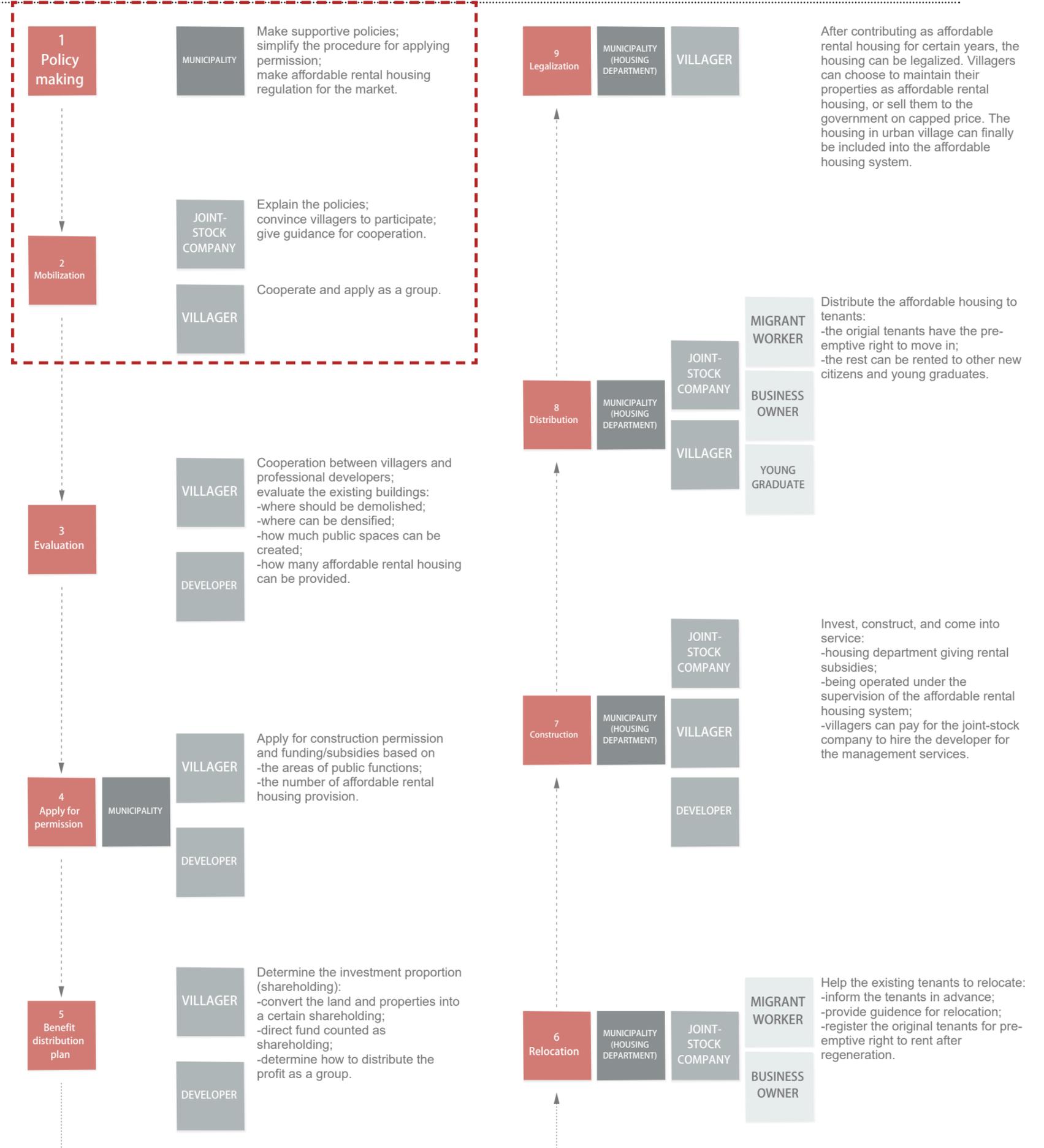
Legalization mechanism

STAGE 1

START-UP



Set rules;
Regenerate as pioneer;
Mobilize the villagers



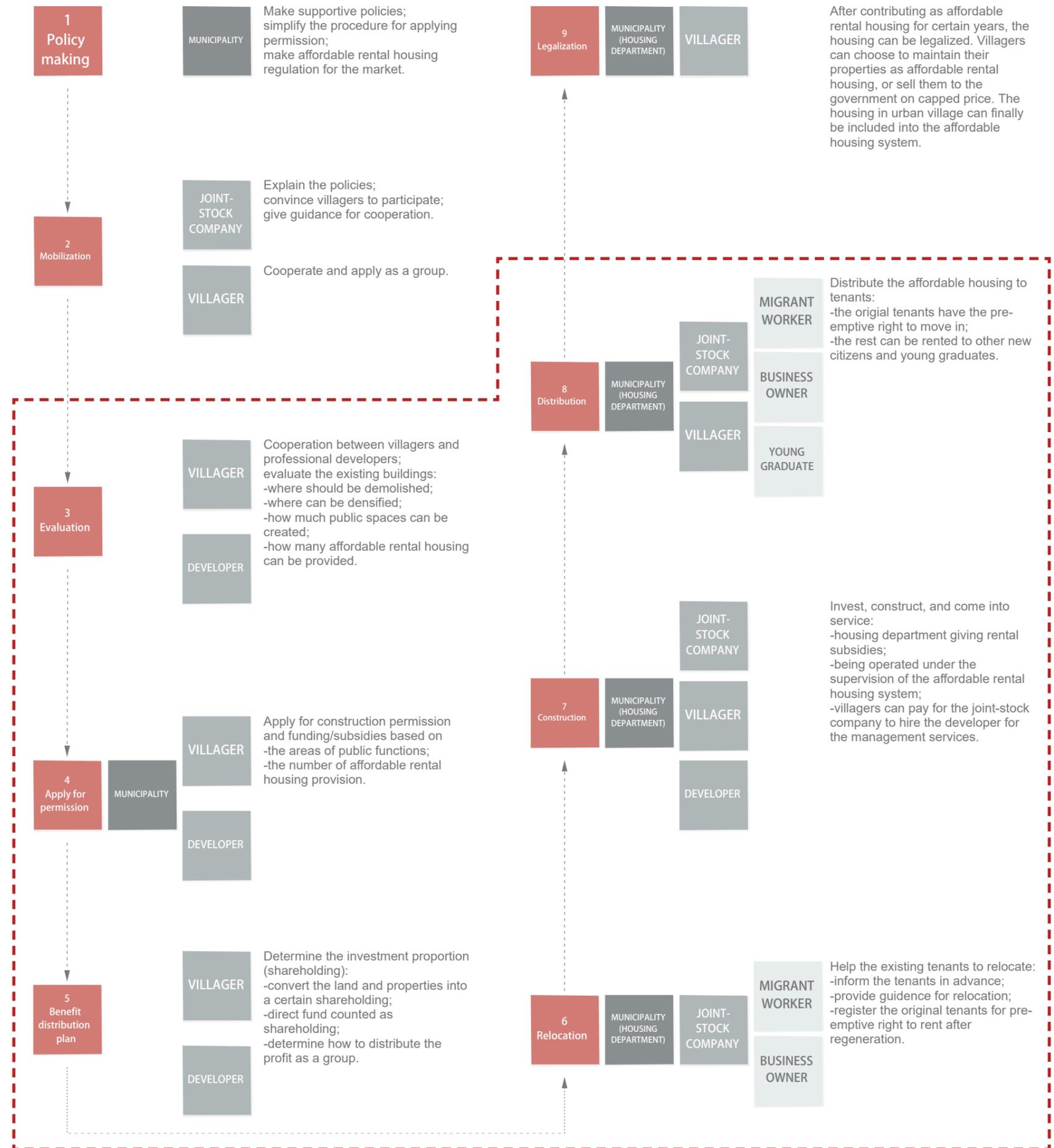
Legalization mechanism



Set rules;
Regenerate as pioneer;
Mobilize the villagers



Follow instruction;
Develop and manage their
properties as affordable
rental housing



Legalization mechanism



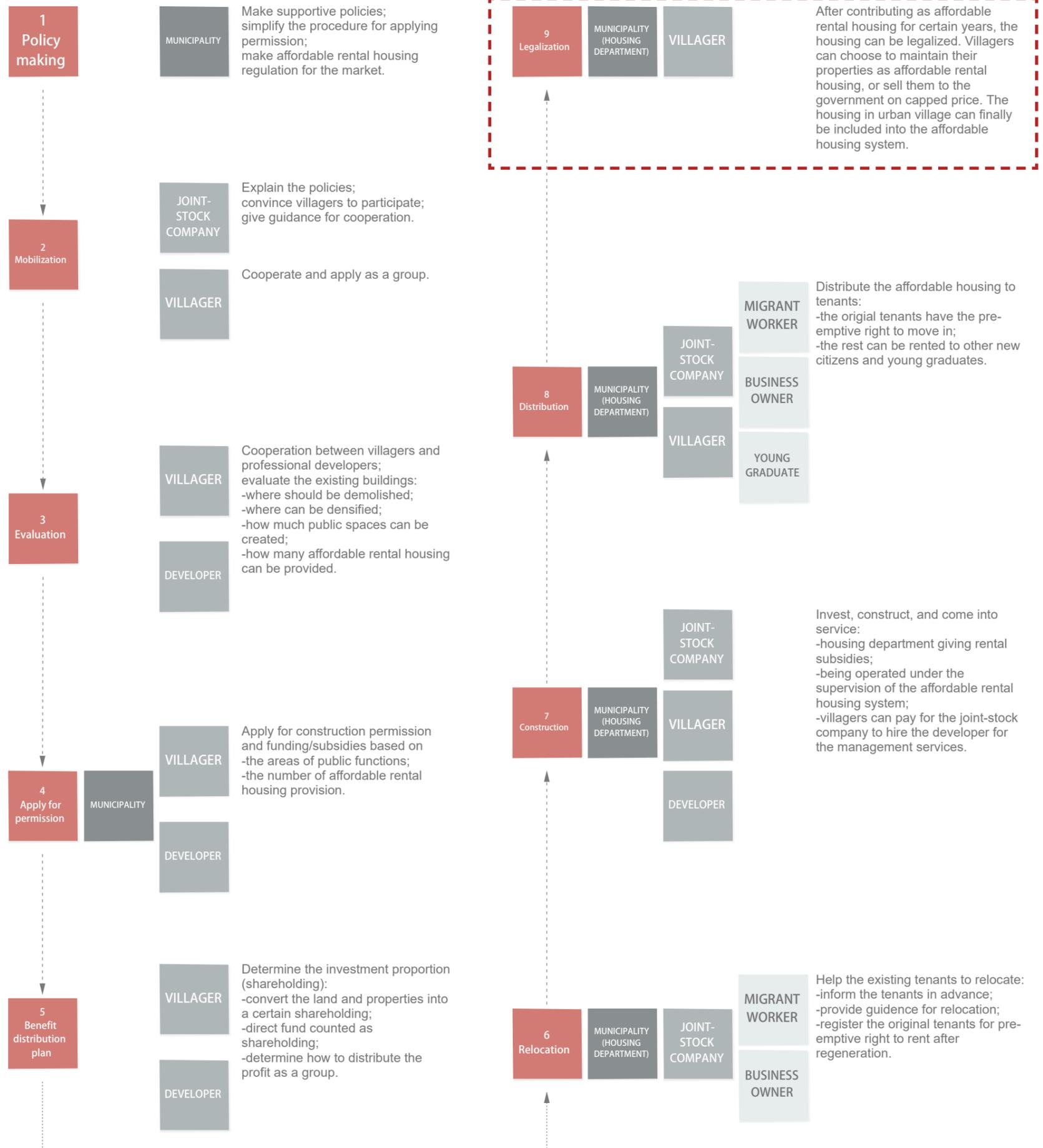
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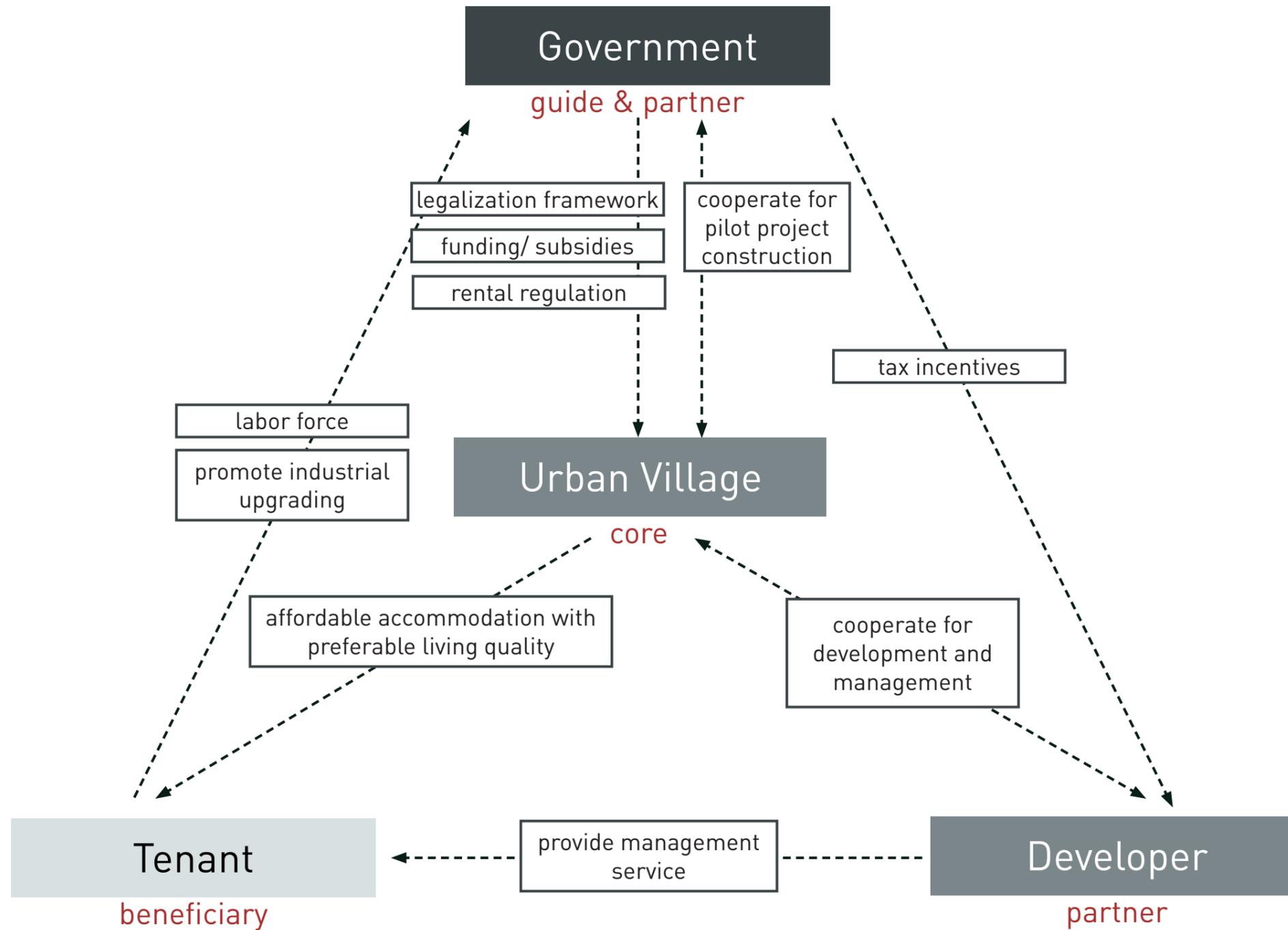
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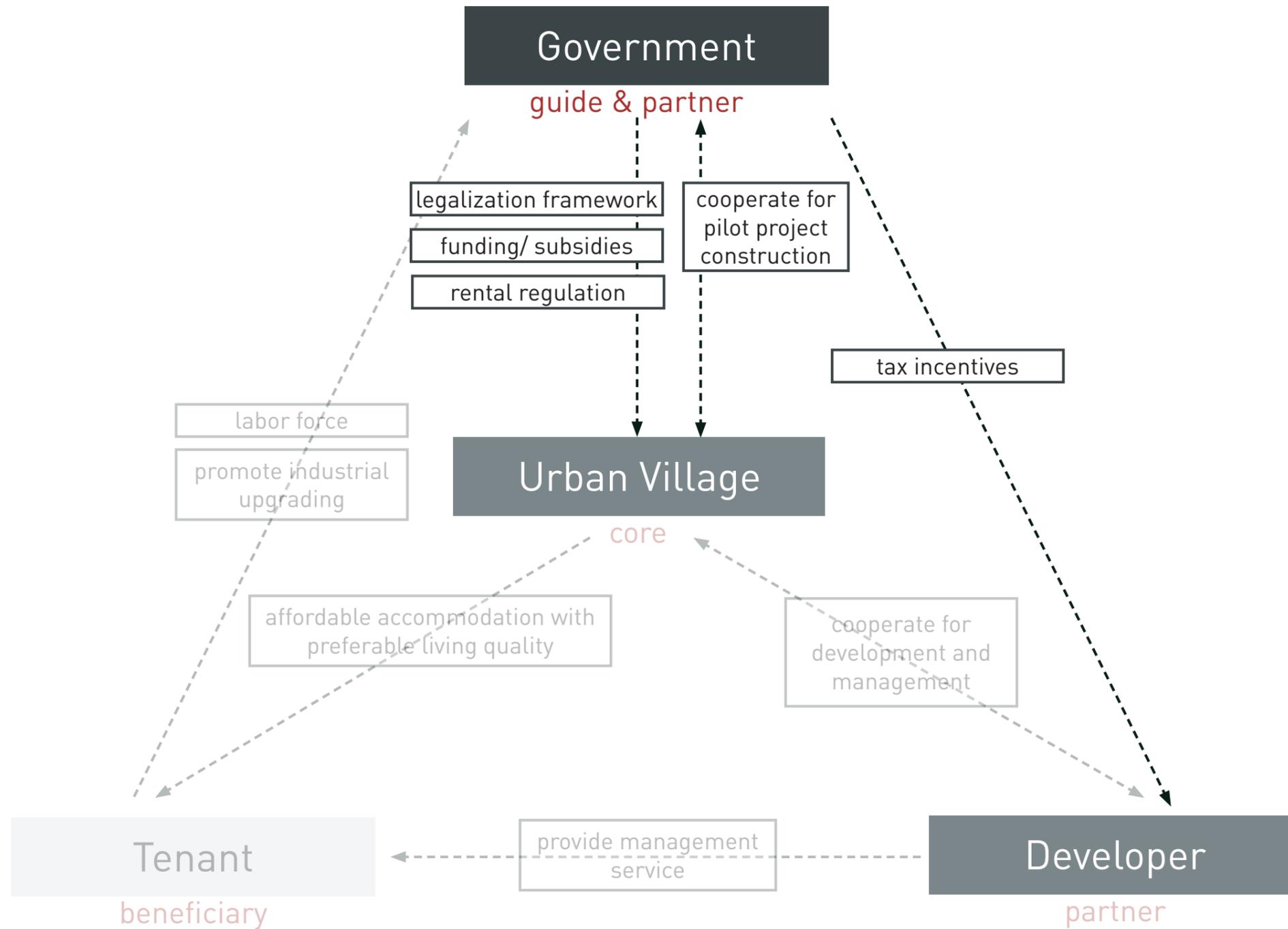
Legalize the properties;
Be included in the
affordable housing system;
The original tenants have
the pre-emptive rights to
buy



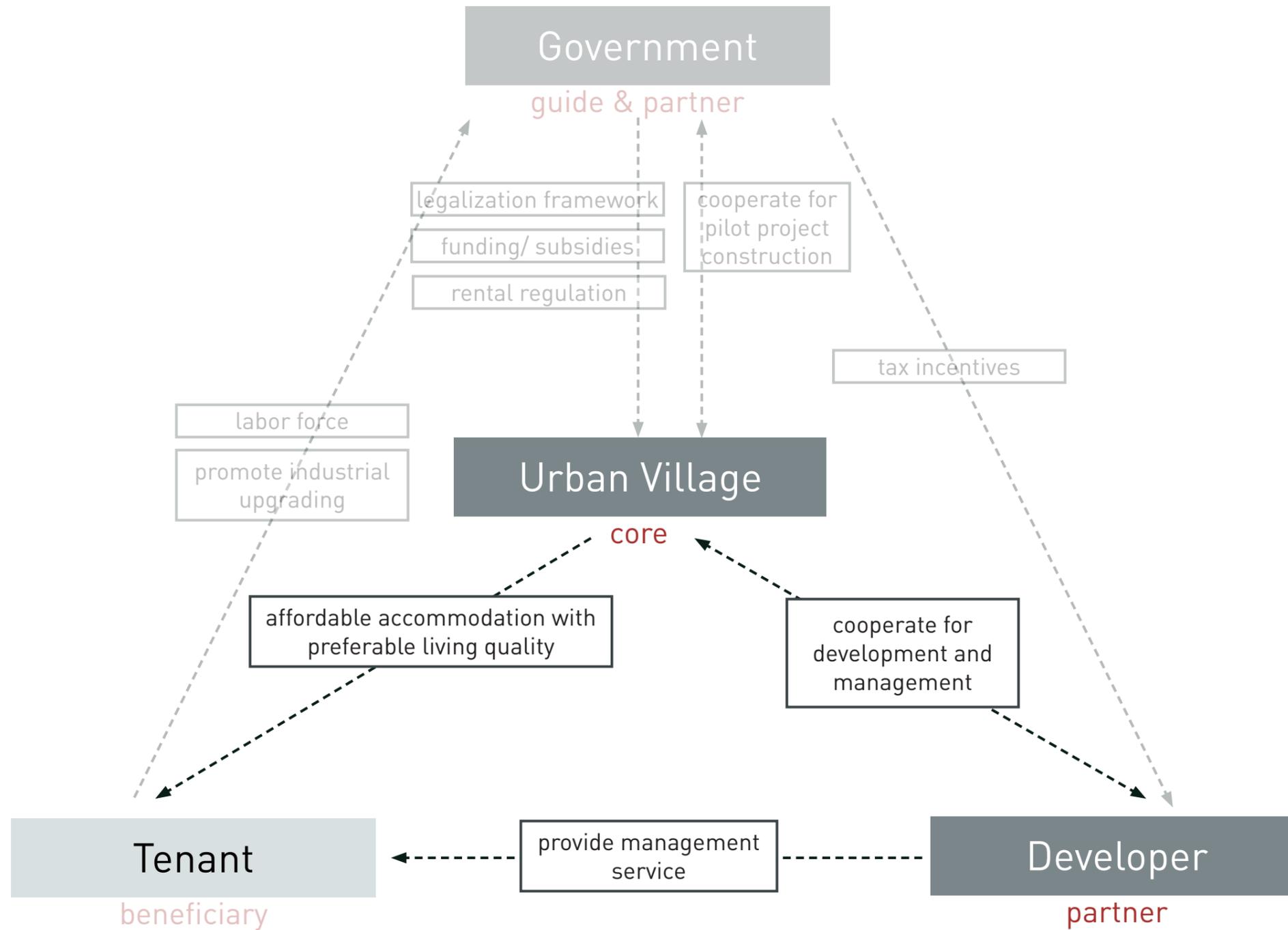
Governance model



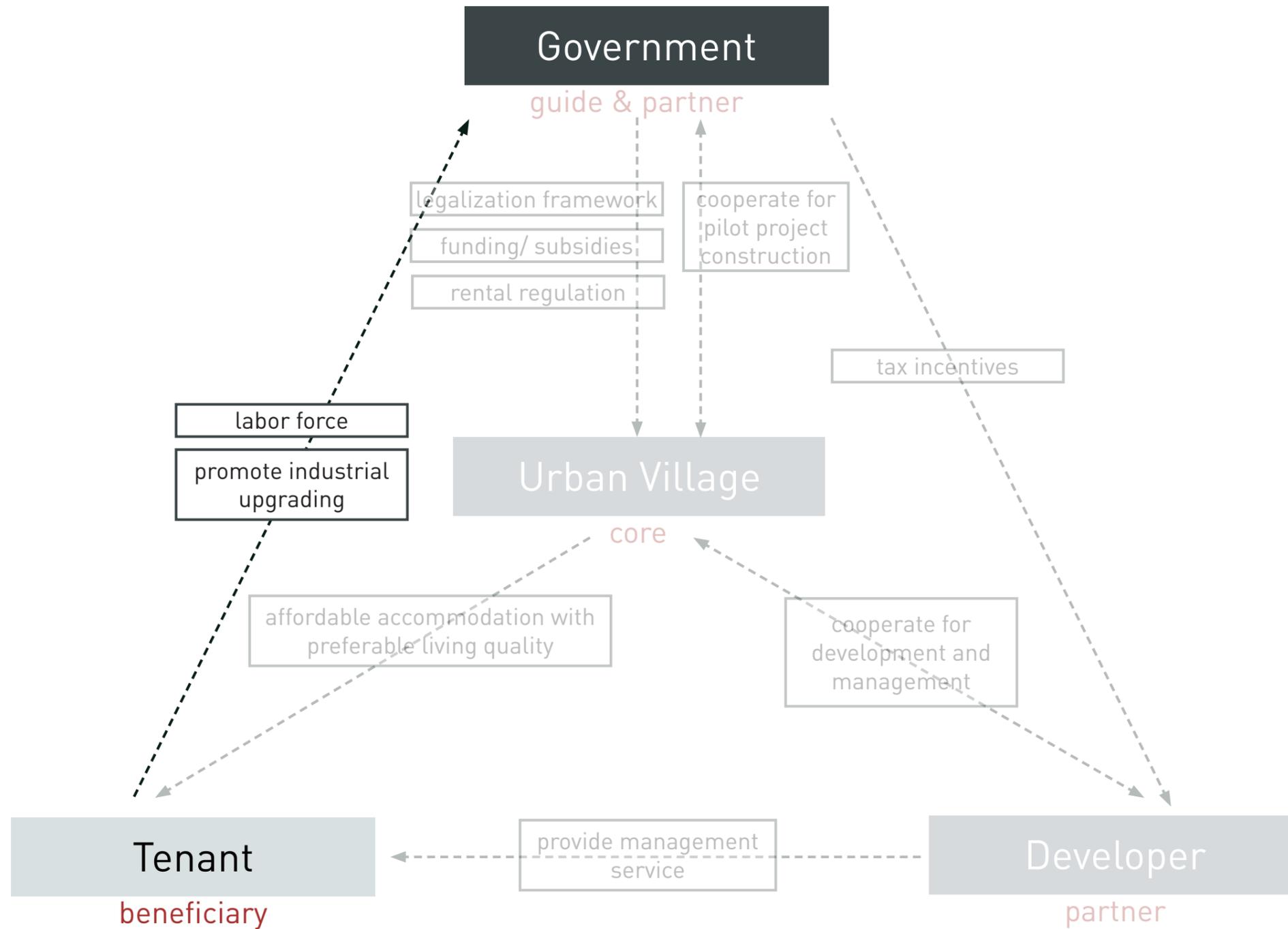
Governance model



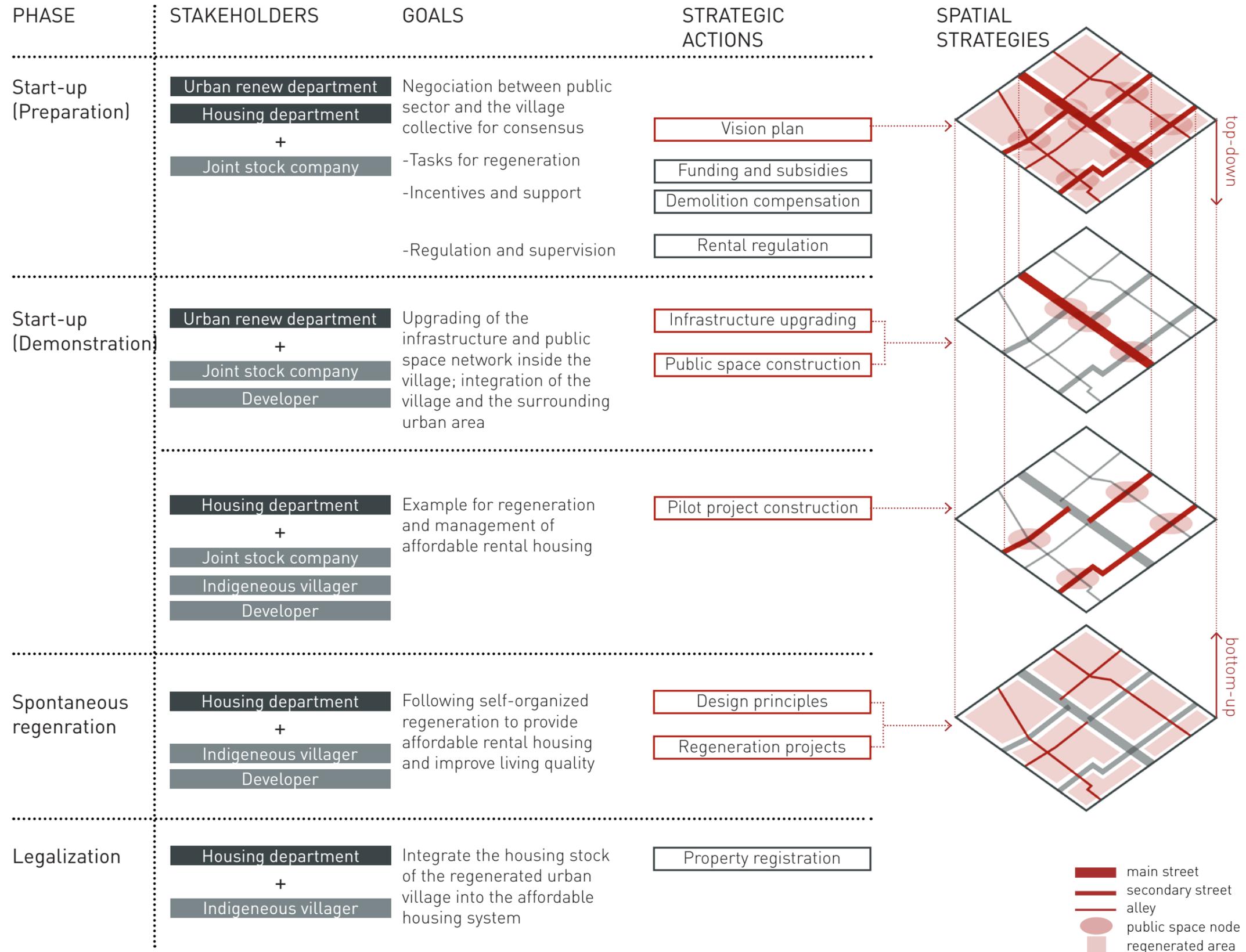
Governance model



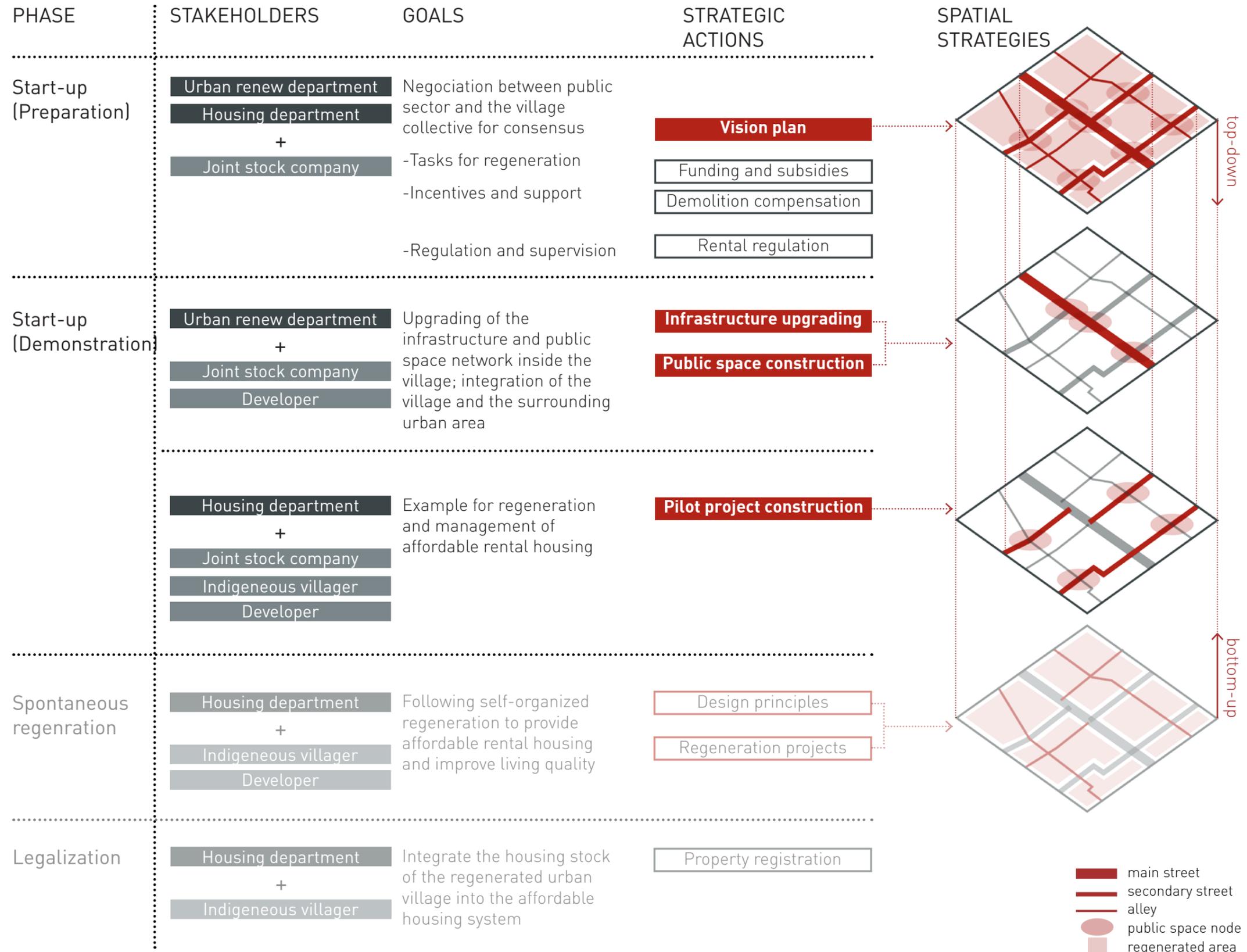
Governance model



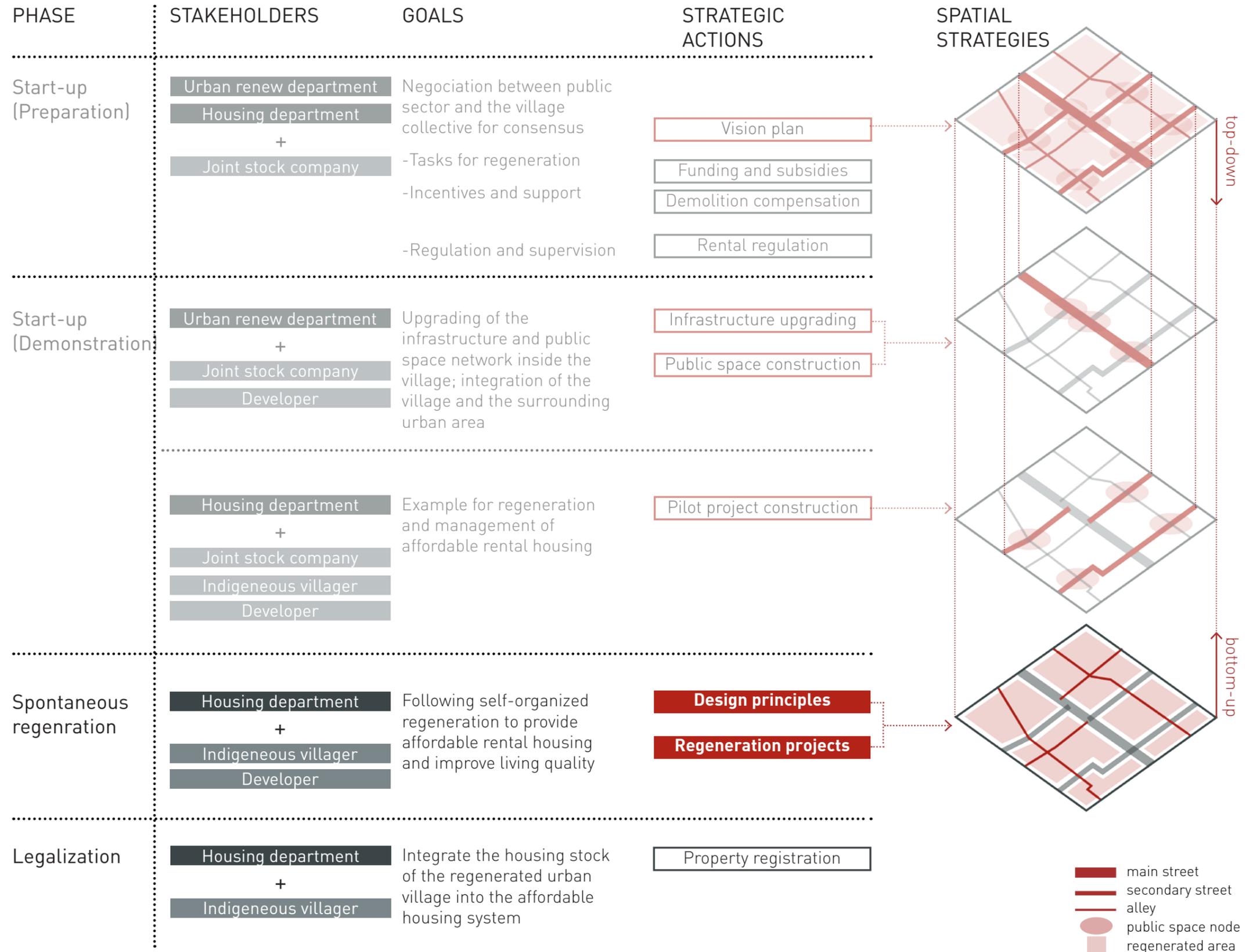
From mechanism to strategy



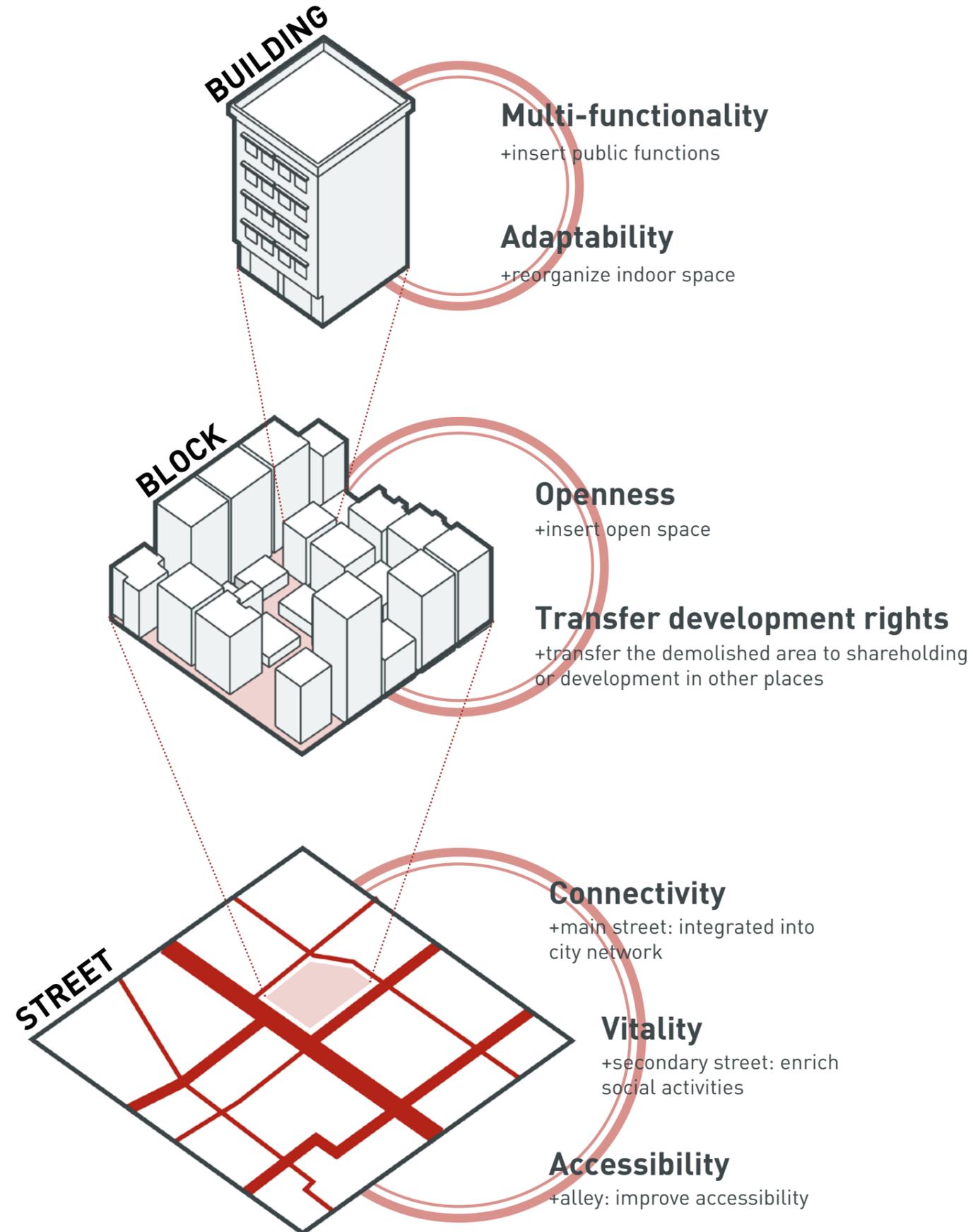
From mechanism to strategy



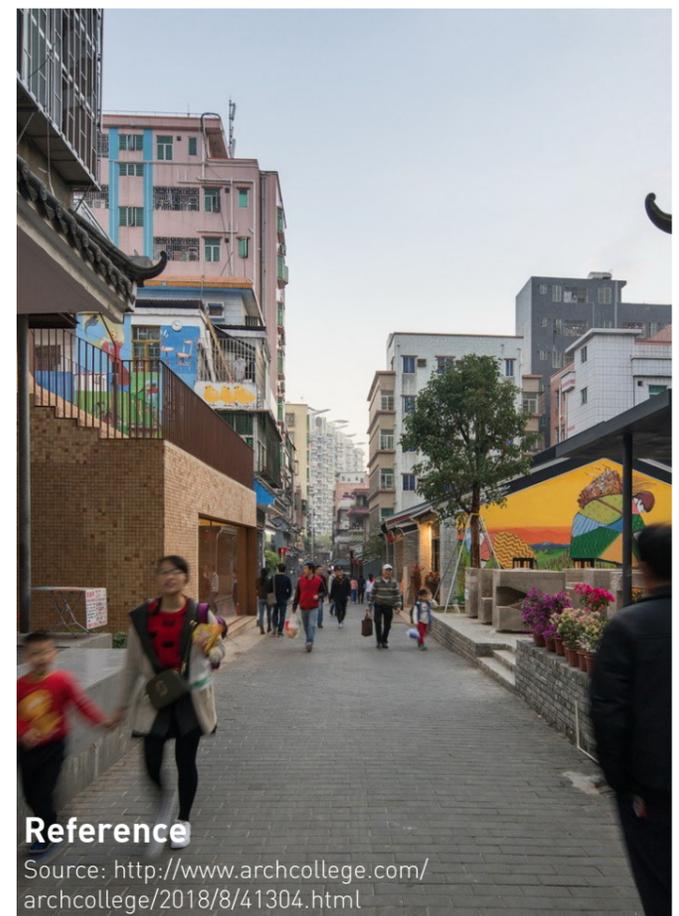
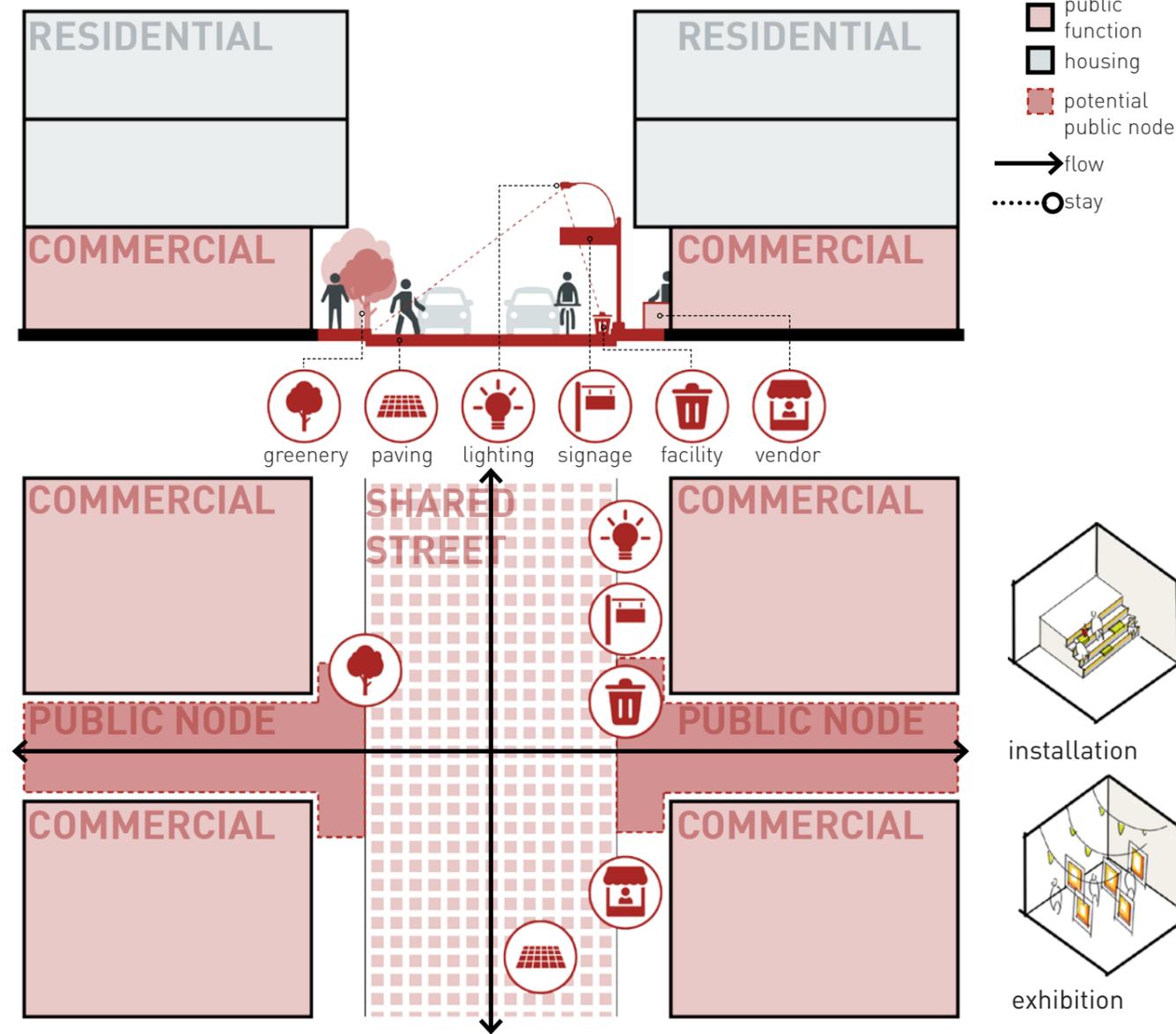
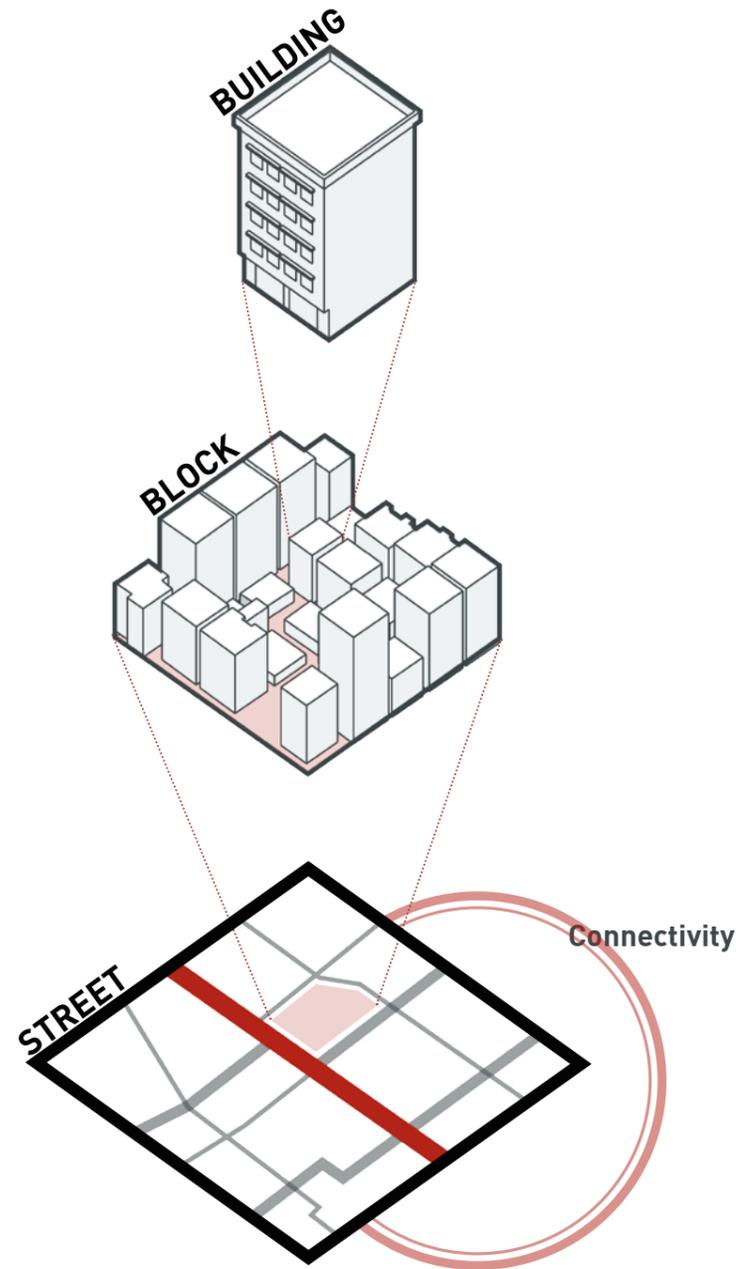
From mechanism to strategy



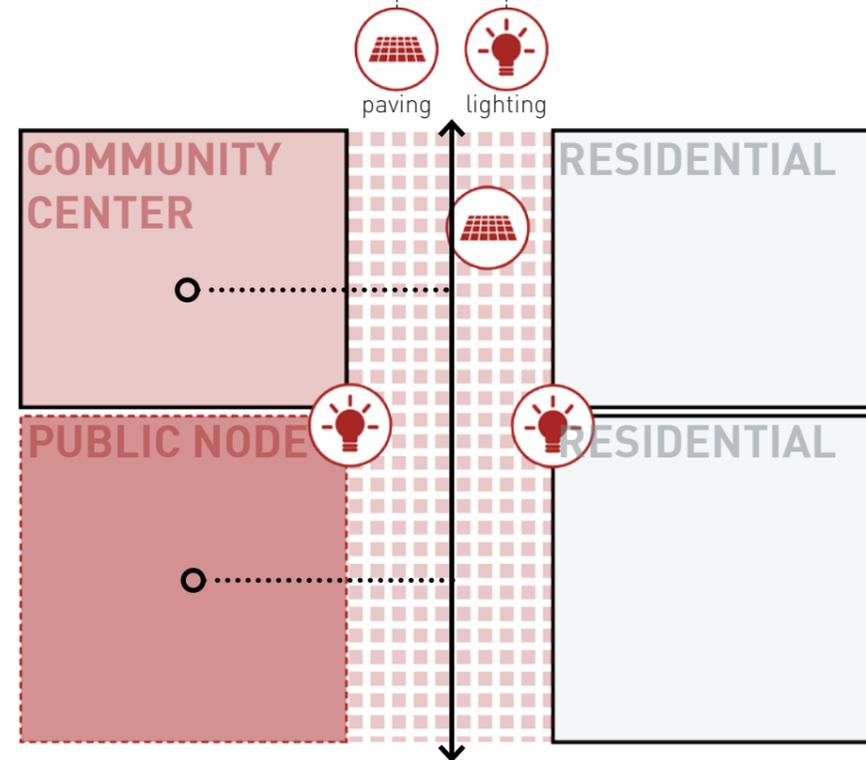
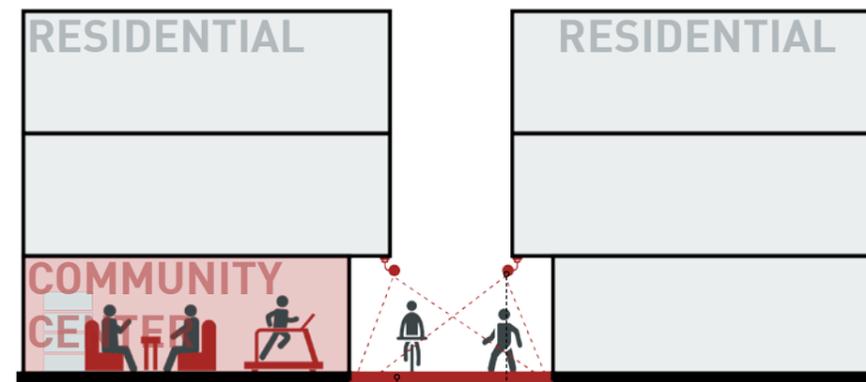
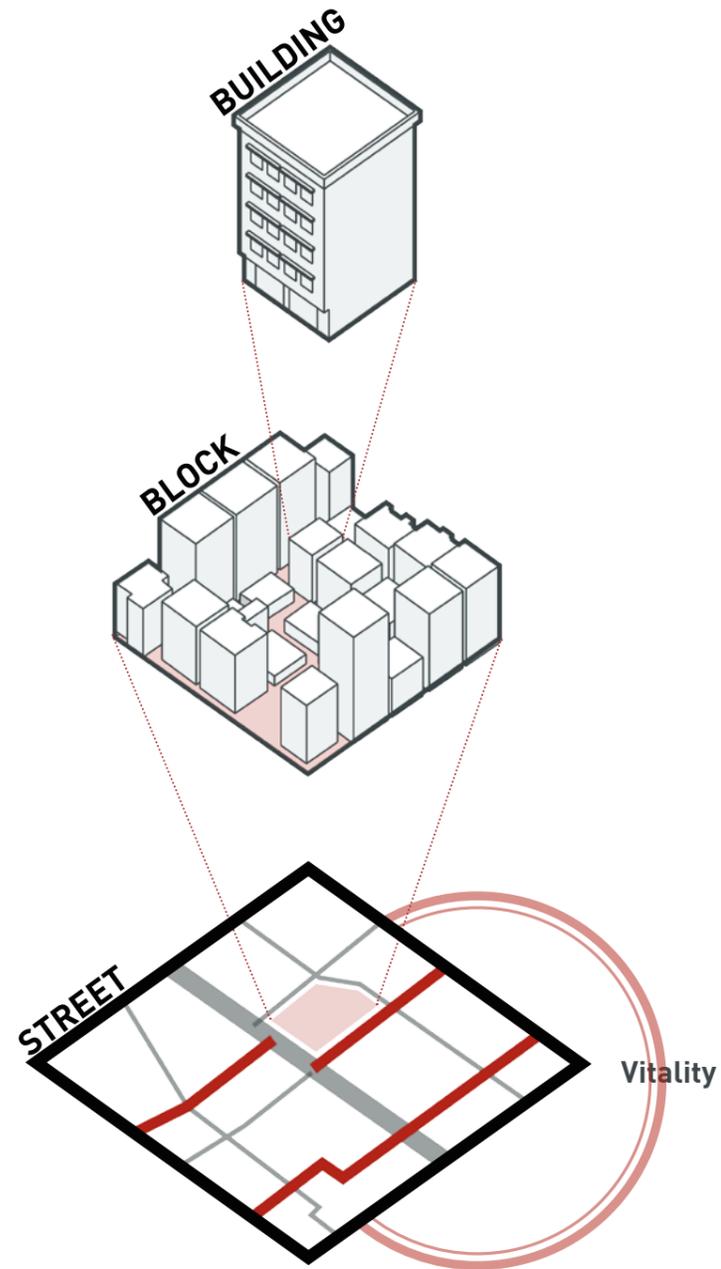
Design principles-Element



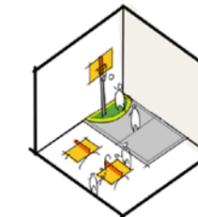
Design principles-Main street: integrated into city network



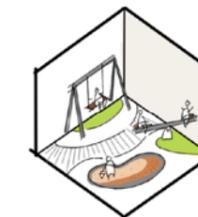
Design principles-Secondary street: enrich social activities



- public function
- housing
- potential public node
- flow
- stay



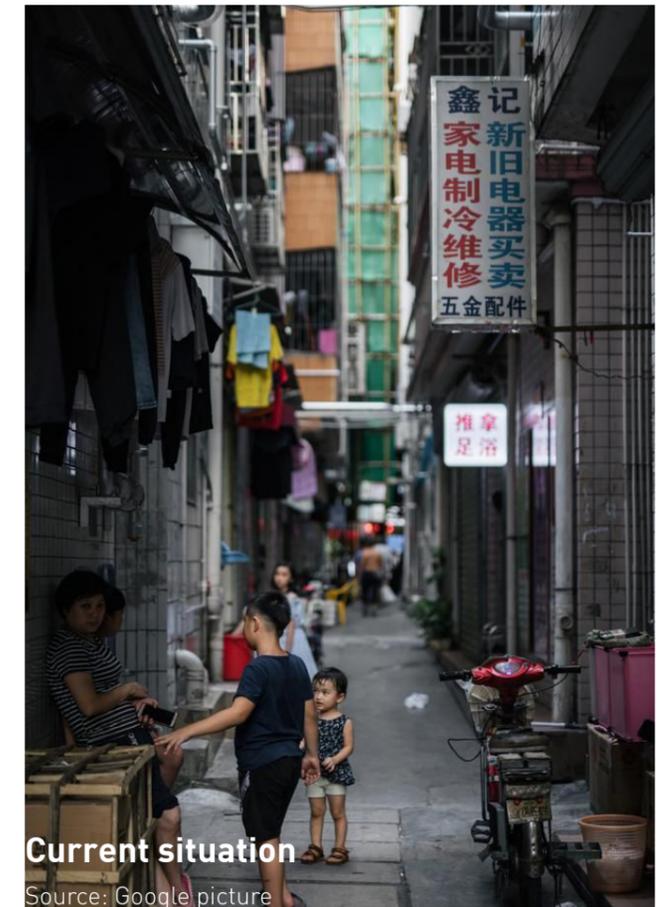
sport field



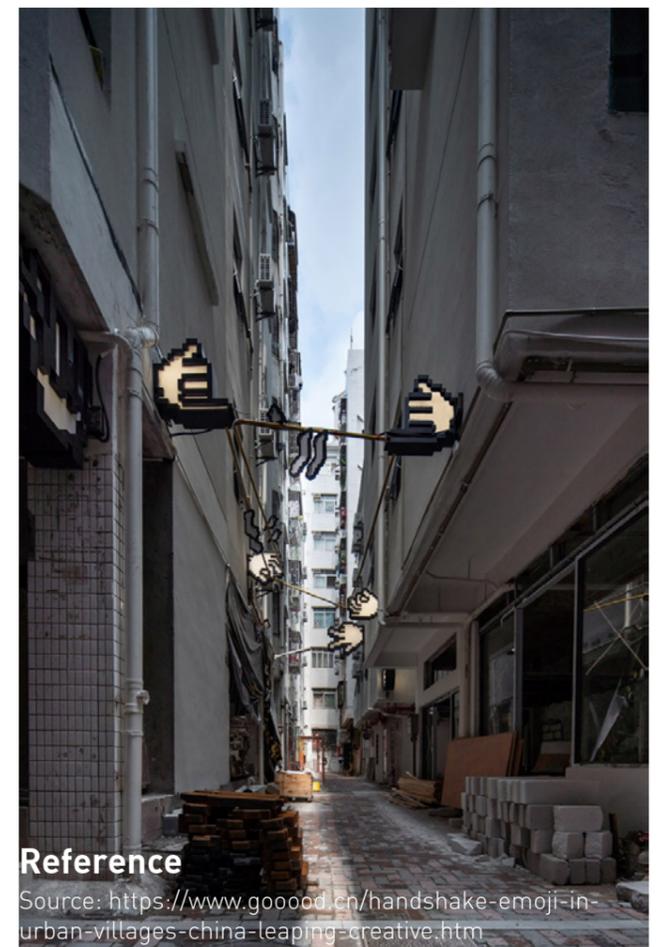
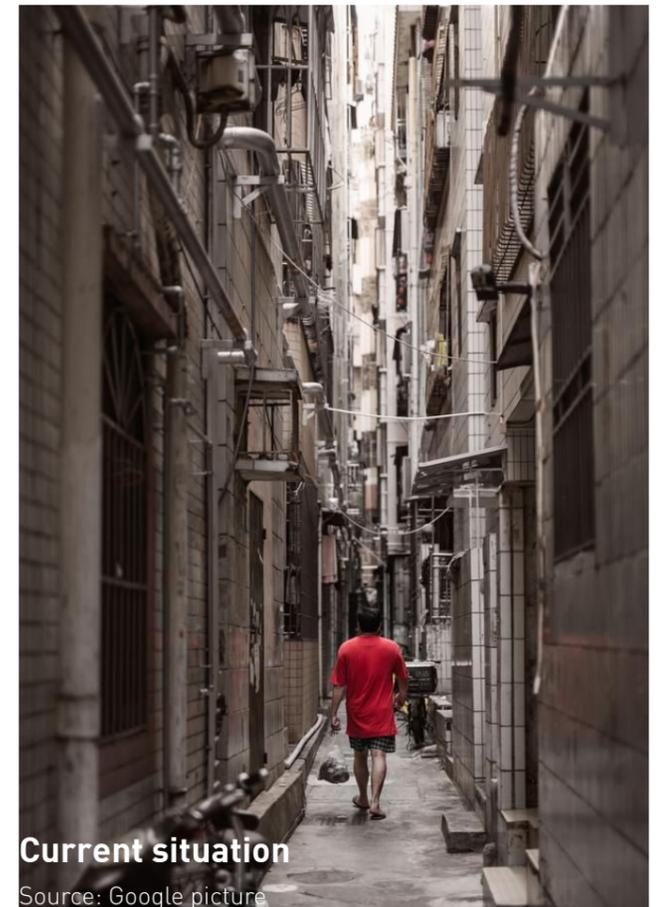
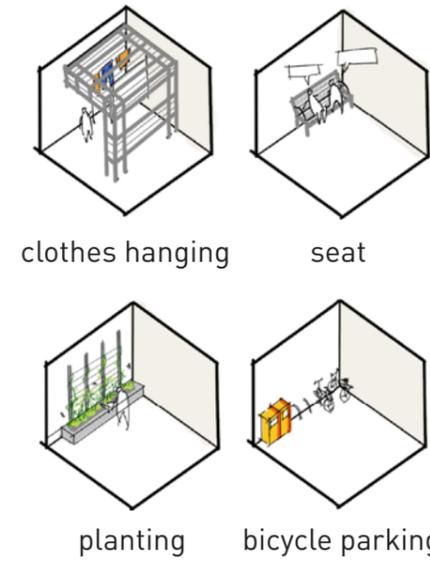
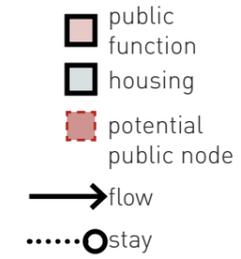
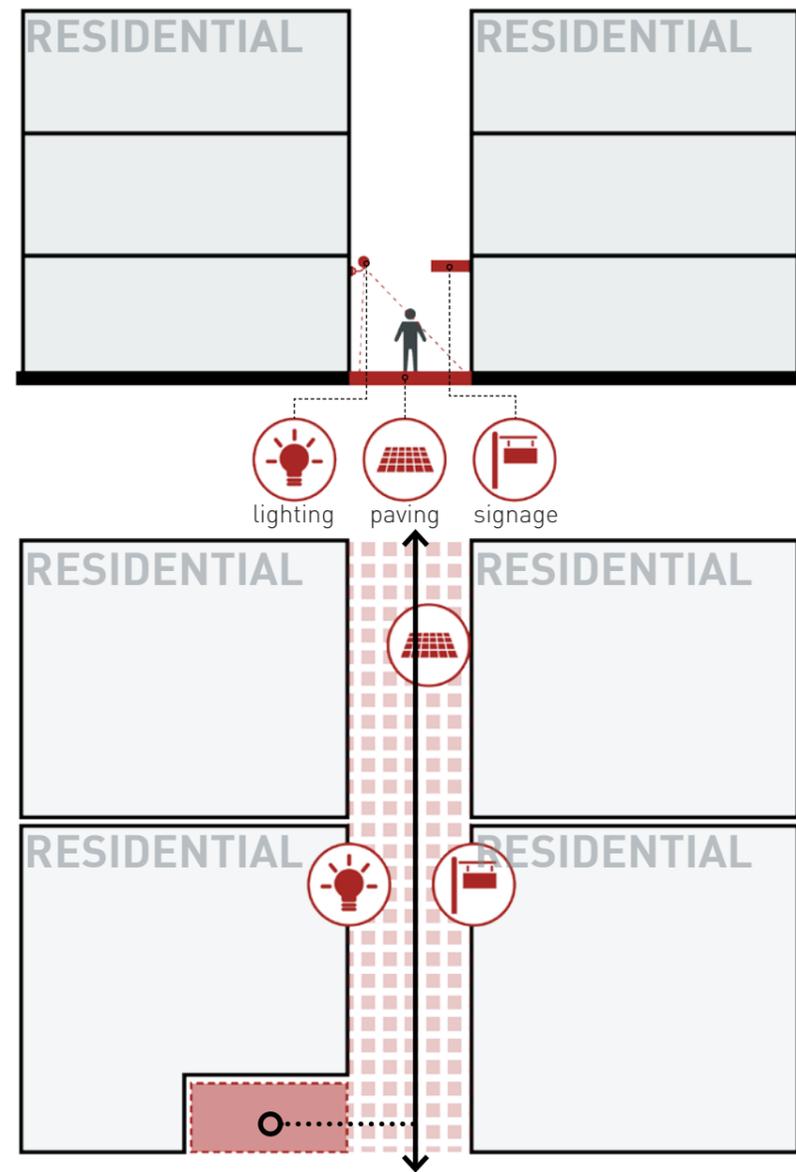
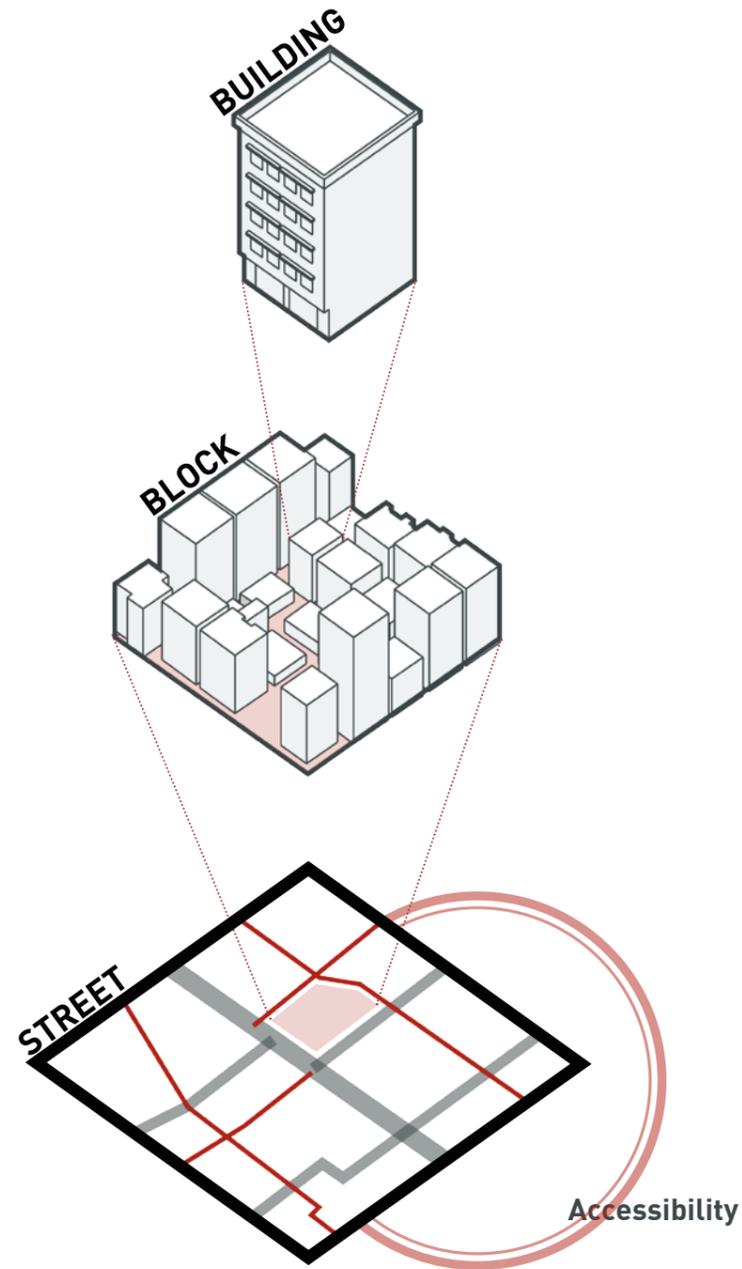
playground



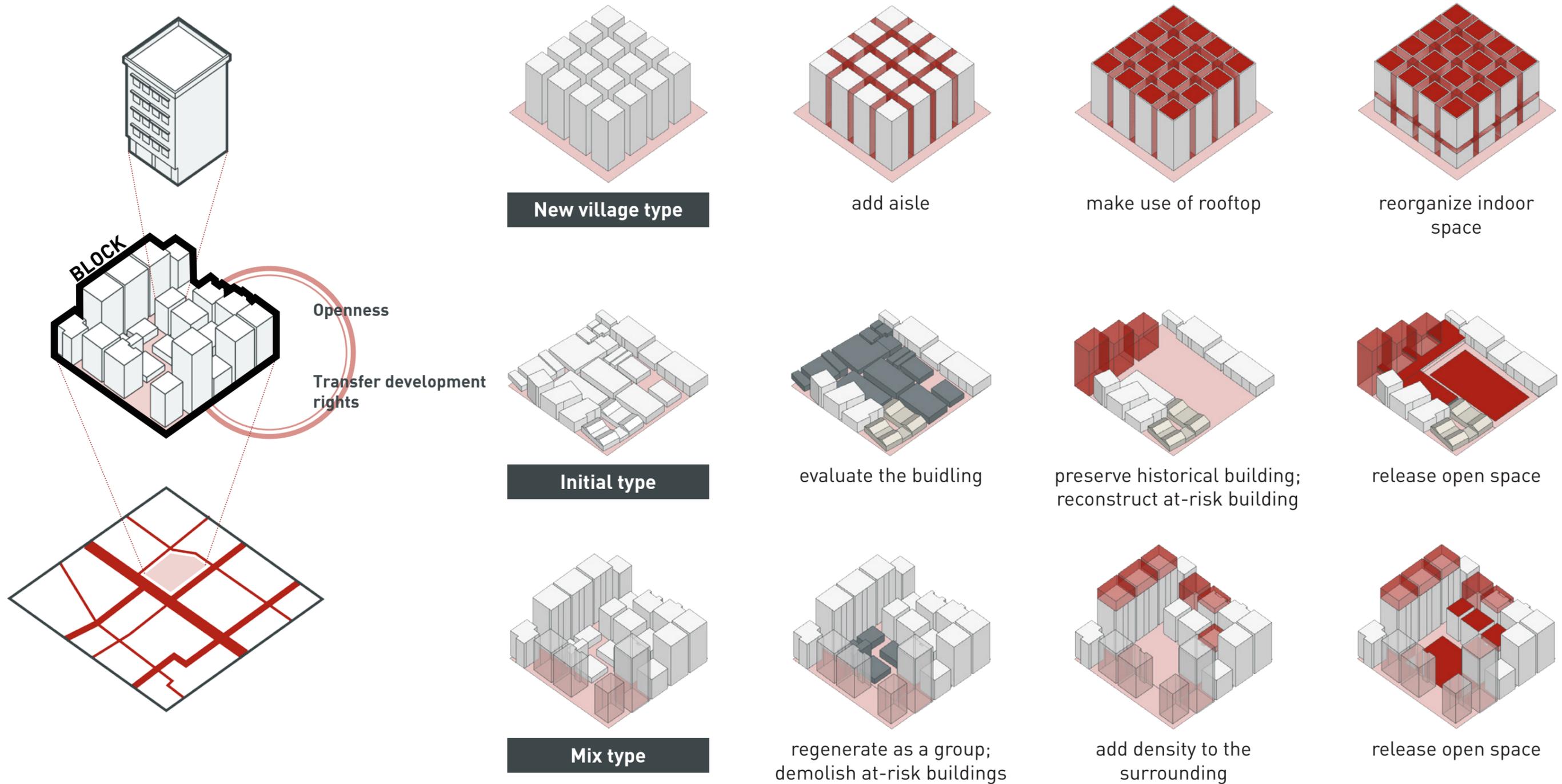
chess and cards



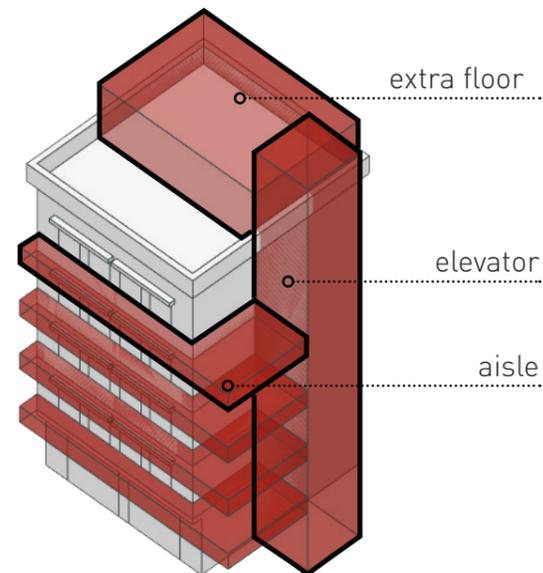
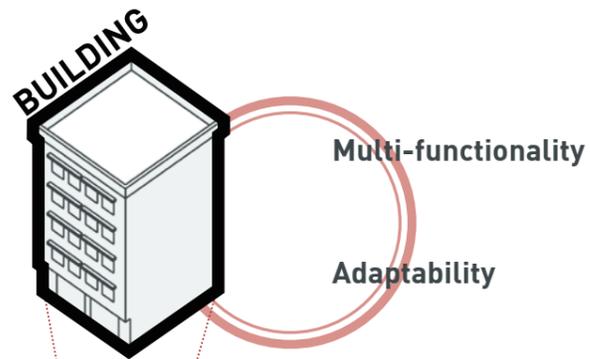
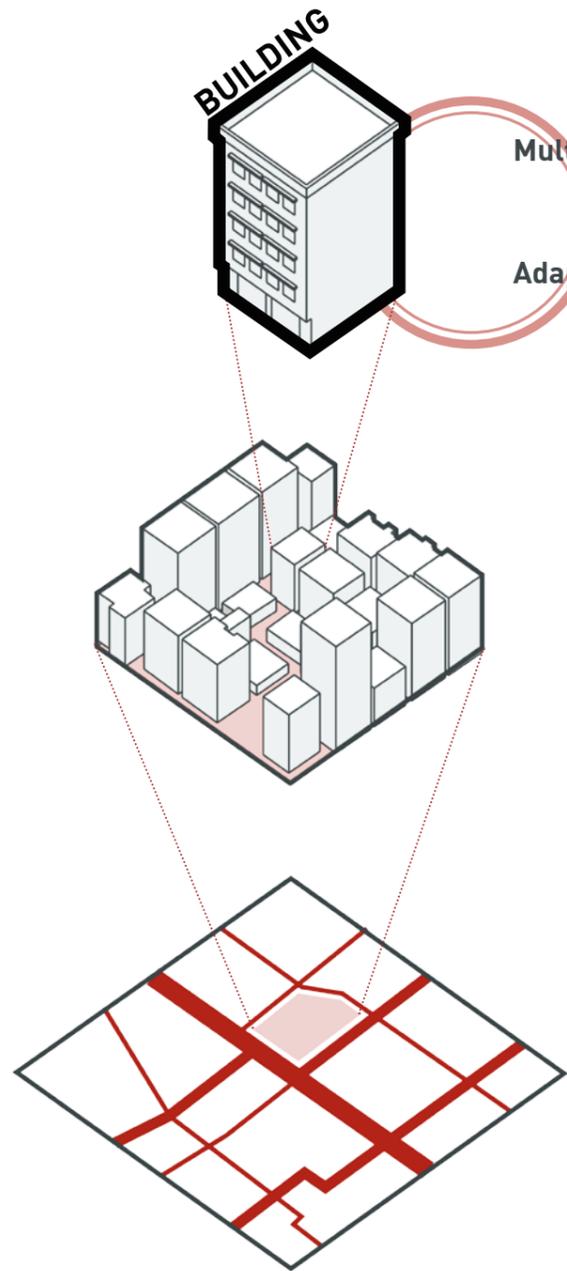
Design principles-Alley: improve accessibility



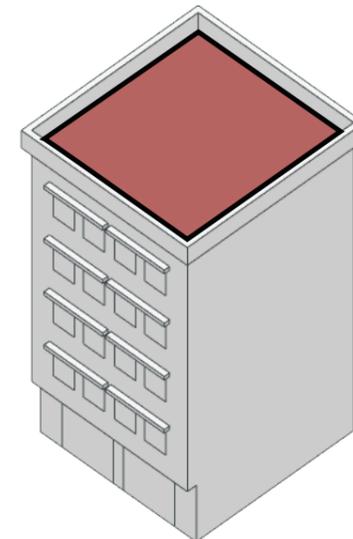
Design principles-Block: increase open space while maintaining density



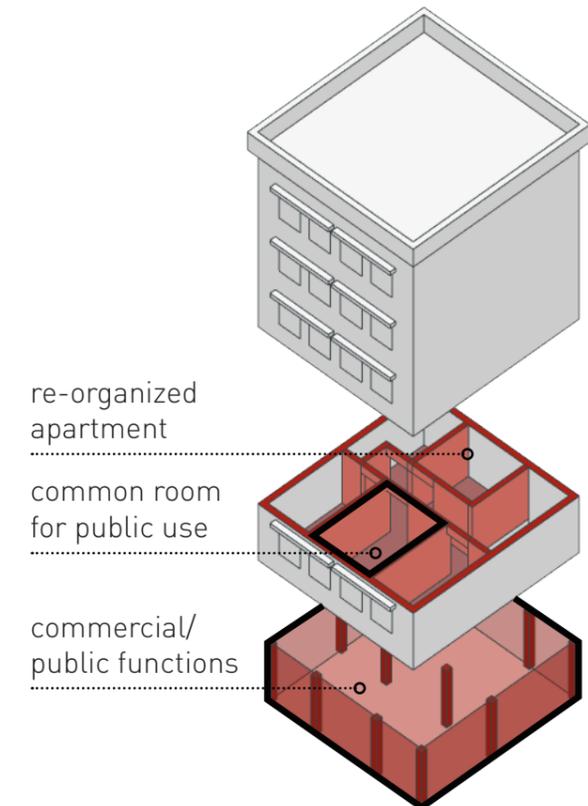
Design principles-Building: insert public functions & be rearranged to adapte to new demands



Add extra construction

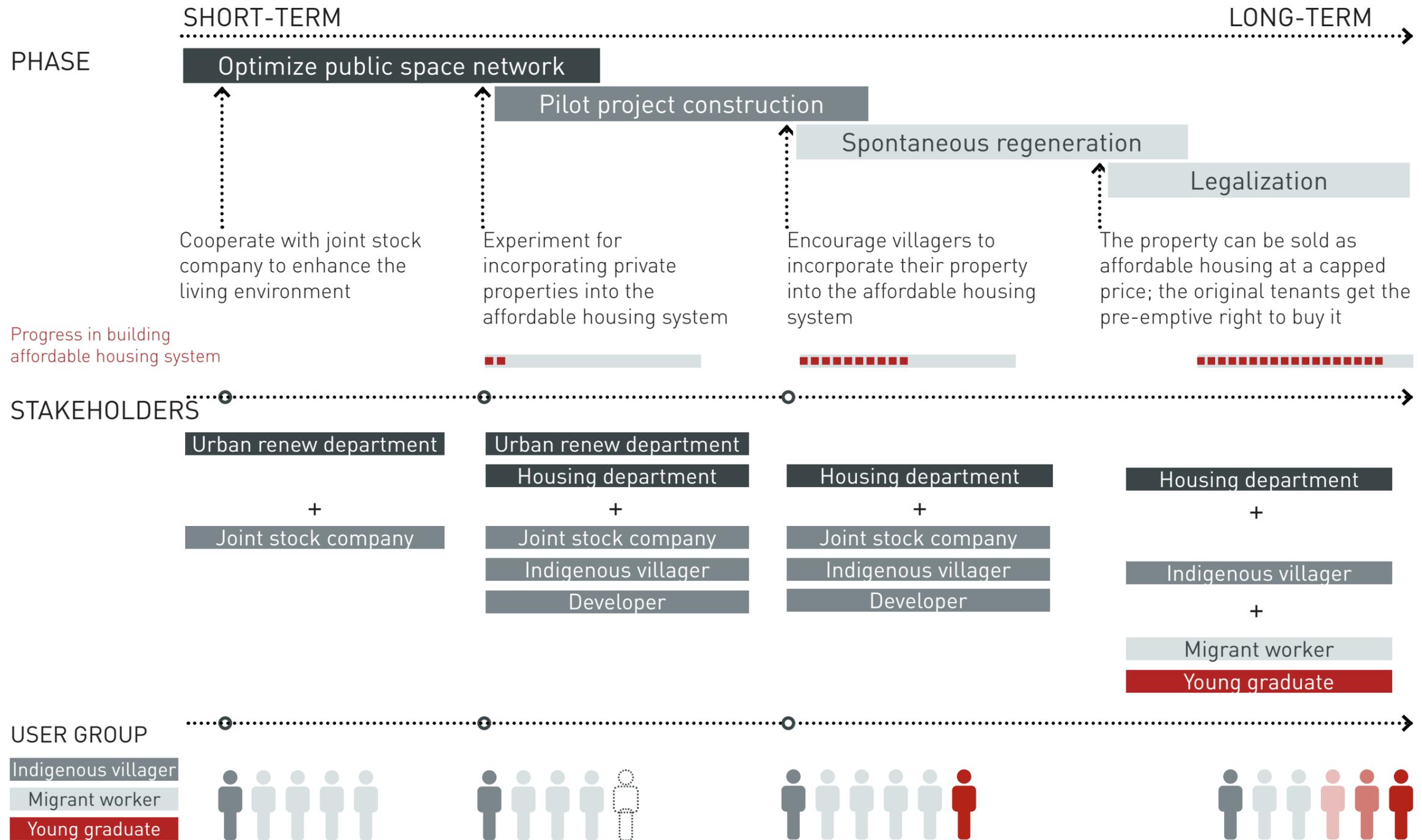


Make use of rooftop



Reorganize indoor space

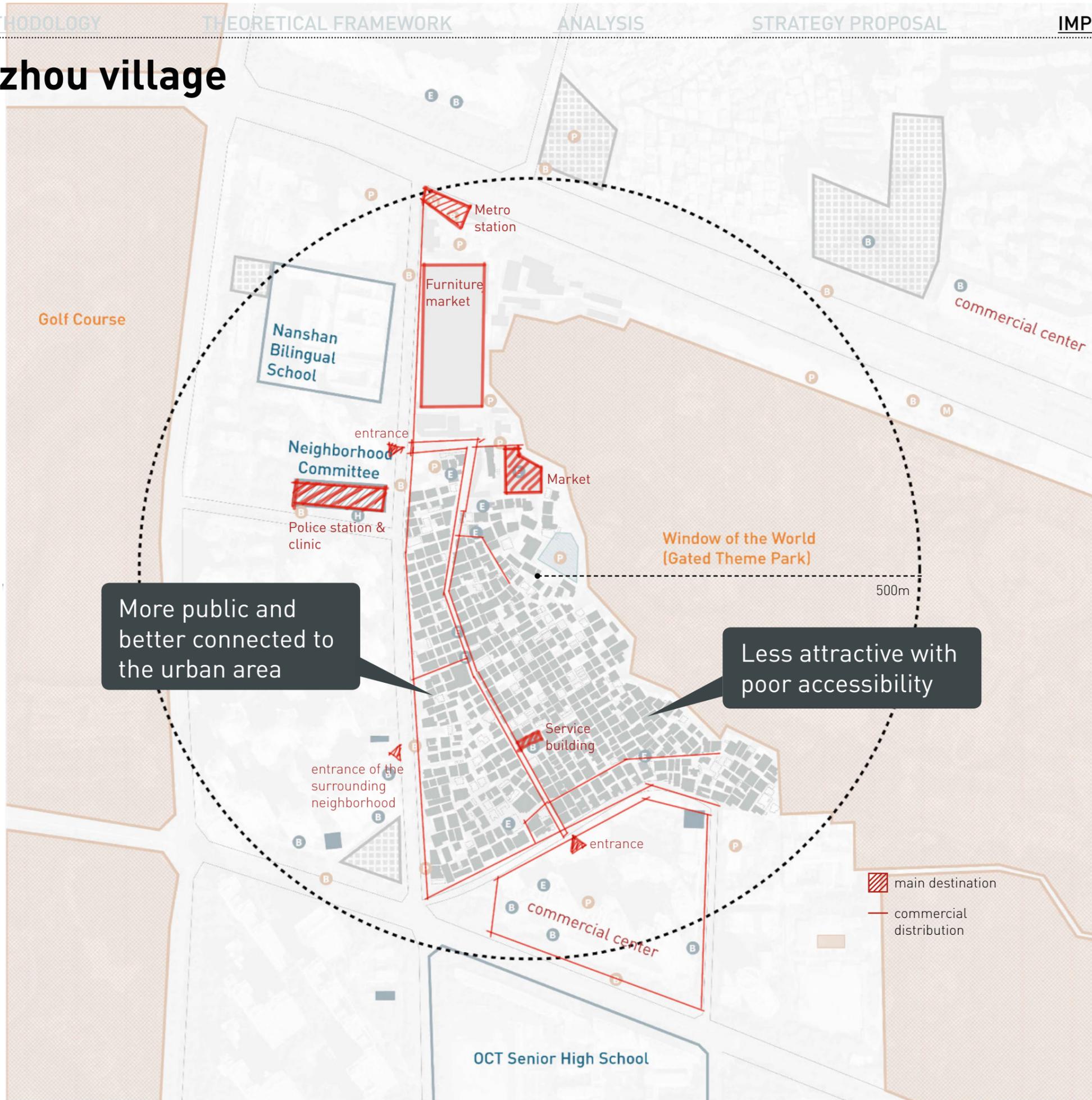
Phasing



TEST THE STRATEGY

Implementation

Case: Baishizhou village



Vision map

After the regeneration, Baishizhou village will become an affordable living community that can be intergrated into the city with better accessibility and higher living quality.



Bring better connection to the main street and the city network

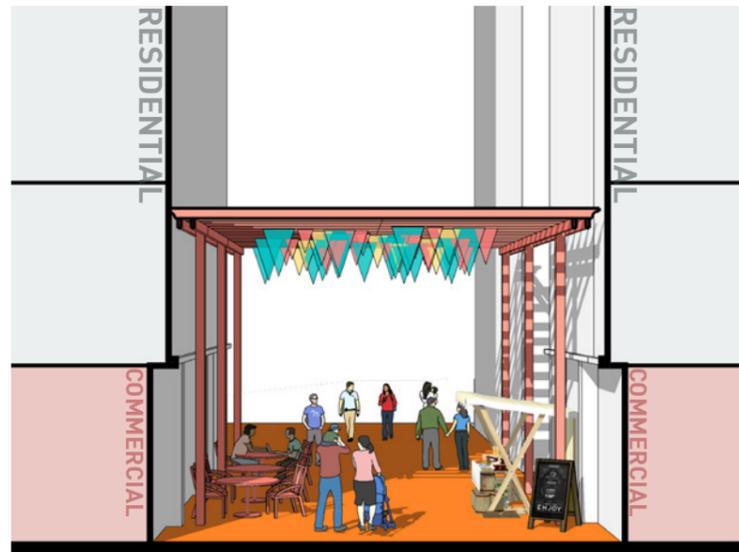
Leading stakeholders



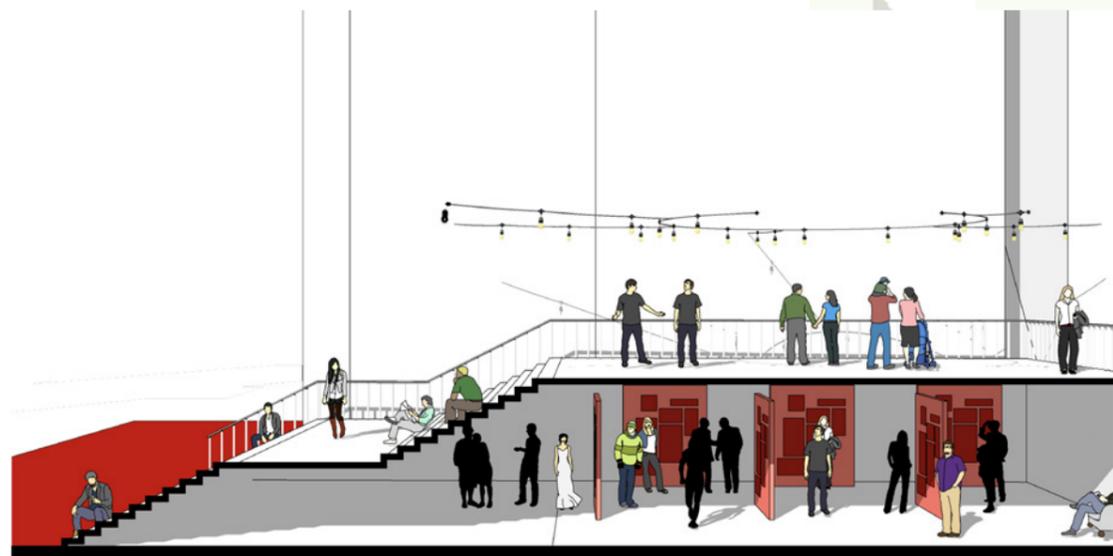
public sector



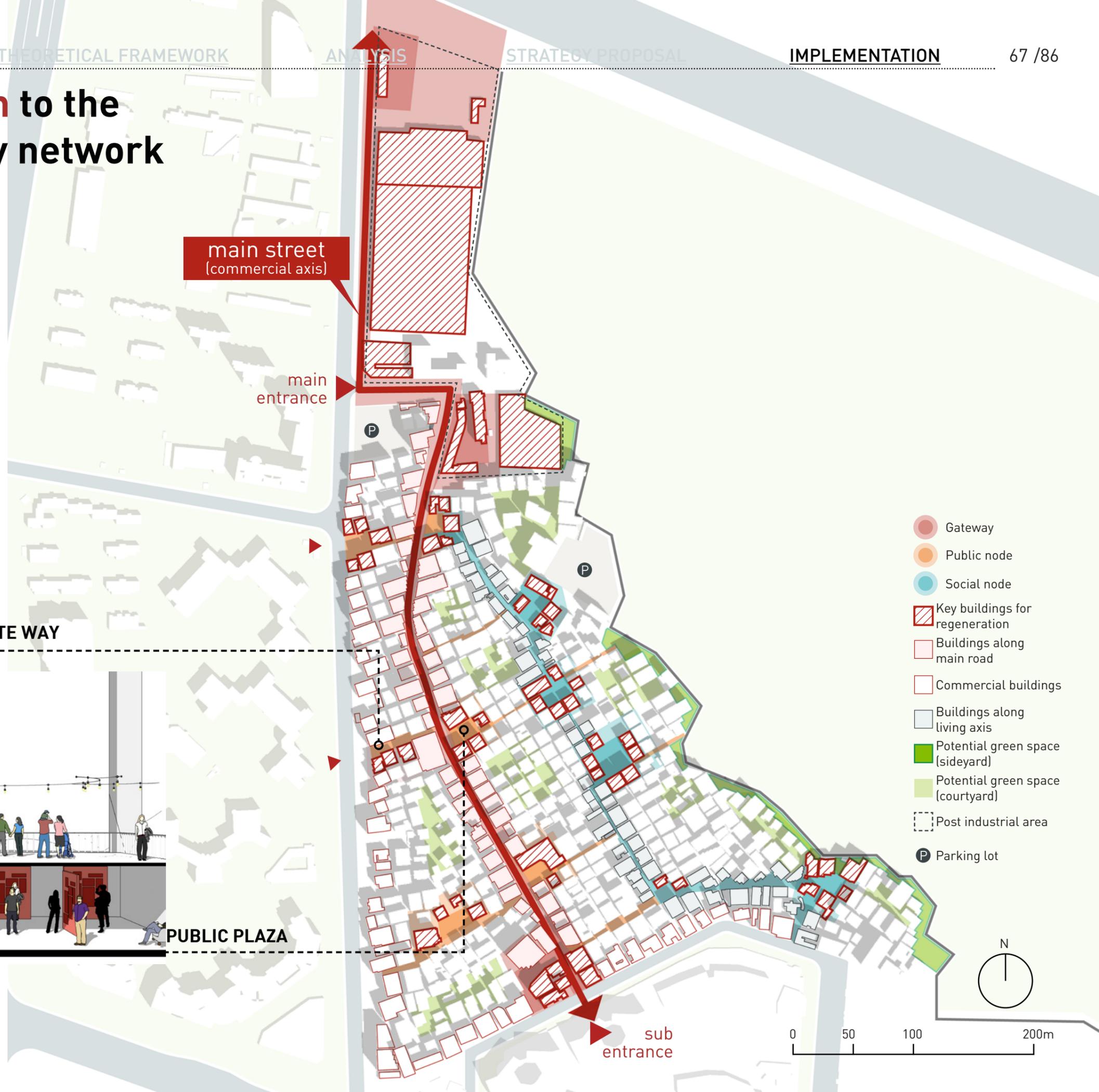
joint-stock company



GATE WAY



PUBLIC PLAZA

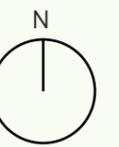


main street
(commercial axis)

main entrance

sub entrance

- Gateway
- Public node
- Social node
- Key buildings for regeneration
- Buildings along main road
- Commercial buildings
- Buildings along living axis
- Potential green space (sideyard)
- Potential green space (courtyard)
- Post industrial area
- Parking lot



Add living axis to regenerate the east part as **livable community**

Leading stakeholders



joint-stock company

villager



- Gateway
- Public node
- Social node
- Key buildings for regeneration
- Buildings along main road
- Commercial buildings
- Buildings along living axis
- Potential green space (sideyard)
- Potential green space (courtyard)
- Post industrial area
- Parking lot

Add footpath connections to optimize the network

Leading stakeholders



joint-stock company

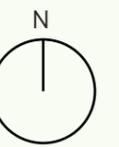


villager



- Gateway
- Public node
- Social node
- Key buildings for regeneration
- Buildings along main road
- Commercial buildings
- Buildings along living axis
- Potential green space (sideyard)
- Potential green space (courtyard)
- Post industrial area
- Parking lot

0 50 100 200m



Fill the leftover vacant lands with green space

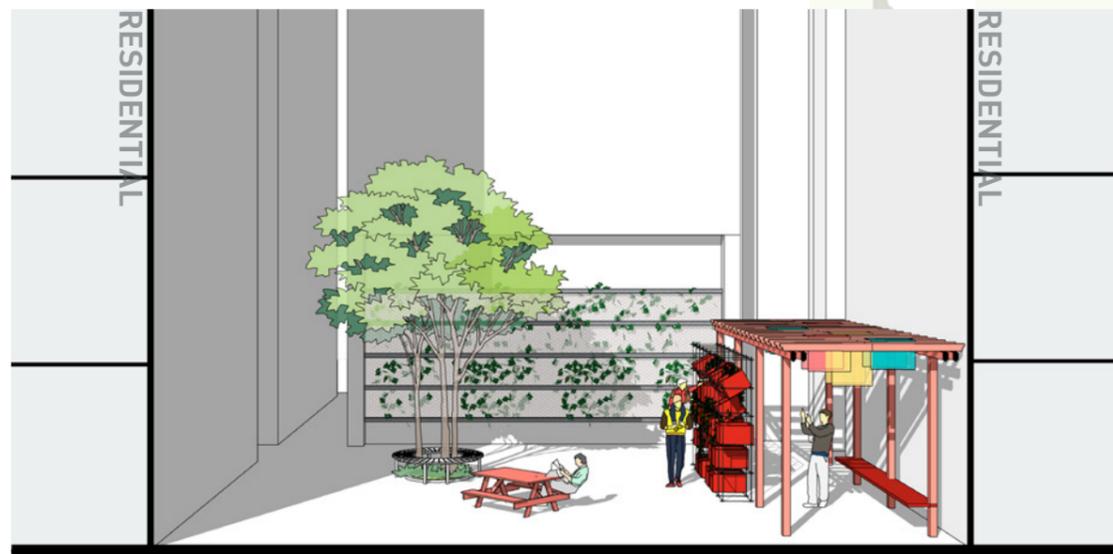
Leading stakeholders



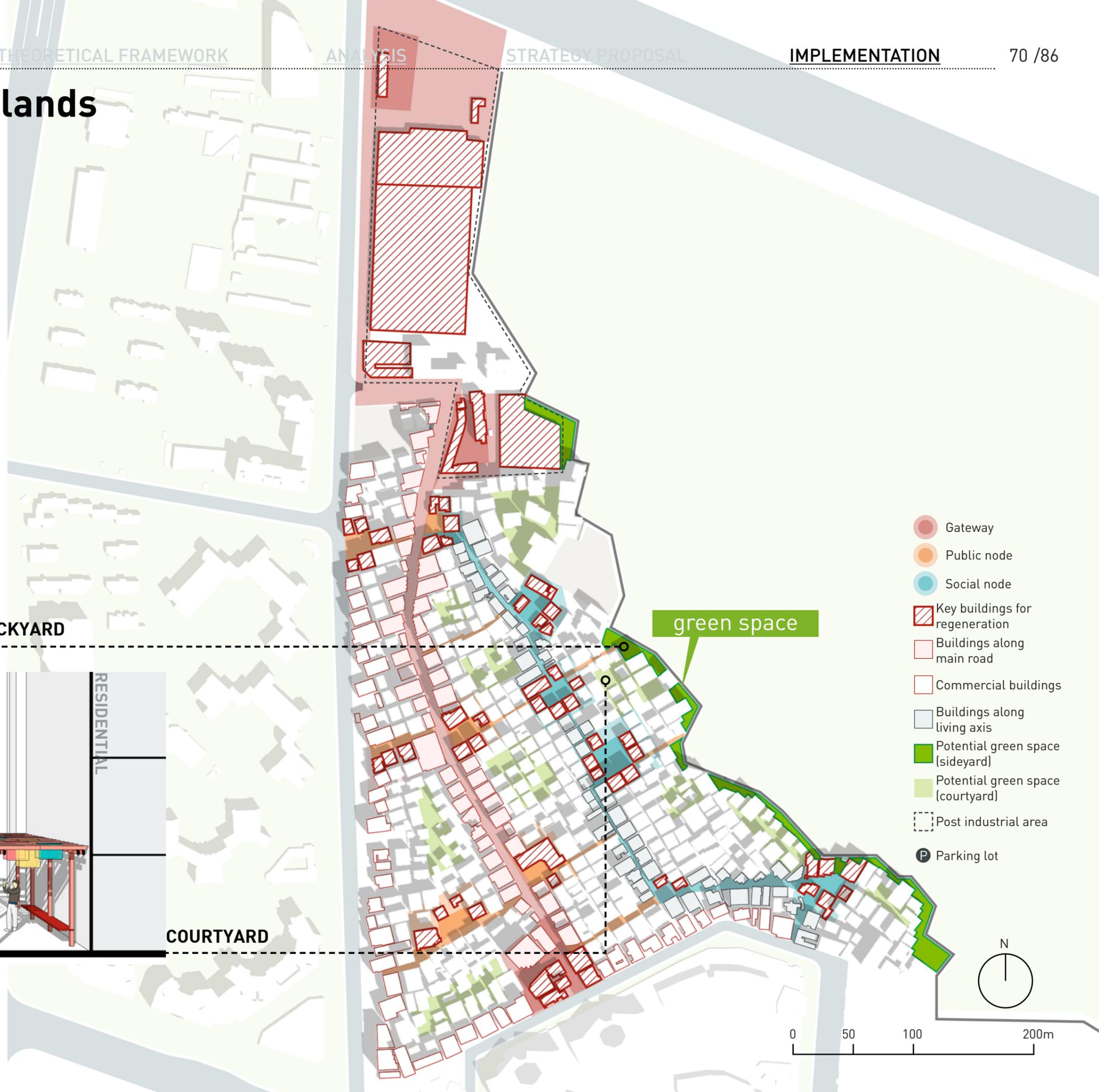
villager



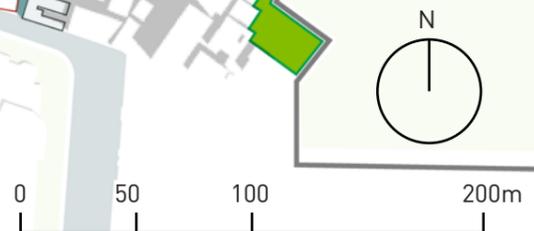
BACKYARD



COURTYARD

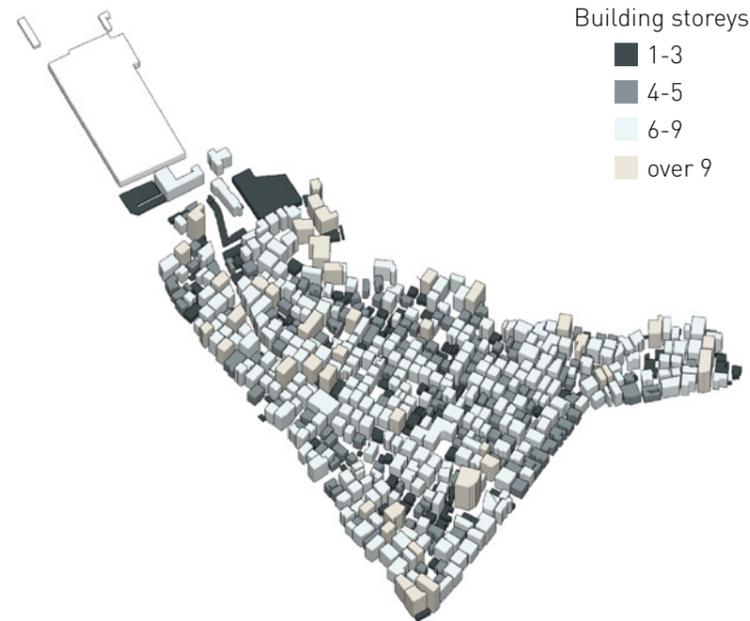


- Gateway
- Public node
- Social node
- Key buildings for regeneration
- Buildings along main road
- Commercial buildings
- Buildings along living axis
- Potential green space (sideyard)
- Potential green space (courtyard)
- Post industrial area
- P Parking lot



Building code: Guide the spontaneous regeneration

01 Building height



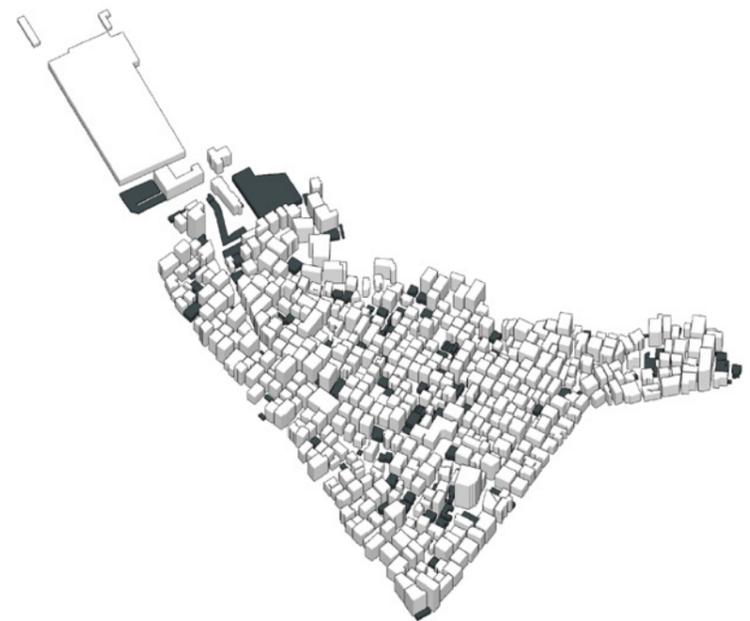
03 Set back/ open ground floor



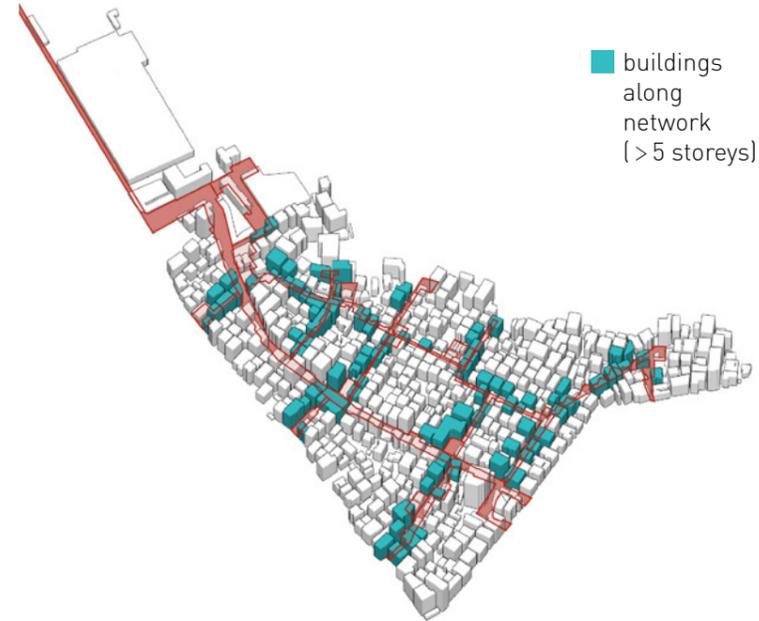
04 Insert public program



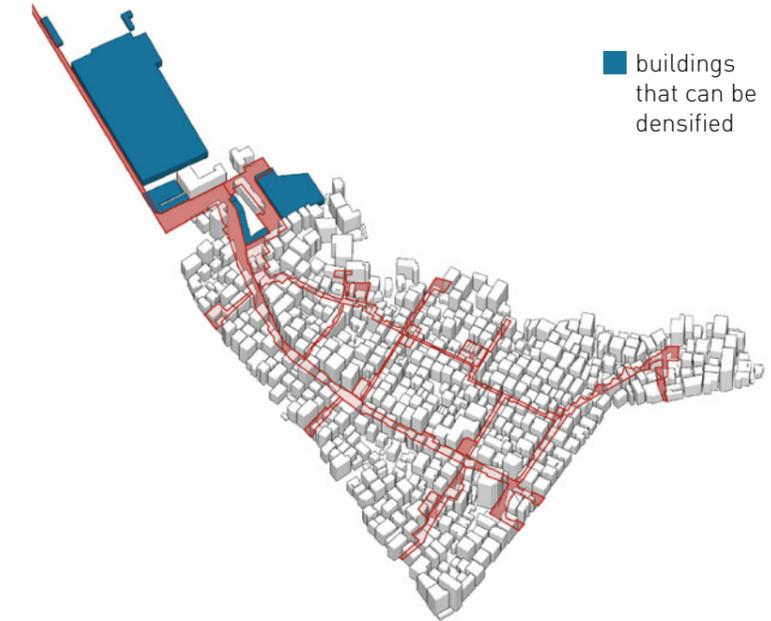
02 Demolition



05 Densification as compensation

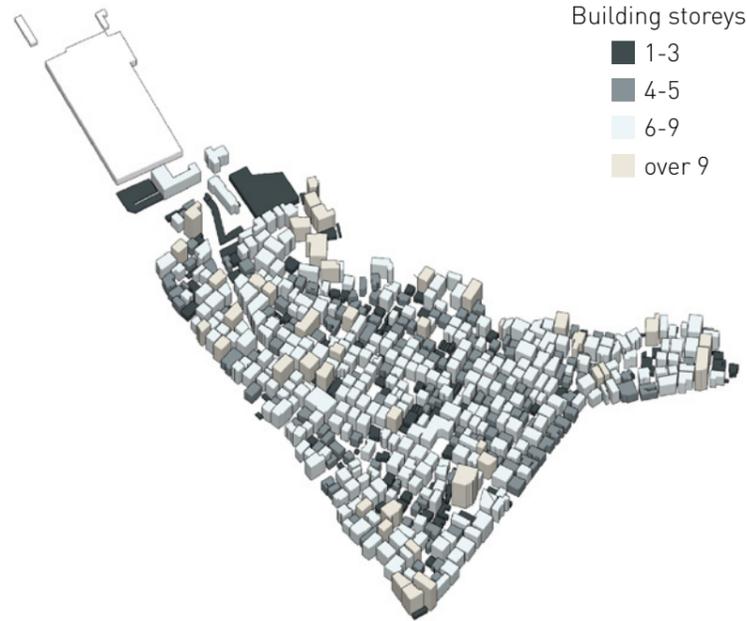


05 Densification as compensation

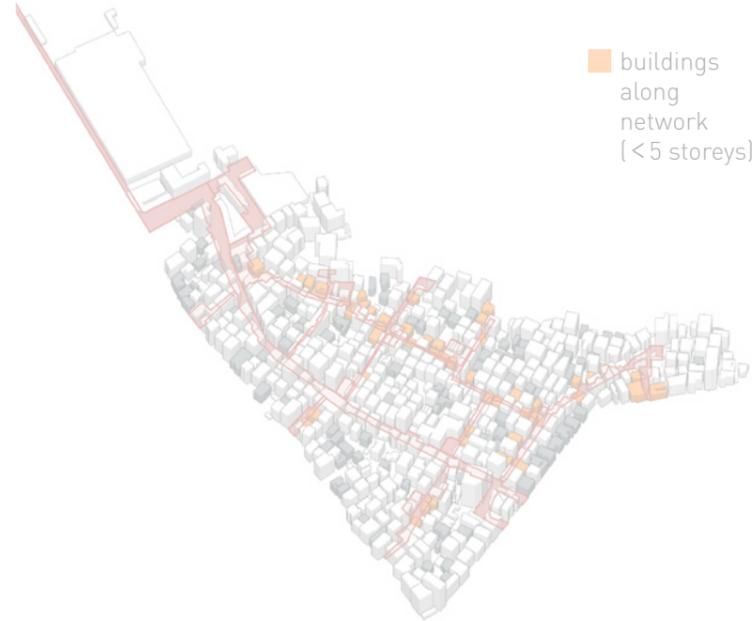


Building code: Guide the spontaneous regeneration

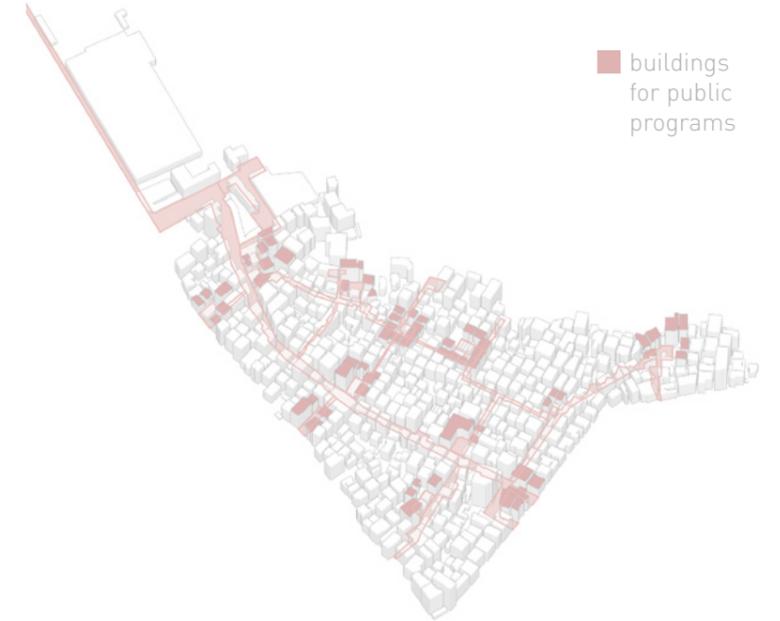
01 Building height



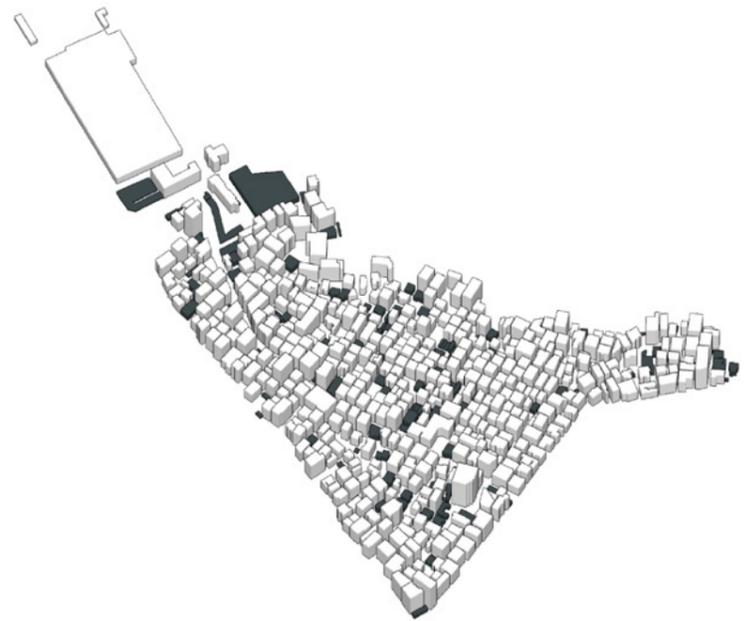
03 Set back/ open ground floor



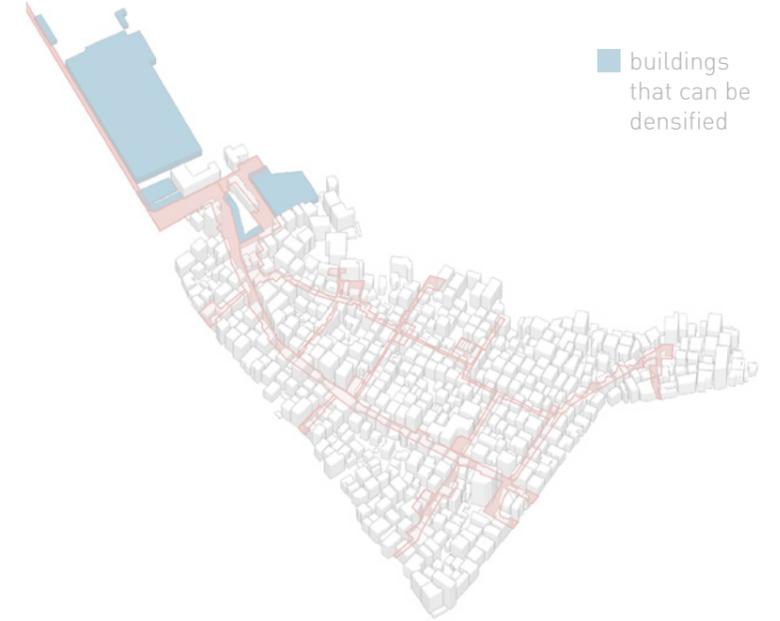
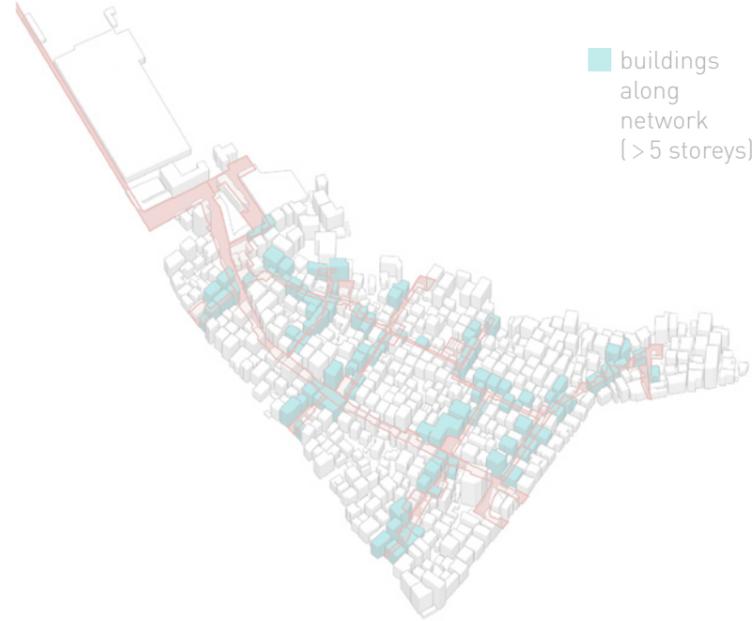
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02 Demolition

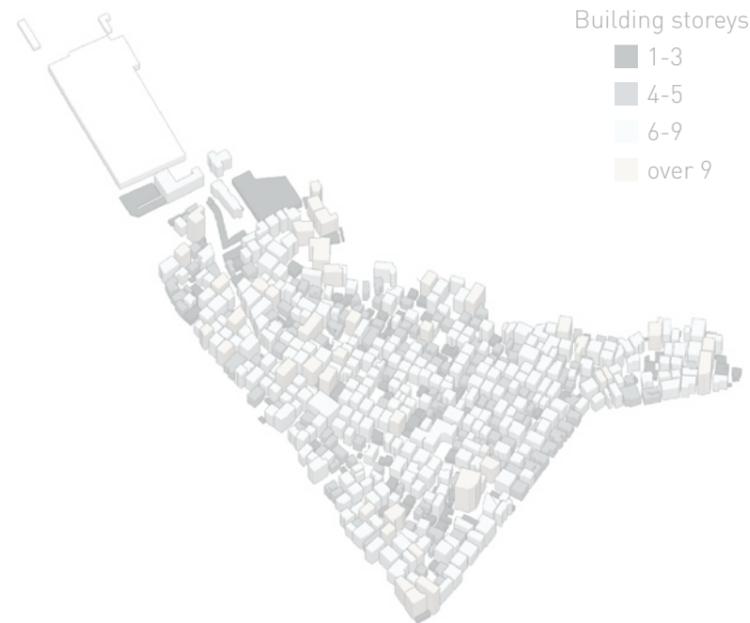


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Building code: Guide the spontaneous regeneration

01 Building height



03 Set back/ open ground floor



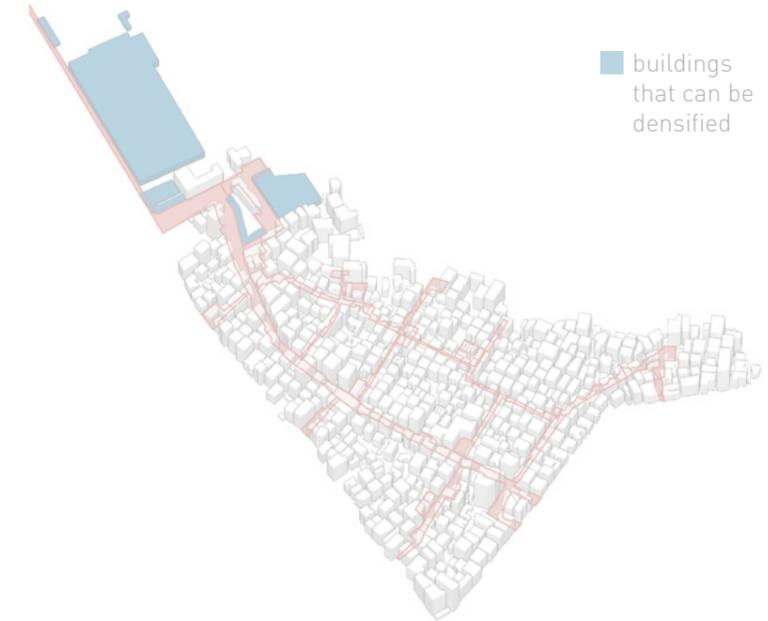
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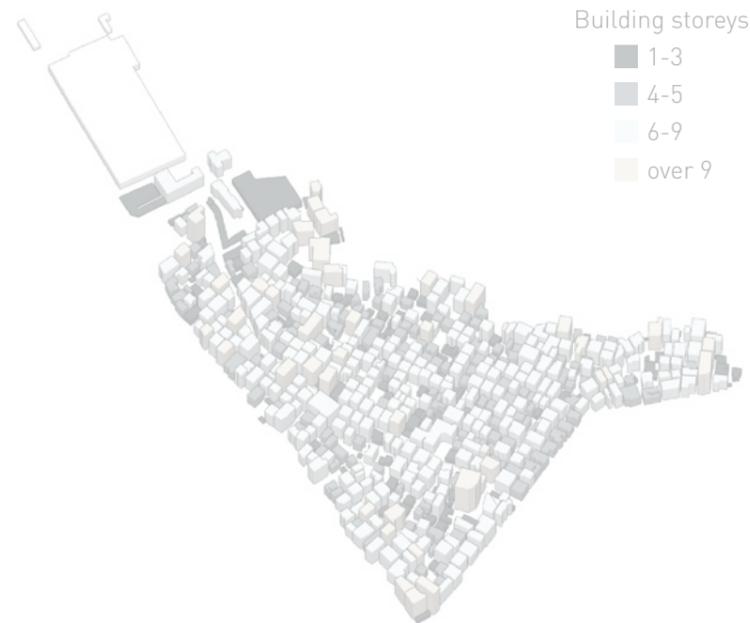


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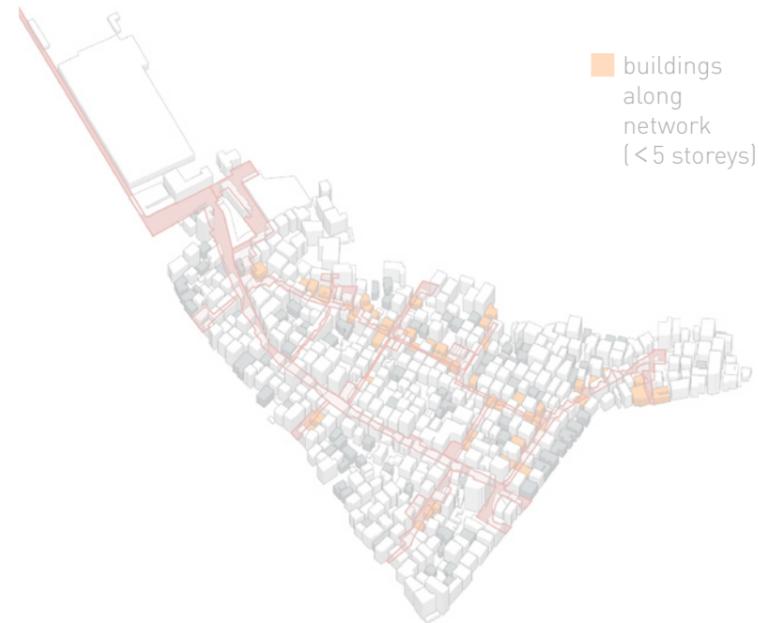


Building code: Guide the spontaneous regeneration

01 Building height



03 Set back/ open ground floor



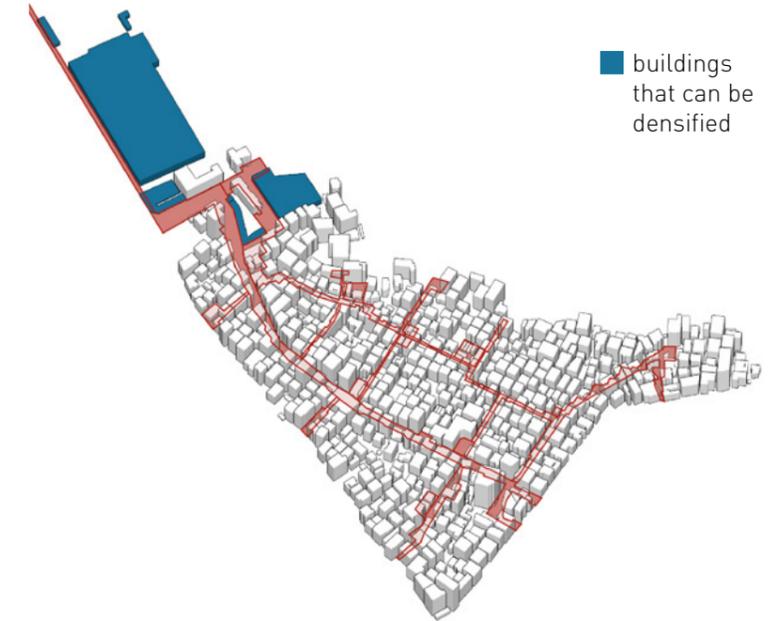
04 Insert public program



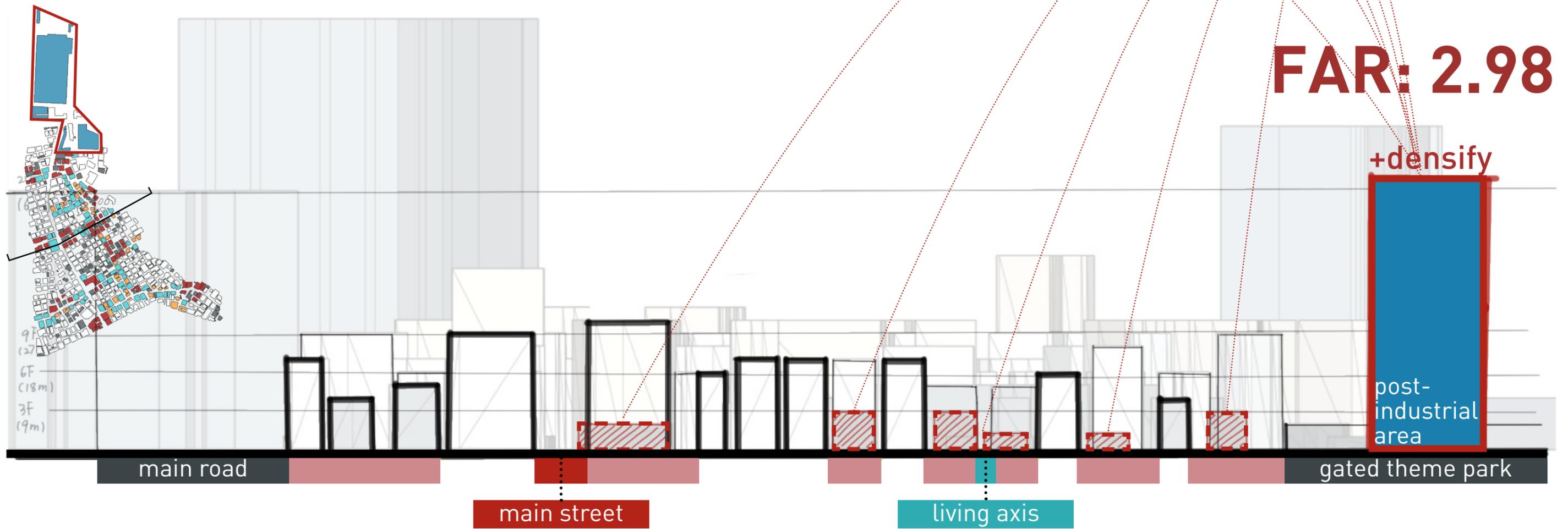
02 Demolition



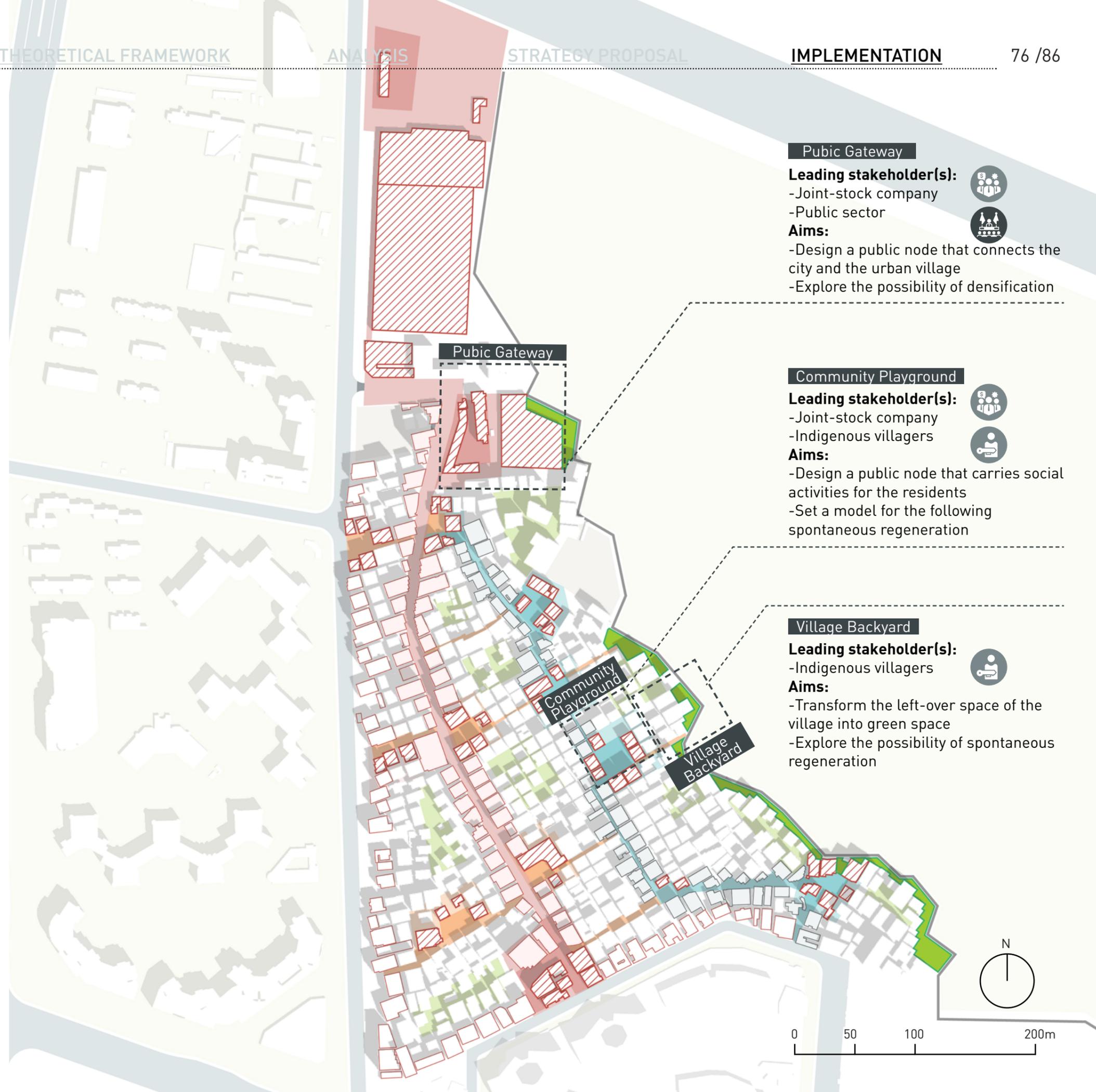
05 Densification as compensation



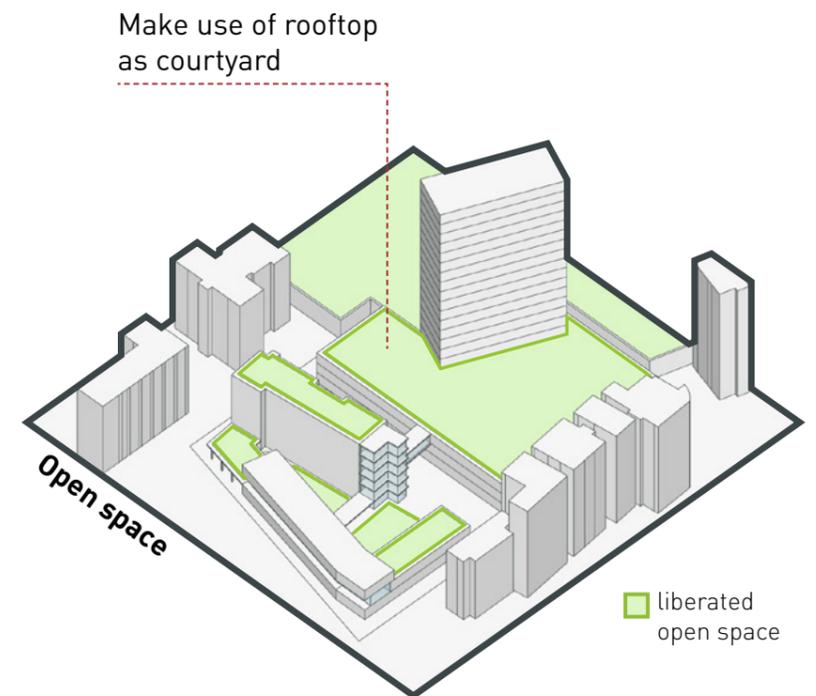
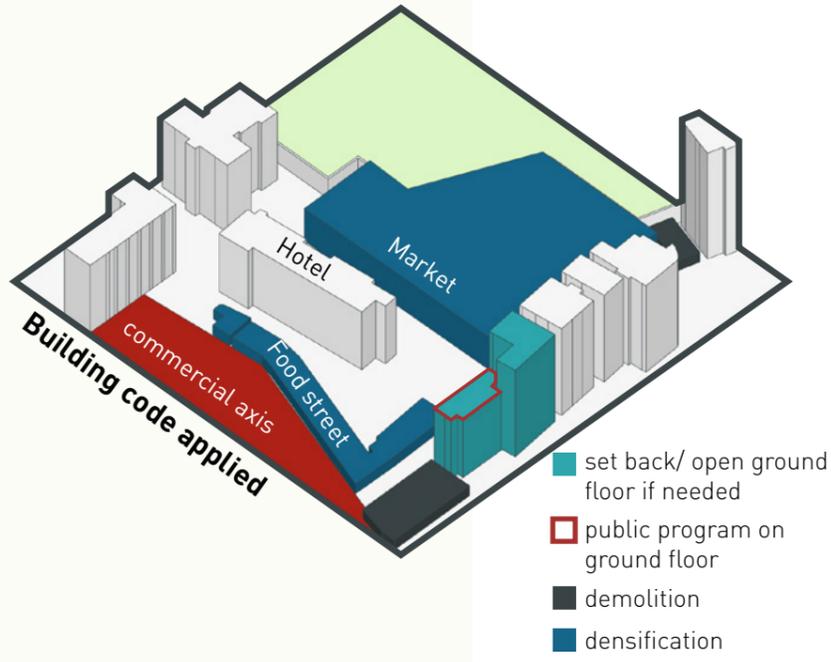
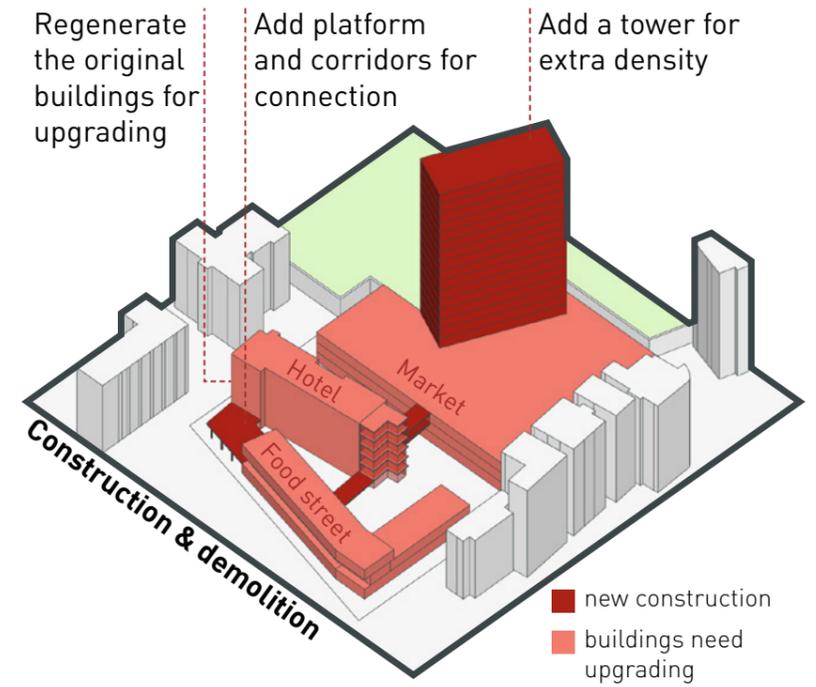
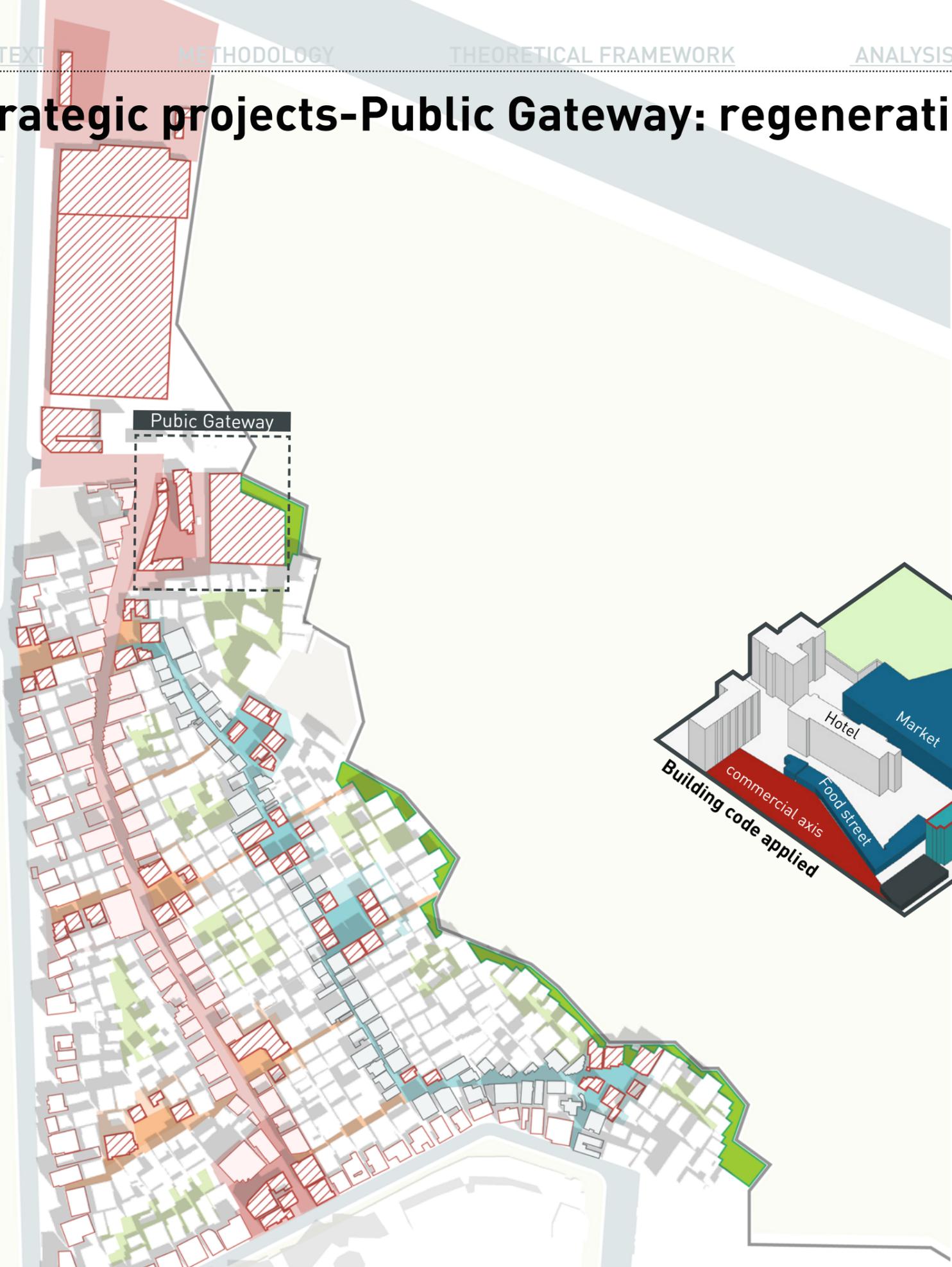
Compensate demolition



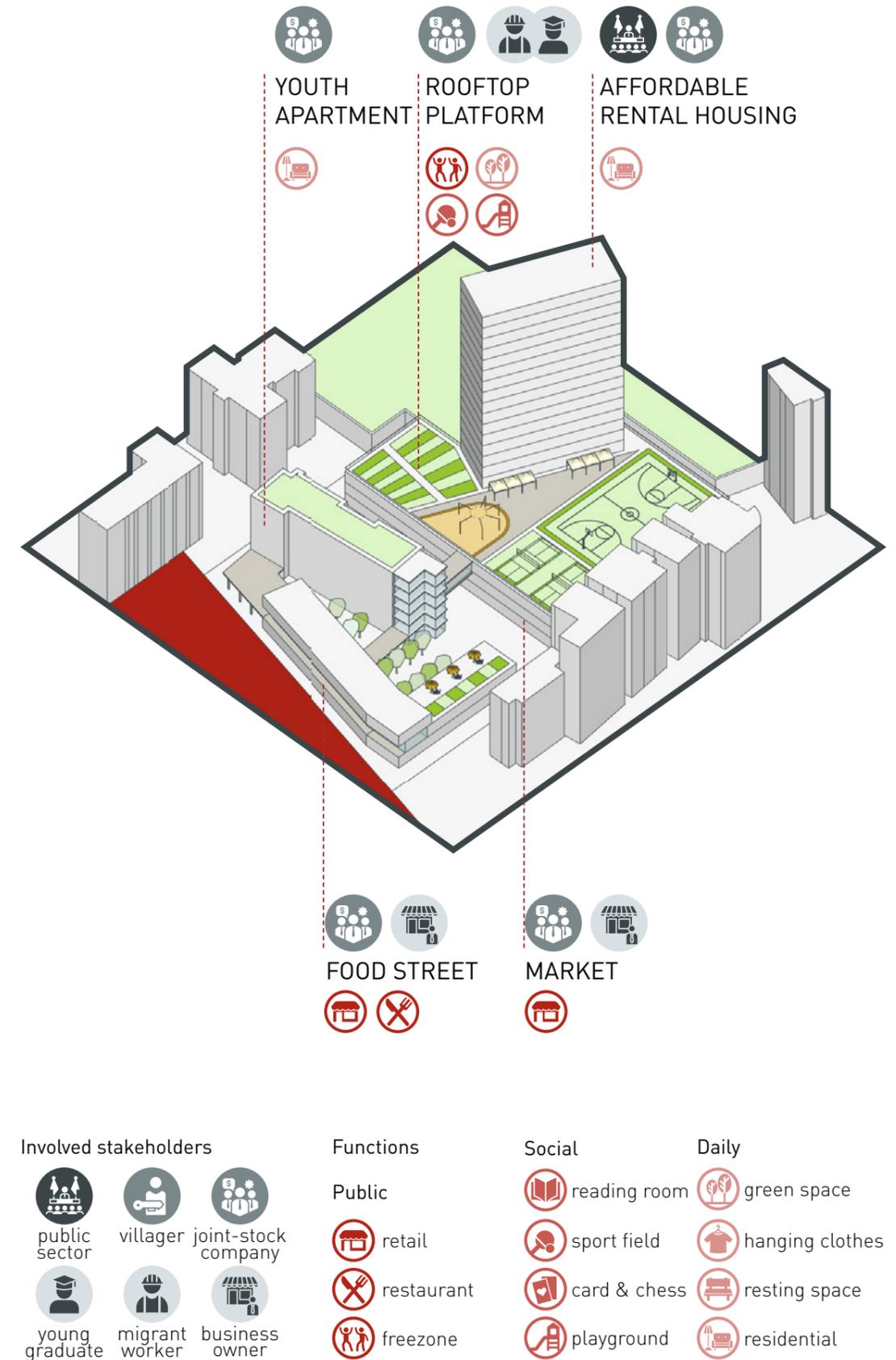
Strategic projects



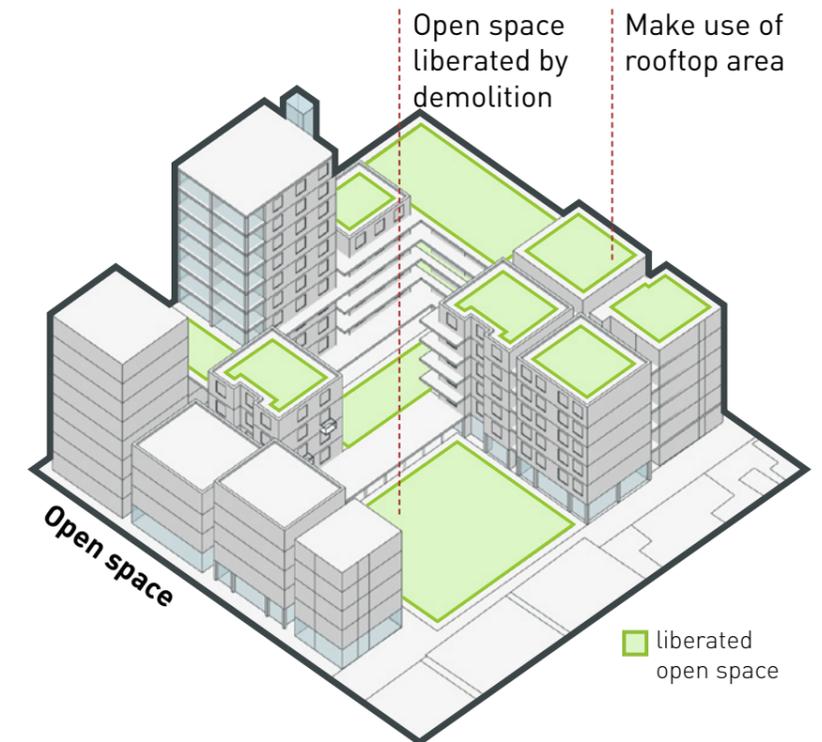
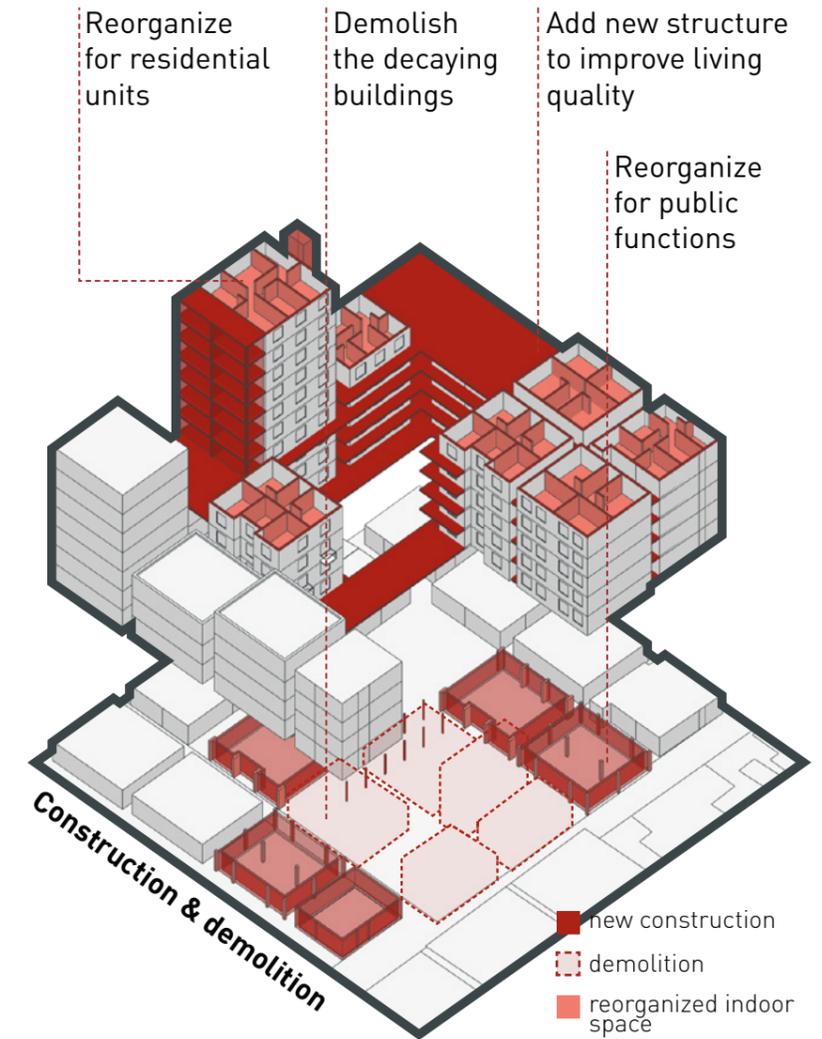
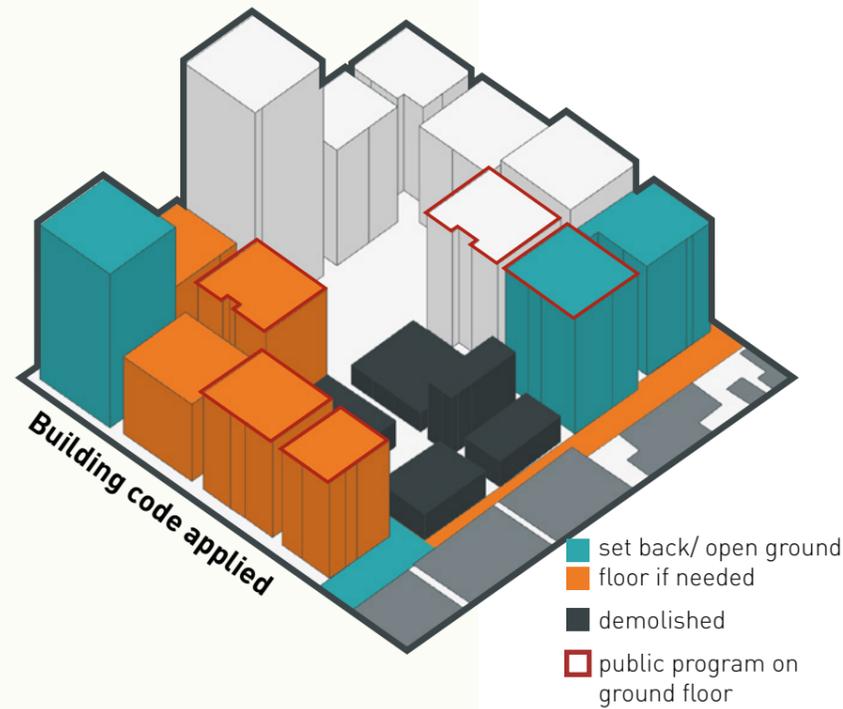
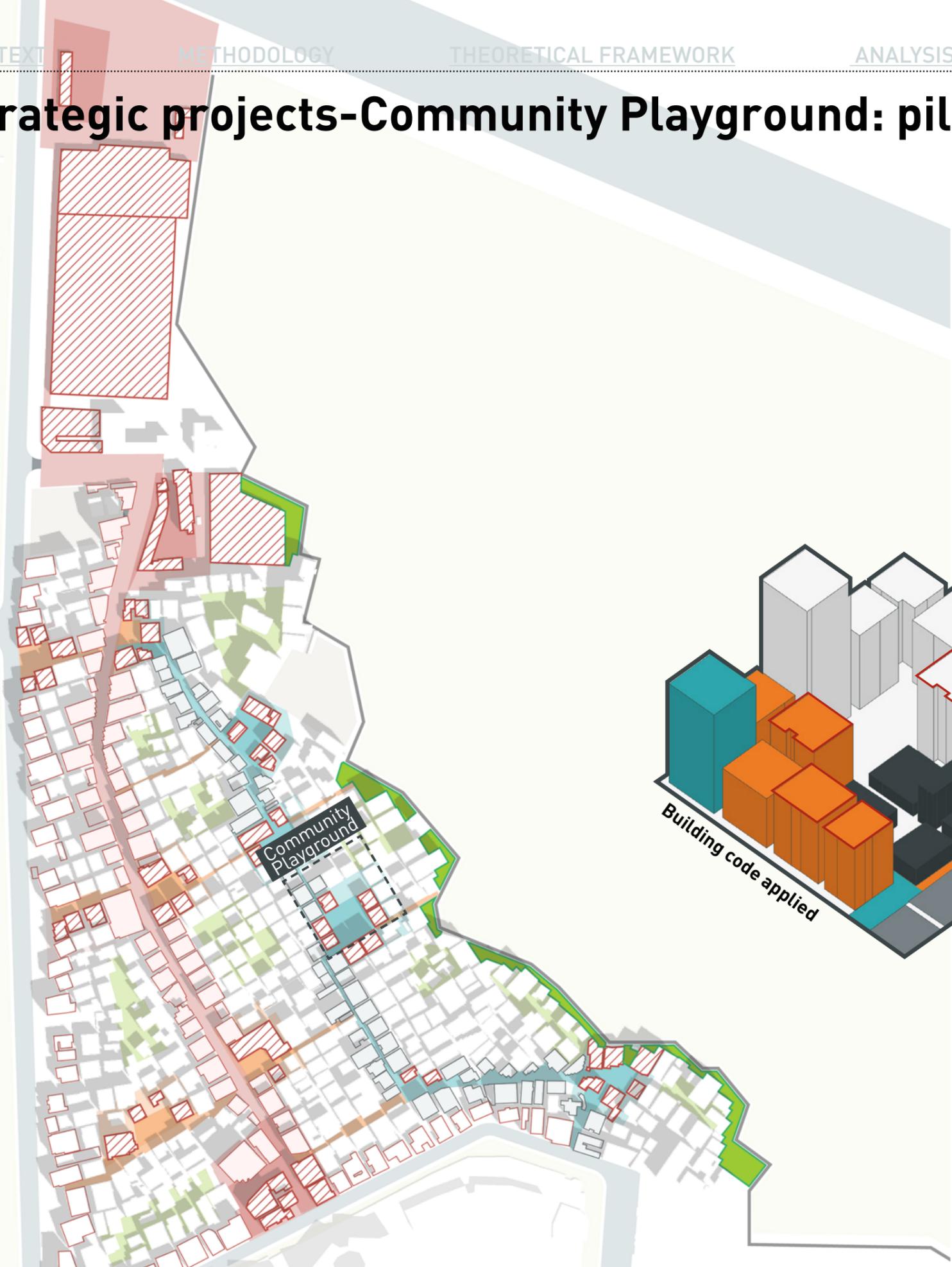
Strategic projects-Public Gateway: regeneration + densification



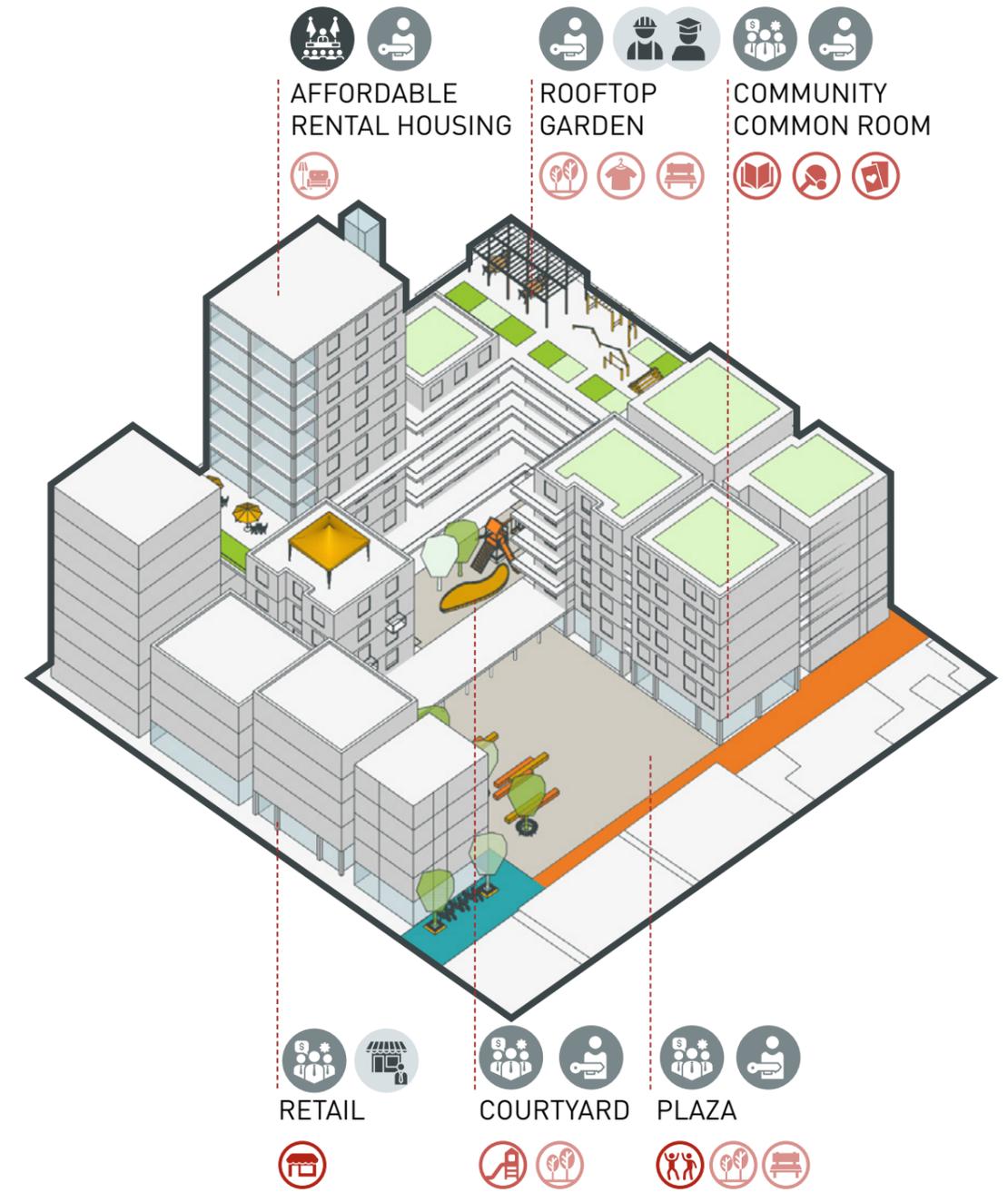
Strategic projects-Public Gateway: public node for the surrounding area



Strategic projects-Community Playground: pilot project

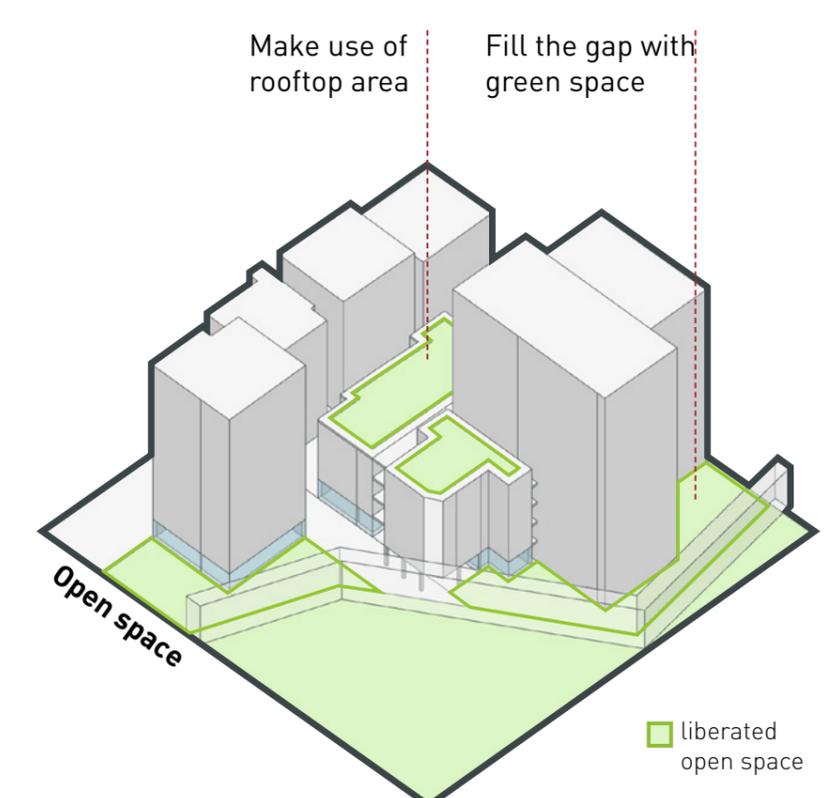
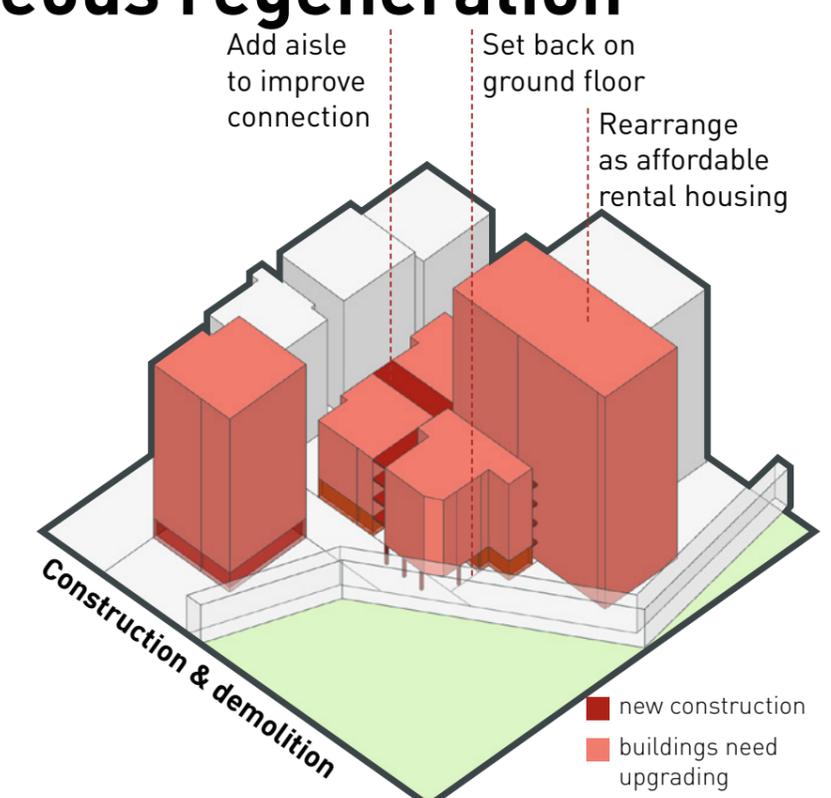
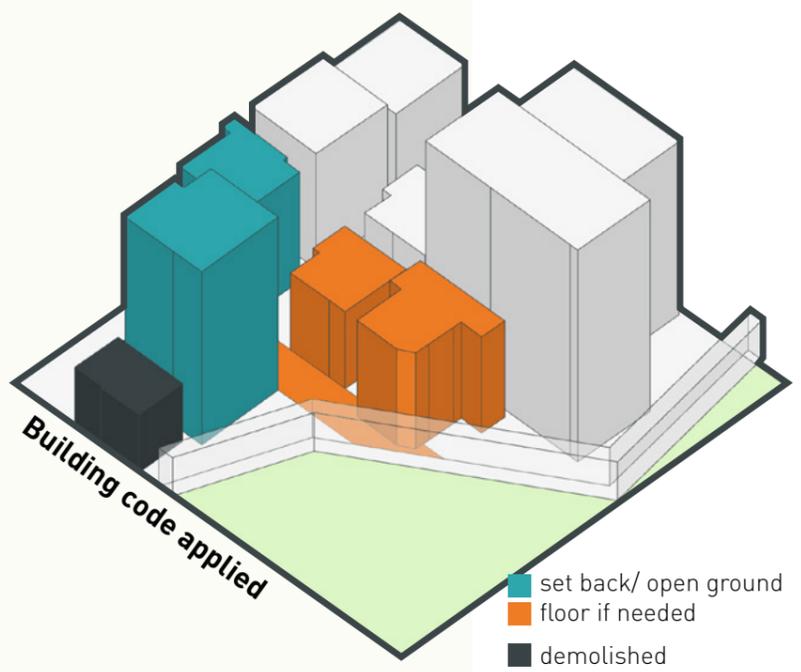
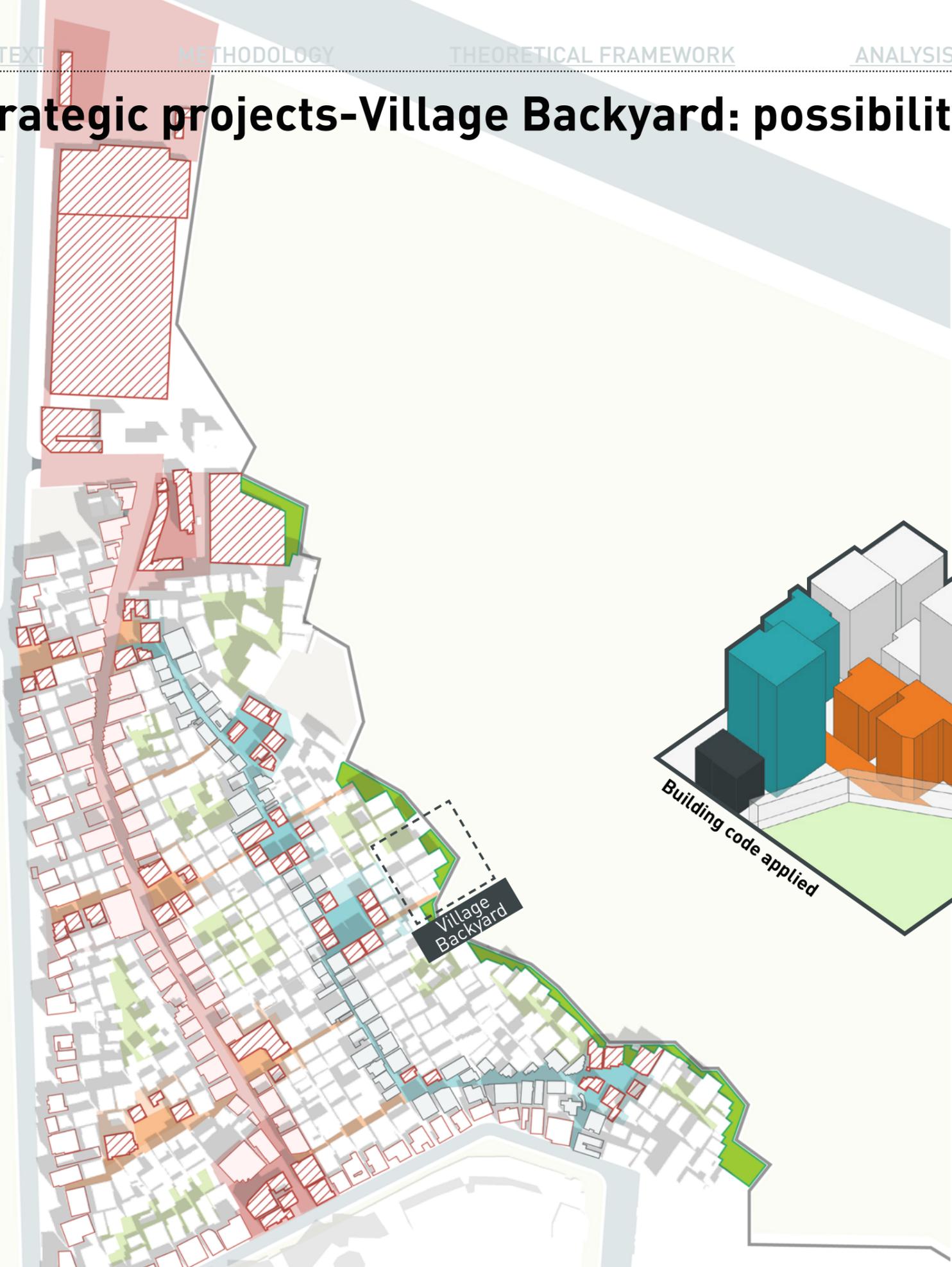


Strategic projects-Community Playground: social node for local residents

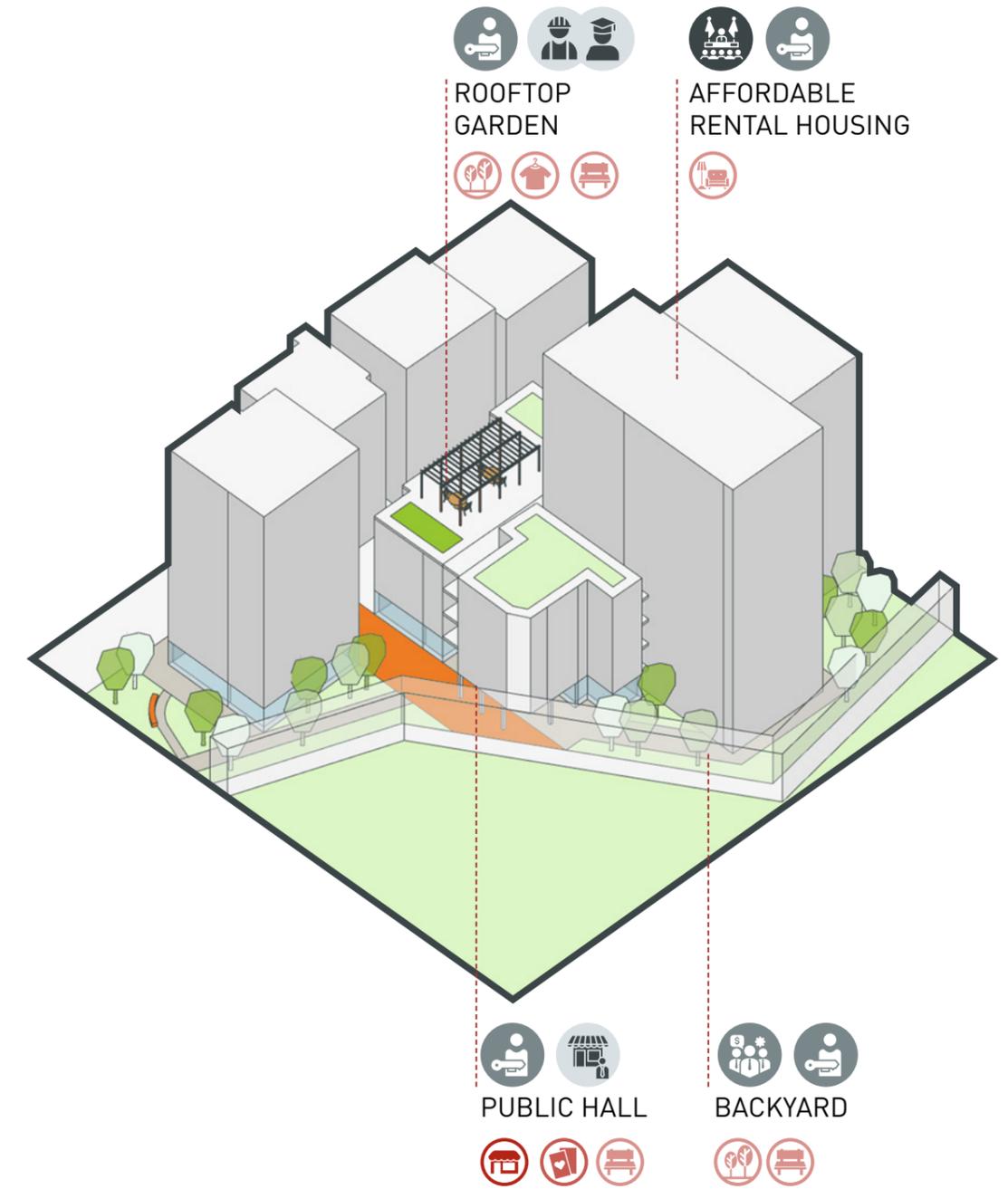


<p>Involved stakeholders</p> <ul style="list-style-type: none"> public sector villager joint-stock company young graduate migrant worker business owner 	<p>Functions</p> <ul style="list-style-type: none"> Public retail freezone 	<p>Social</p> <ul style="list-style-type: none"> reading room sport field card & chess playground 	<p>Daily</p> <ul style="list-style-type: none"> green space hanging clothes resting space residential
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Strategic projects-Village Backyard: possibility for spontaneous regeneration



Strategic projects-Village Backyard: improved living environment



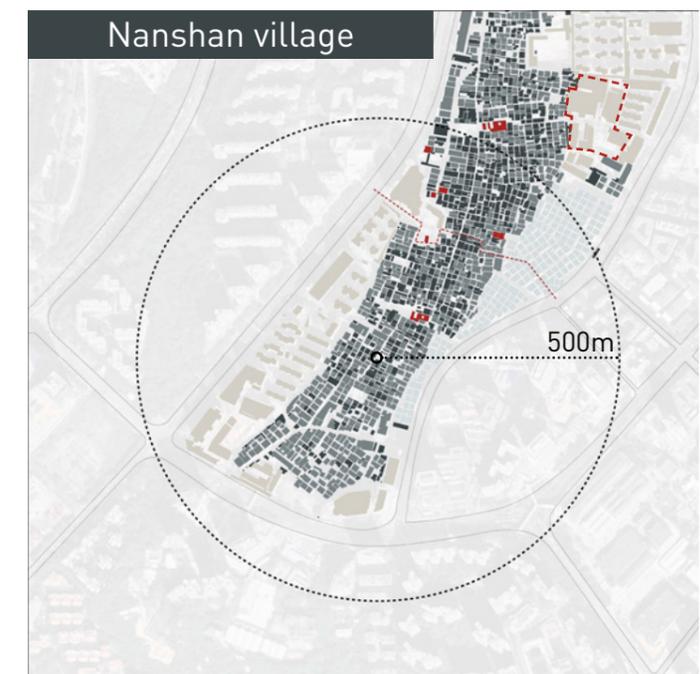
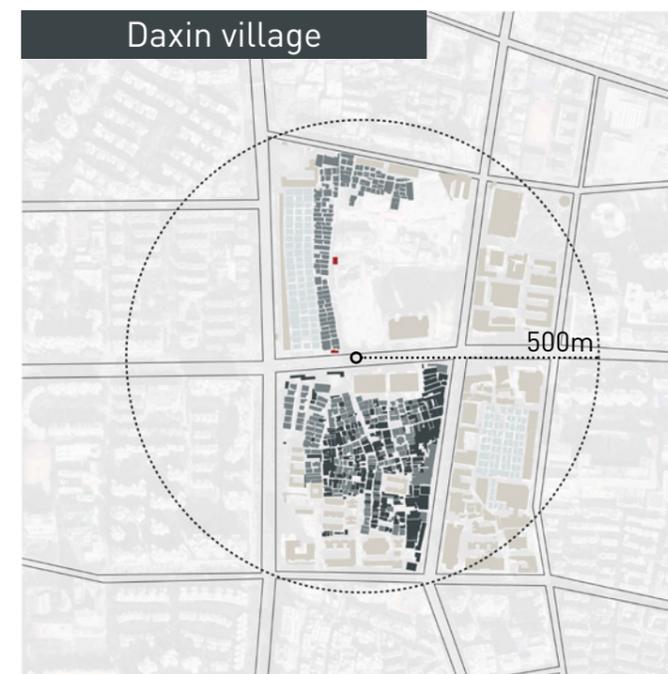
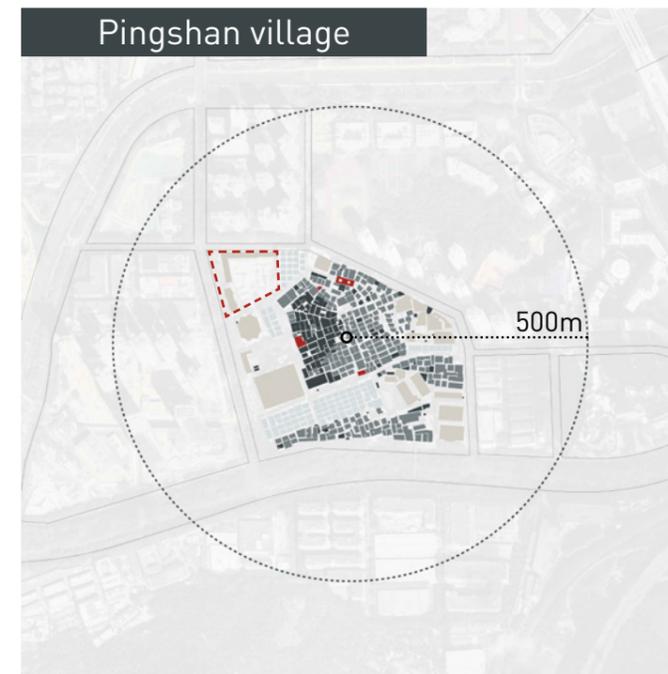
- Involved stakeholders**
- public sector
 - villager
 - joint-stock company
 - young graduate
 - migrant worker
 - business owner

- Functions**
- Public
 - retail
 - Social
 - card & chess

- Daily**
- green space
 - hanging clothes
 - resting space
 - residential

Conclusion

1. The regeneration is not only about **providing affordable housing**, but also **improving the spatial quality** like accessibility, vitality, openness and so on;
2. In order to improve spatial quality with more public spaces, **de-densification is needed** inside the dense village settlement;
3. The collective-owned **post-industrial area** has the potential for **densification to compensate** for the demolished areas;
4. If the post-industrial area has already been redeveloped for urban function, it is the government's duty to help the villagers to **transfer their development rights to another place**;
5. The new development can be combined with the **construction of the city sub-centers**, where the opportunity accessibility will be improved in the upcoming future, to make the quality equal to or better than the regenerated urban village.



 Existing post-industrial area

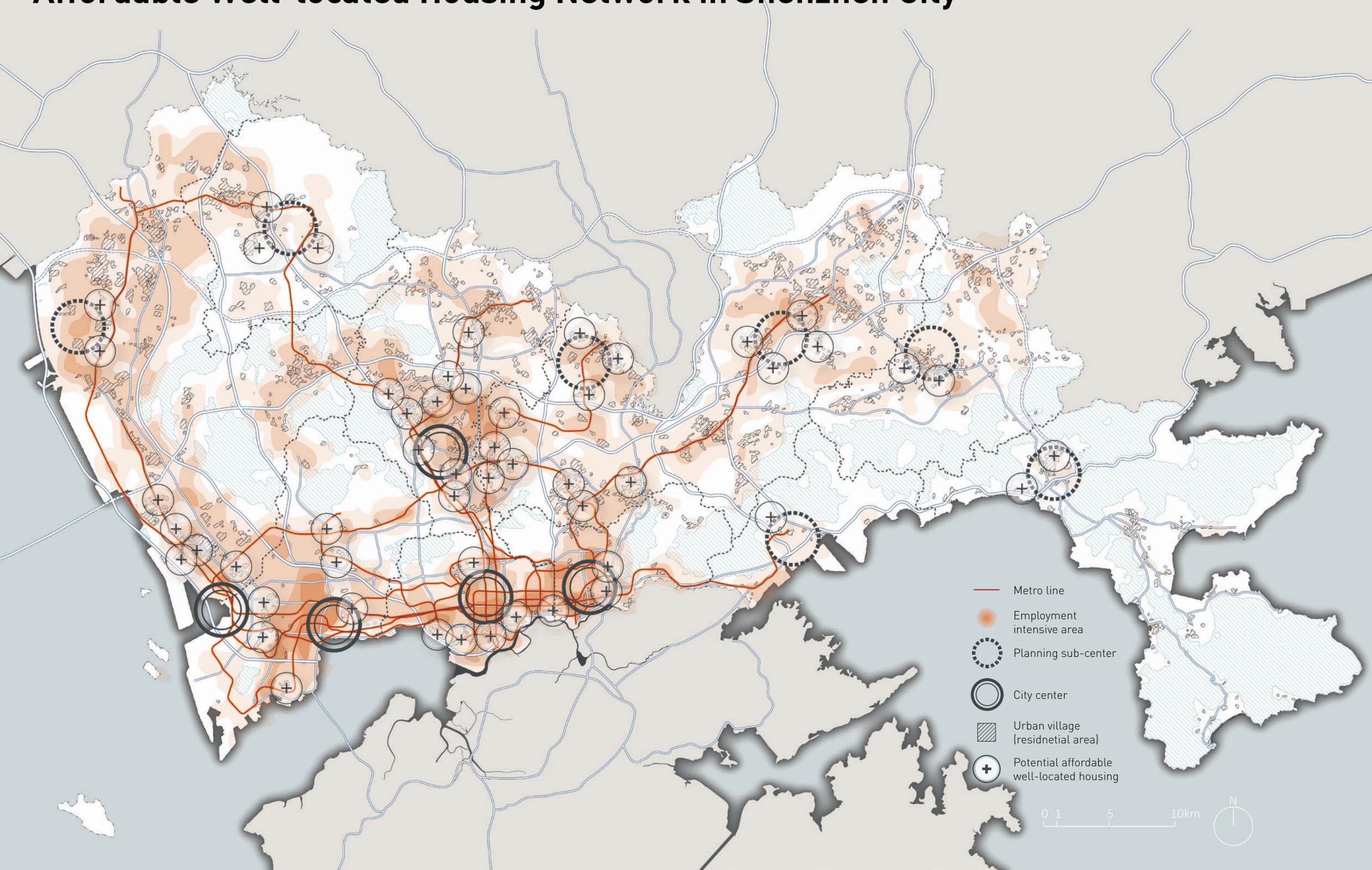
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source: Territorial Spatial Master Planning of Shenzhen from 2020 to 2035, Planning and Natural Resources Bureau of Shenzhen Municipality, 2021

Affordable Well-located Housing Network in Shenzhen City



THANK YOU!