



LILONG STUDY, HONGKOU CREEK
SHANGHAI, CHINA
JUNE 2014

INTRODUCTION



OUTLINE

- Introduction
- Cost/Benefit Analysis
- Clusters
- Tools
- Conclusion



SHIKUMEN-STYLE LILONG

BACKGROUND

LILONG 1 - 8

ABOUT

- Commercial perimeter, residential center
- On former site of Foreign Settlement
- Iconic carved stone gateways
- Rising real estate prices



SHIKUMEN-STYLE LILONG

HISTORIC URBAN LANDSCAPE (HUL)

LILONG 1 - 8

ABOUT

- Approach to modern-day pressures
- Addresses multiple values
- Aligns with government initiatives



COMMERCIAL ACTIVITY ALONG LILONG PERIMETER

PROBLEMS & OPPORTUNITIES

LILONG 1 - 8

PROBLEMS

- Pressure for development
- Relocation of residents
- Low income of residents
- Poor infrastructure

OPPORTUNITIES

- Recent investments in historic buildings
- “Green system”
- Historic Urban Landscape

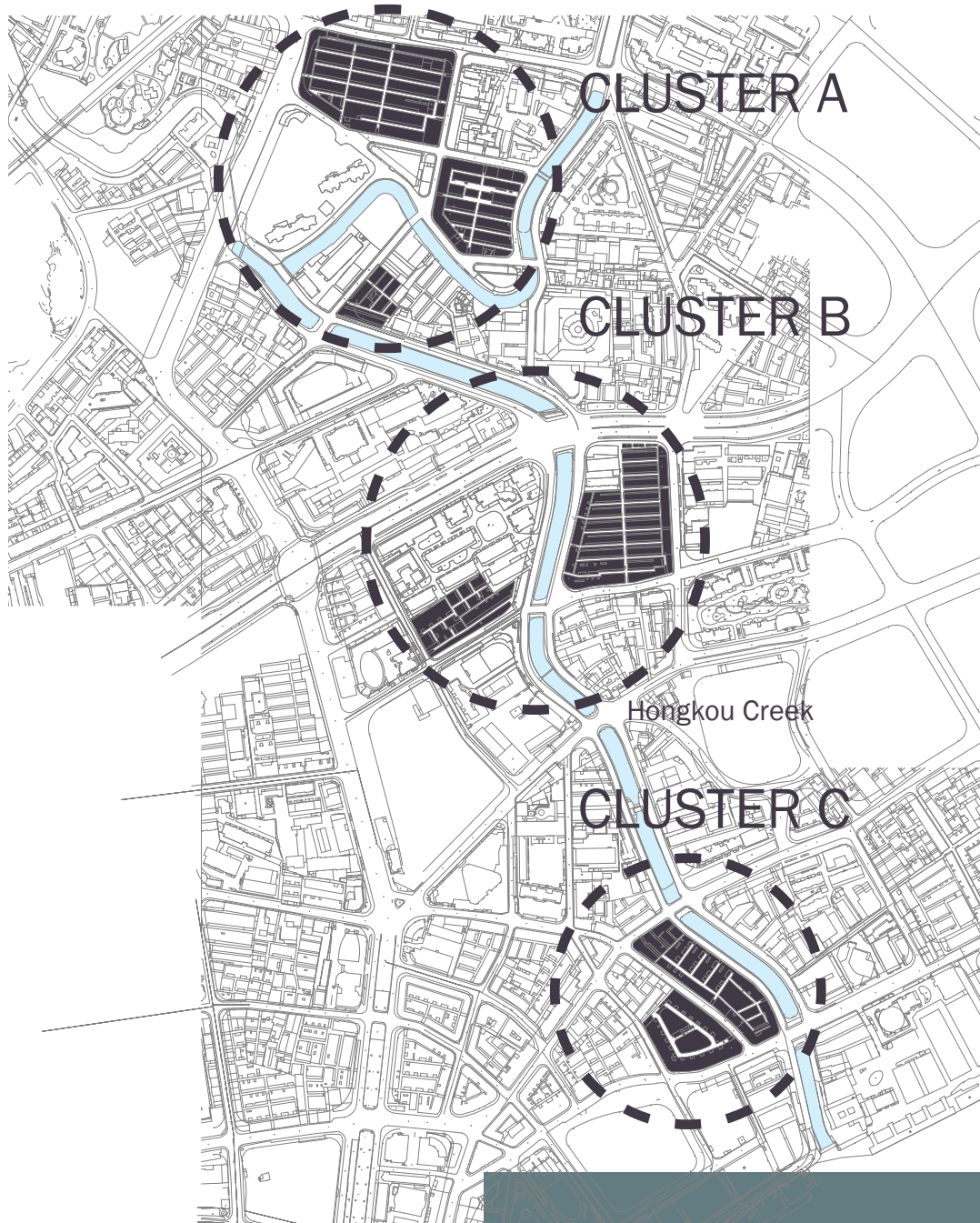


CHINA'S 9 MAJOR TASKS FOR 2014



- Making breakthroughs in reform in important areas.
- Ushering in a new phase of China's opening to the outside world and ensuring its high standard performance.
- Making domestic demand the main engine driving growth.
- Advancing agricultural modernization and rural reform and development.
- Carrying out a new type of people-centered urbanization.
- Using innovation to support and lead economic structural improvement and upgrading.
- Accelerating the development of education, health, culture and other social programs.
- Making coordinated efforts to ensure and improve people's wellbeing.
- Building China into a beautiful homeland with a sound ecological environment.

ABOUT



- 8 lilongs alongside Hongkou Creek
- Divided into 3 clusters
- 67,919 total square meters
- Actors impacted by development
- 20-25 year timeline

GUIDING PRINCIPLES FOR DEVELOPMENT



- Manage heritage resources



- Maintain layers of values



- Reinforce local identity



- Enhance quality of life



- Foster social cohesion

ASSUMPTIONS

LILONG 1 - 8

ABOUT

- Language barriers
- Appropriateness of cost-benefit analysis criteria
- Only 10 days in Shanghai



SHIKUMEN-STYLE LILONG

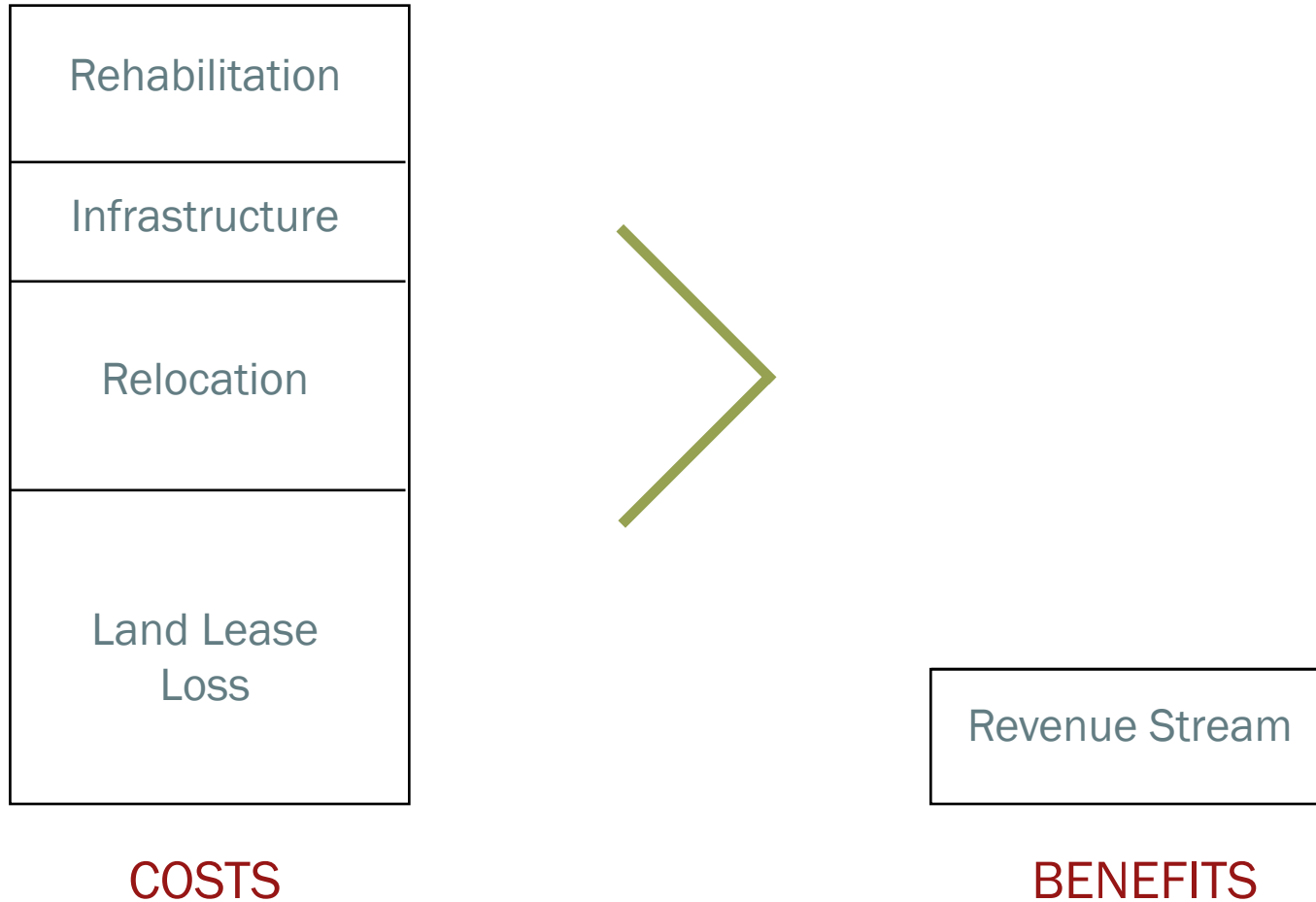
COST/BENEFIT ANALYSIS



TRADITIONAL FINANCIAL SCALE

LILONG 1 - 8

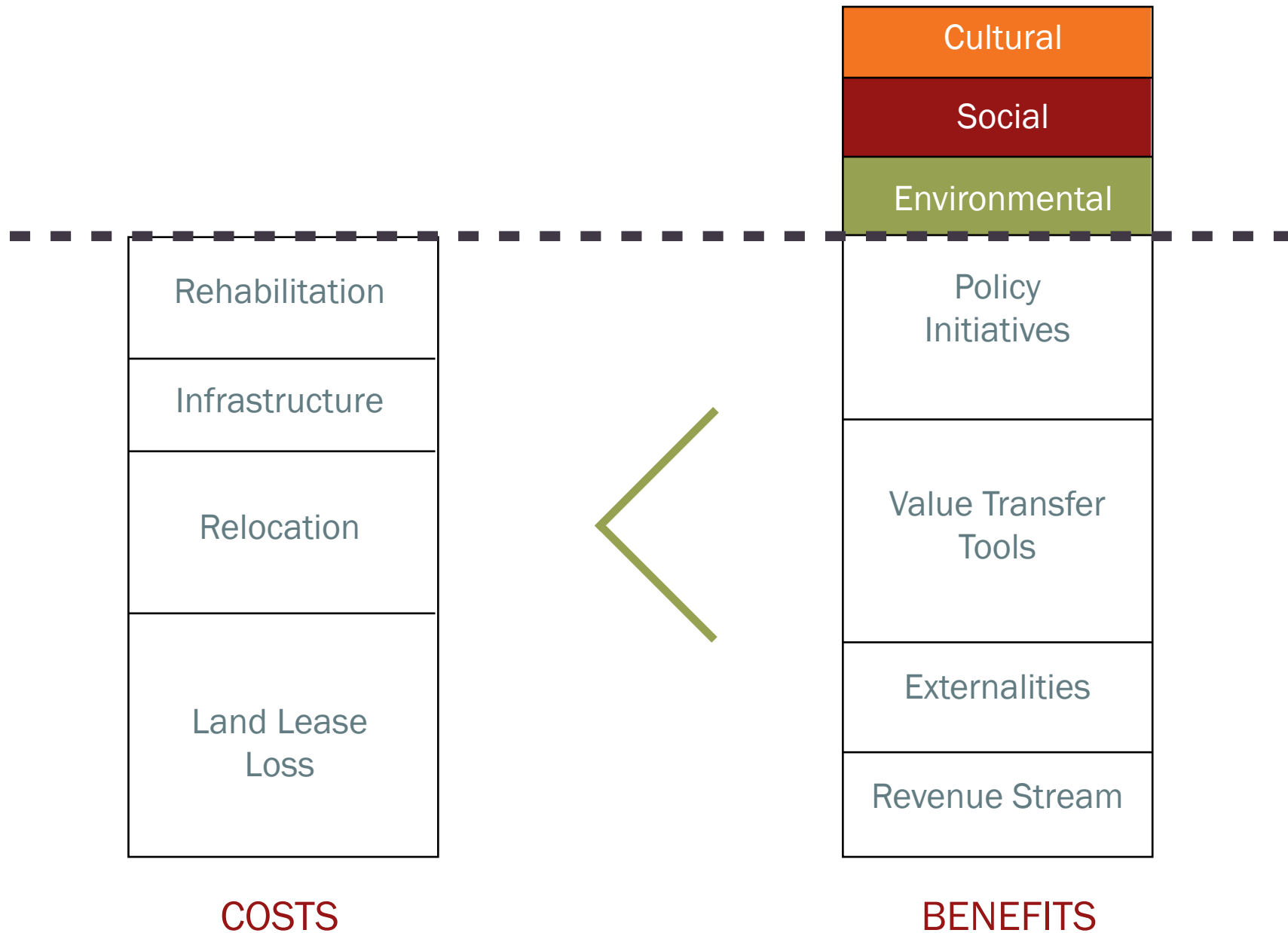
COST/BENEFIT ANALYSIS



PILOT FINANCIAL SCALE

LILONG 1 - 8

COST/BENEFIT ANALYSIS



VALUES OF CULTURAL HERITAGE

- Authenticity Value:

- Spatial Characteristics

- Stone Gate Alleys (Shikumen)
 - Alleyway configuration
 - Alleyway Use
 - Use of main lane (public access)
 - Use of side lanes- community use
 - Secure setting- environment
 - Continuity of Form and Materials (Temporal)
 - Public/Multi-use Space

- Architectural Elements

- Stone Gates
 - Traditional Building Technique
 - Original Material
 - Original Design
 - Door
 - Roof
 - Courtyard
 - Commerical space on block exterior

- Historic Value:

- Evolution over Time

- Subdivision of Housing Interiors
 - Change in Courtyard Function
 - Facilities- added
 - General upkeep/condition
 - New construction
 - House Exterior
 - House Interior

- Importance of Element:

- Structural Quality

- Exterior
 - Interior

CULTURAL COST/BENEFIT SCALE

Considers Importance of Value
and Change in Existence of Value



COMMUNITY VALUES AND SOCIAL TRADITIONS

Social Capital

- Displacement (negative value)
- Trust
- Sense of Community
- Social mobility
- Diversity
- Stigma (negative value)

Traditional

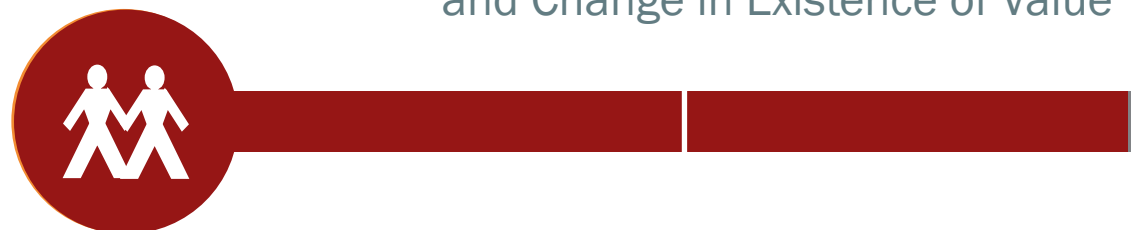
- Cultural Relics
- Cultural Resources

Personal Welfare

- Safety/ Security
- Health
- Cooking/Leisure time
- Privacy/spatial distribution
- Climate Control
- Happiness
- Retail Choice

SOCIAL COST/BENEFIT SCALE:

Considers Importance of Value
and Change in Existence of Value

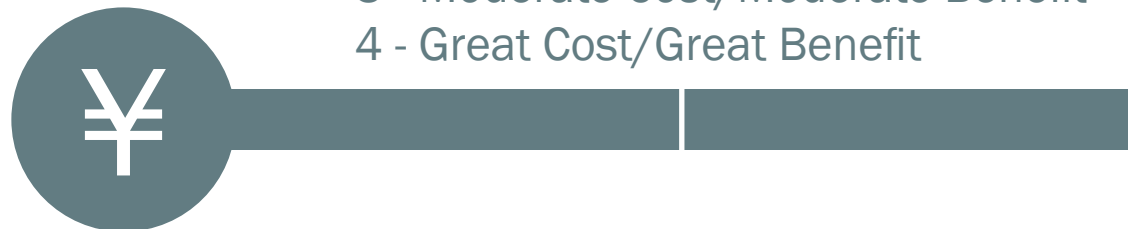


MUNICIPAL DIRECT AND INDIRECT COSTS

- BENEFIT: Income
 - Rents
 - Wage and Earning
 - Sales Tax
 - Real Estate Tax
 - Business Taxes
 - Sell of Land Use Rights
- COST: Expenditures
 - Fire
 - Maintenance
 - Police
 - Electric and Gas
 - Water and Sewer
 - Traffic and Transportation
 - Community Services at the Xiaoque Leve
 - Access to parks
 - Gardening
 - Permeability

FINANCIAL COST/BENEFIT SCALE

- 1 - No Cost/No Benefit
- 2 - Minimal Cost/Minimal Benefit
- 3 - Moderate Cost/Moderate Benefit
- 4 - Great Cost/Great Benefit



COST/ BENEFIT ANALYSIS

- Air

Natural Circulation

Access to clean air

Systems for regulating temperature

- Water

Adequate Drainage

Access to drinking water

Systems for sewage

- Greenery

Access to parks

Gardening

Permeability

- Energy

Natural lighting

Building Envelope

Low-energy appliance

ENVIRONMENTAL COST/BENEFIT SCALE:

0 = none

1 = very low

2 = low

3 = medium

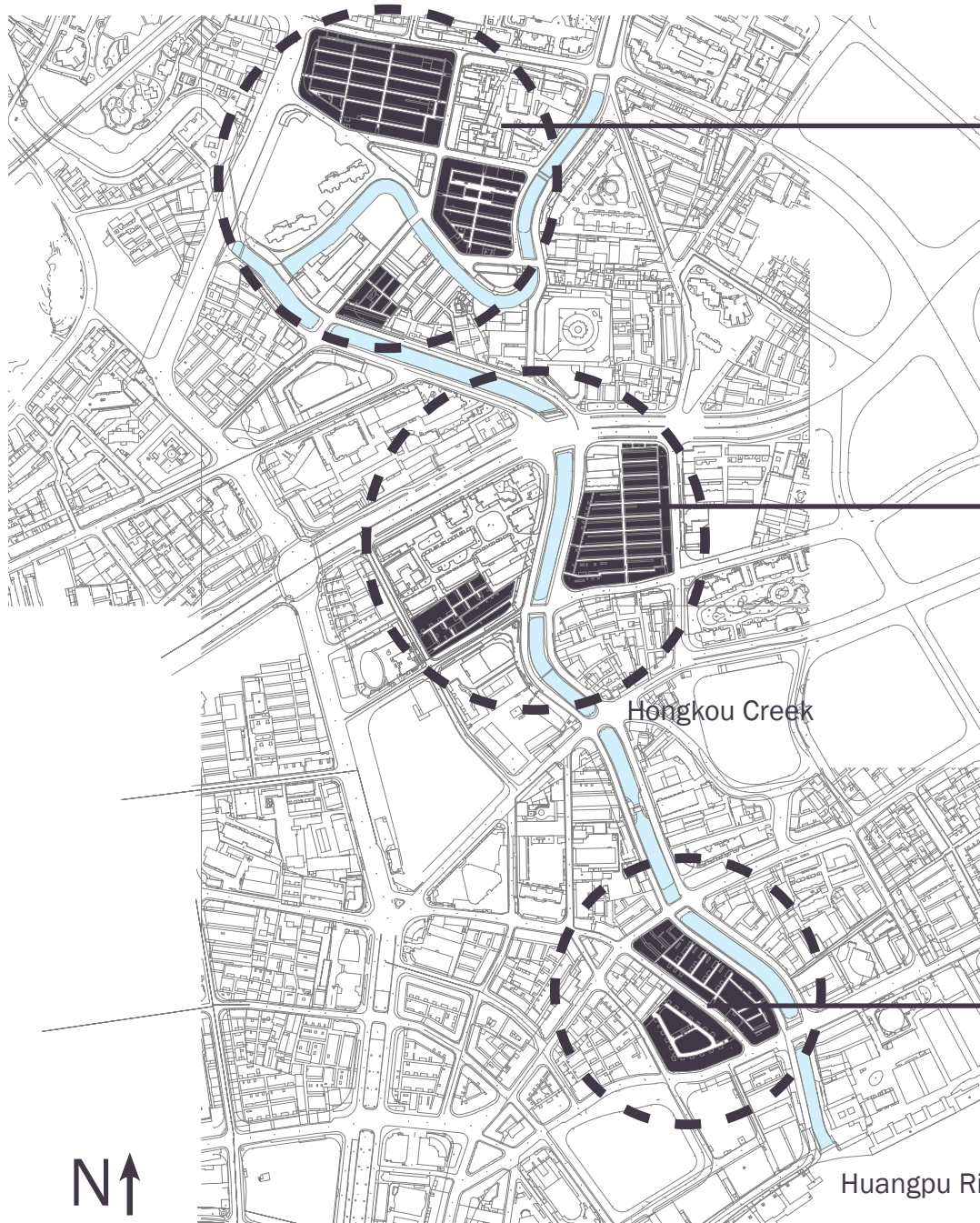


CLUSTERS



CONTEXT MAP

LOCATION



CLUSTER A

CLUSTER B

CLUSTER C

Huangpu River

CLUSTER A

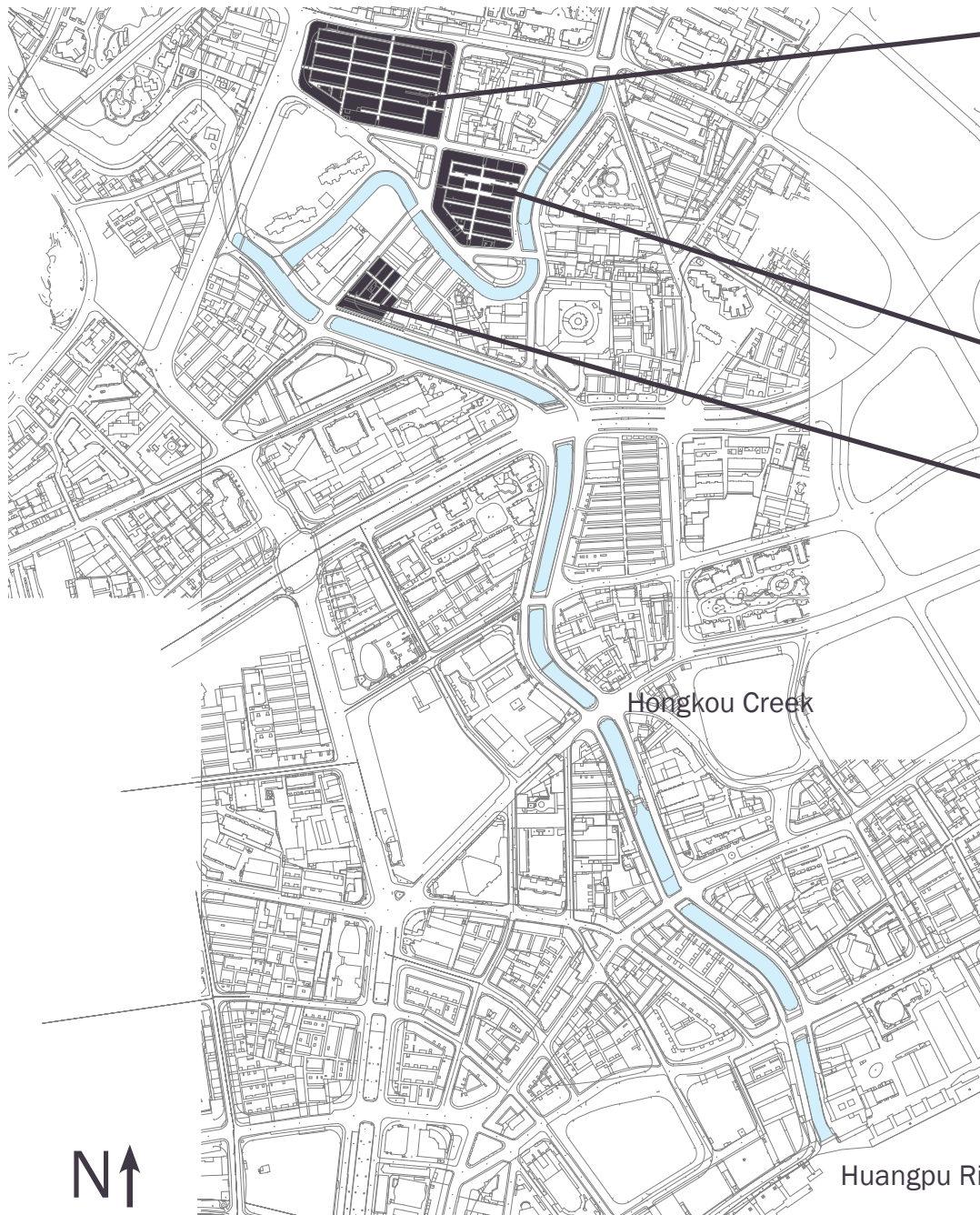
THE BUSINESS DISTRICT



BUSINESS DISTRICT

Cluster A: LILONG 1, 2, & 3

LOCATION



LILONG BLOCK 1

LILONG BLOCK 2

LILONG BLOCK 3

Hongkou Creek

Huangpu River



Lilong 1

Rui-kang-li
瑞康里

SMALL BUSINESS DISTRICT

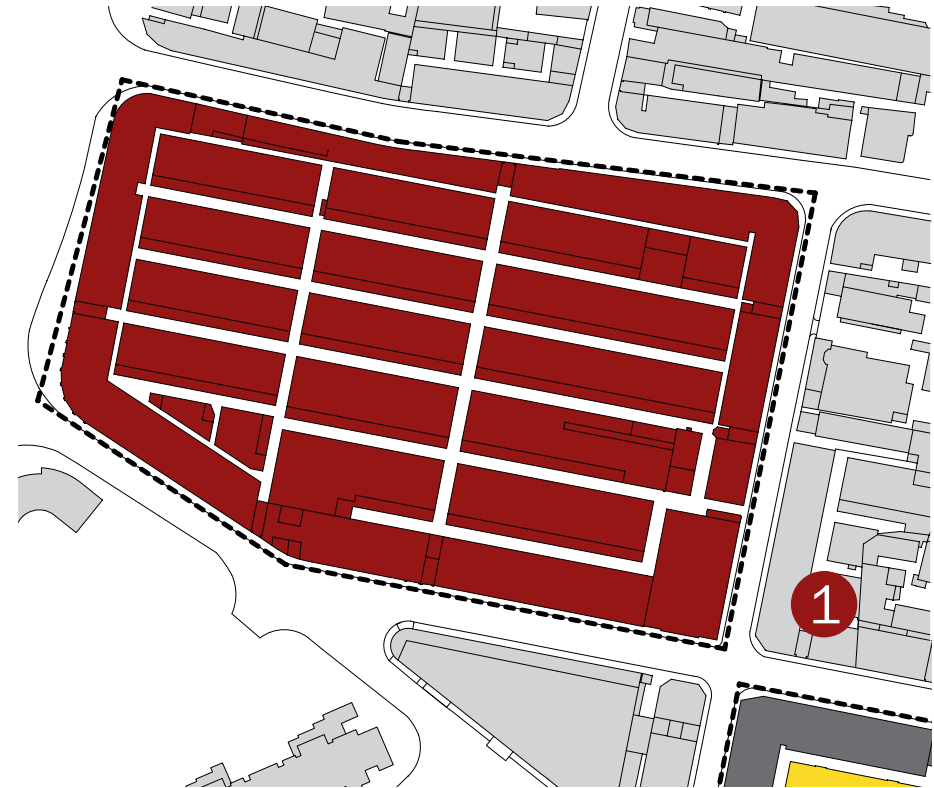
Cluster A: **LILONG 1**

ABOUT

- Located in the Northern End of the Hongku District
- Proximity to Small Business Centers
- One Street Front along Siping Road, a major thoroughfare
- Access to Metro Stop (line 10)
- Typical Lilong Layout with a Ring of Buildings Surrounding the Interior Structures
- Existing Small Businesses

USE

- SMALL BUSINESS DISTRICT
- Career Services
- Job Training Center
- Local Businesses
- National & International Businesses
- Start-ups



SMALL BUSINESS DISTRICT

Cluster A: **LILONG 1**

FROM EXISTING CONDITIONS



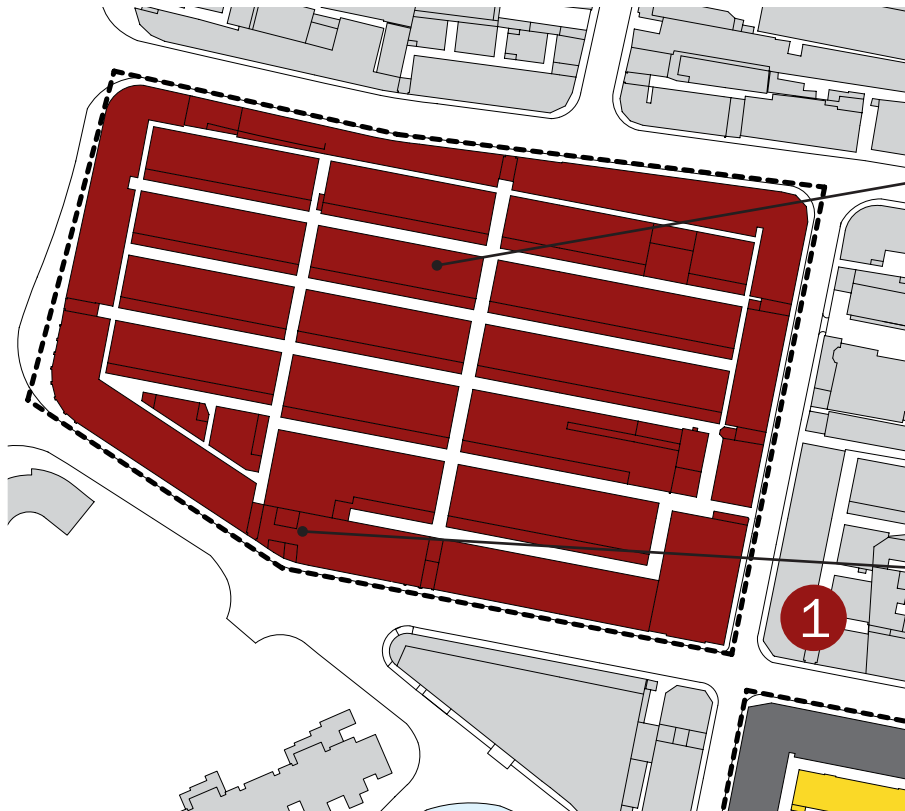
Fosters co-working and encourages community amongst businesses

Contributes to the economic activity in the area



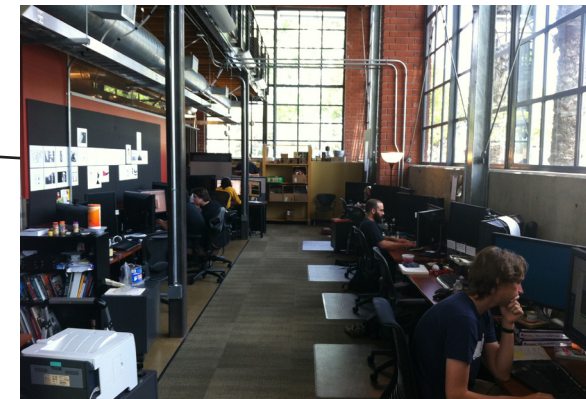
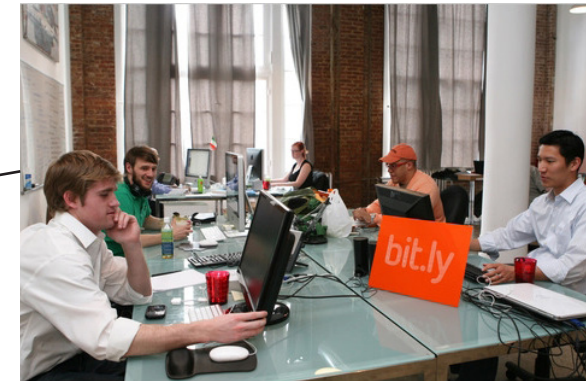
Allows for the expansion of business opportunities for the surrounding creative community

Provides affordable rental space for start-up companies



KEY:

■ Commercial ■ Other Bldg



TO WORK SPACE

Lilong 2

Rui-qing-li
瑞庆里

CREATIVE CLUSTER

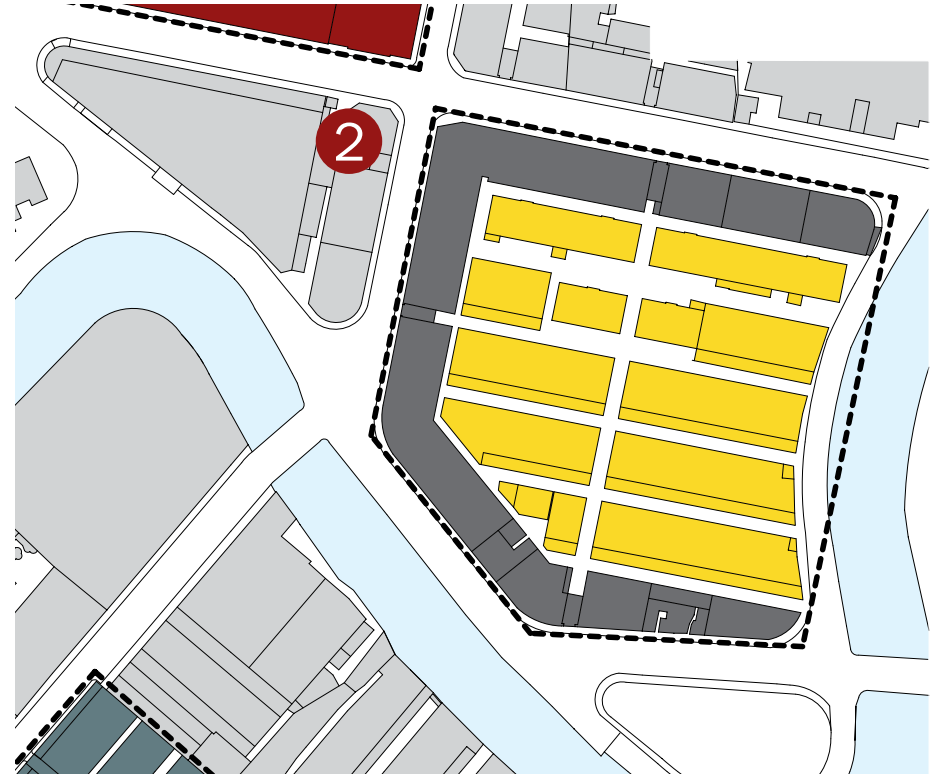
Cluster A: LILONG 2

ABOUT

- On the Northern End of Hongku District
- Proximity to Nearby Creative Centers and Other Commercial Activity
- Located within a Pocket of Hongku Creek
- Easily Accessible from Metro Stop (line 10)
- U-Shaped Exterior Ring Surrounding Interior Structures

USE

- LIVE SPACE
 - WORK SPACE
 - EXHIBITION/EVENT SPACE
 - AFFORDABLE UNITS
- | | |
|------------------|---------------------|
| • Artists | • Fashion Designers |
| • Architects | • Musicians |
| • Visual Artists | • Performers |



CREATIVE CLUSTER

Cluster A: **LILONG 2**

FROM EXISTING CONDITIONS



Capitalizes on the existing creative community

Attracts people to the area

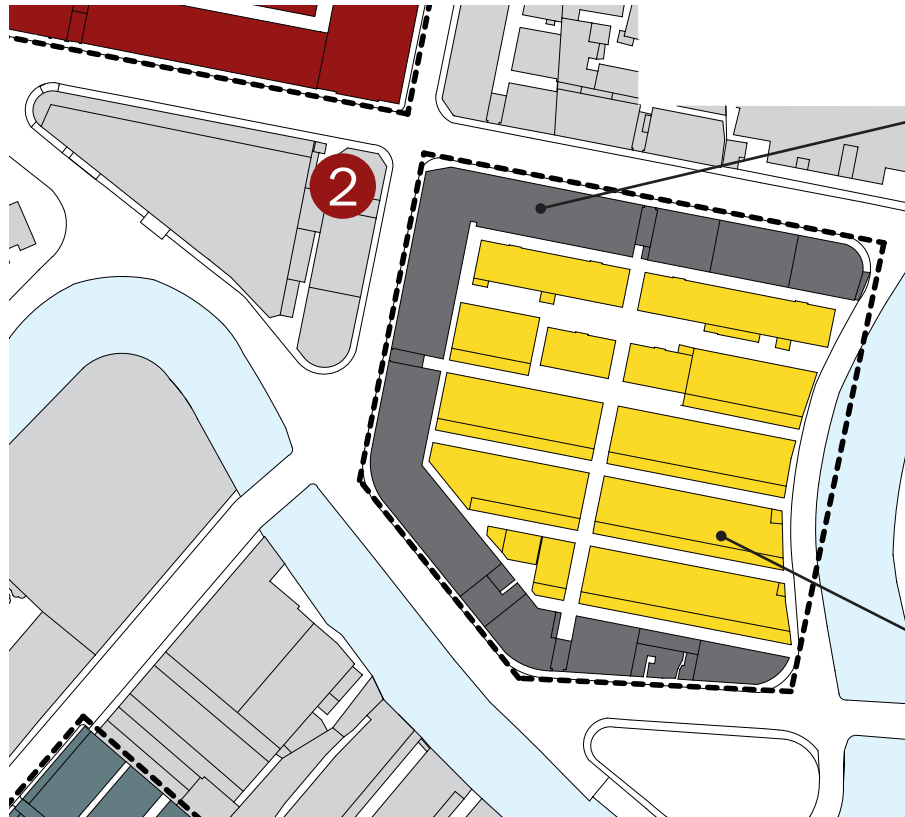
KEY:

	Commercial		Other Bldg
	Industrial		Creek



Fosters a sense of community amongst residents

Provides affordable live, work, and exhibition space



TO LIVE & WORK SPACE

Lilong 3

Lan-wei-li

兰葳里

COMMUNITY CENTER

Cluster A: LILONG 3

ABOUT

- Across Hongku Creek from Lilong 1 & 2
- Smallest Lilong in Cluster A
- Located within a Pocket of the Creek
- Closest Proximity to Nearby Creative Centers
- Exterior Ring Along Streets
- Interior Structures Abut Structures within the Block

USE

- PUBLIC SPACE
- COMMUNITY CENTER
- YOUTH CENTER

CLASSES:

- Traditional Cooking Methods
- Arts & Crafts
- Language
- Senior Activities



COMMUNITY CENTER

Cluster A: **LILONG 3**

FROM EXISTING CONDITIONS



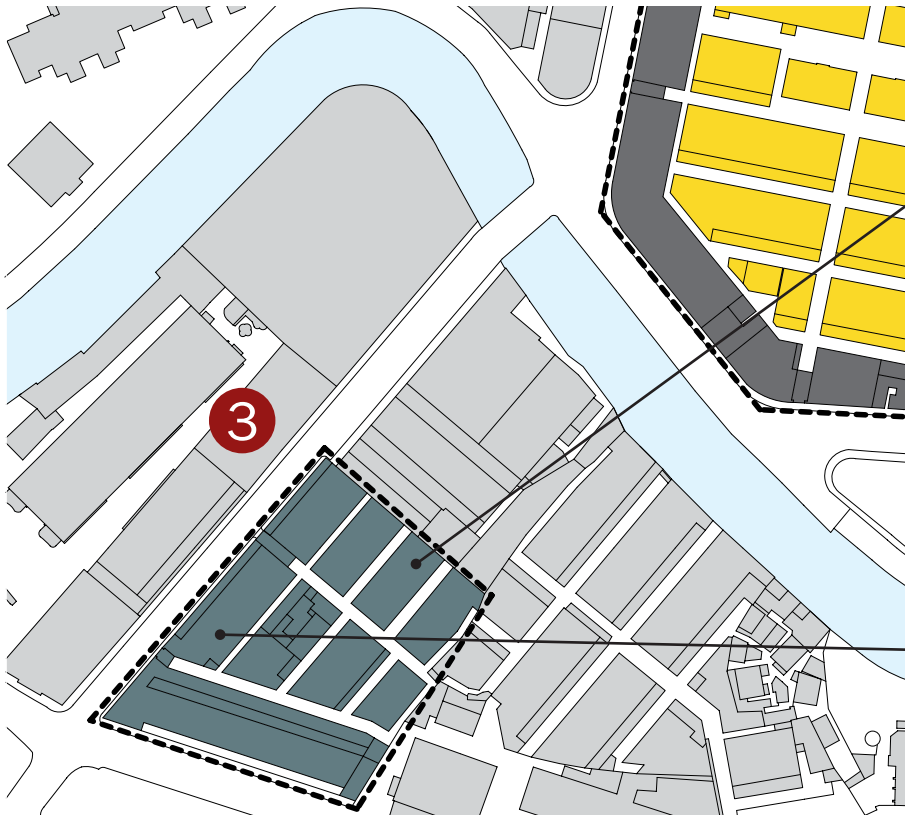
Serves as gathering space for group activities, social support, public information and other purposes

Emphasizes human aspect of the neighborhood

Retains cultural values of local residents

Provides a function that is lacking in the area

KEY:



TO PUBLIC SPACE

BUSINESS DISTRICT

Cluster A: LILONG 1, 2 & 3

COST / BENEFIT ANALYSIS

- DIRECT COSTS

Rehabilitation Cost	-----	160,397,808 RMB
Infrastructure Upgrading Cost	-----	30,941,936 RMB
Relocation Cost	-----	1,374,838,350 RMB

- INDIRECT COSTS

Land Lease Loss Cost	-----	2,315,280,007 RMB
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- DIRECT BENEFITS

Transfer of Development Rights
Redefining Green Space

- VALUE RECAPTURE

Rent Income Stream to Government
Growing Value Asset

- EXTERNALITIES

15% View Premium to Surrounding High-Rises

- POLICY GOALS

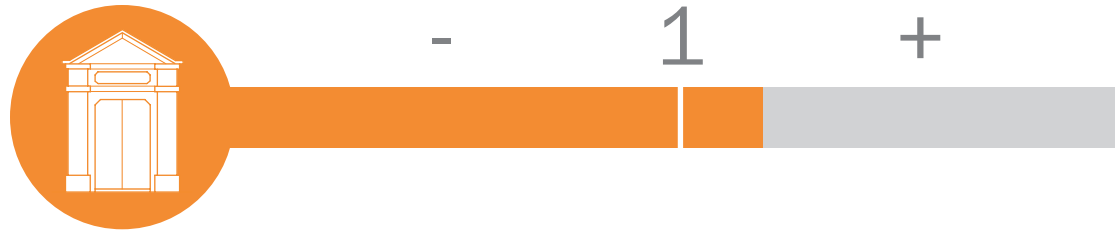
Historic Preservation & Revitalization
Green Space Creation

Creative Industry
Residential Construction

BUSINESS DISTRICT

Cluster A: **LILONG 1**

MEASURING SCALES



CULTURAL

- Adaptive reuse will preserve the built fabric



SOCIAL

- Displacement will occur and community fabric is lost



FINANCIAL

- Scenario costs municipality in regard to income from development.



ENVIRONMENTAL

- Continued use of lilong minimizes impact



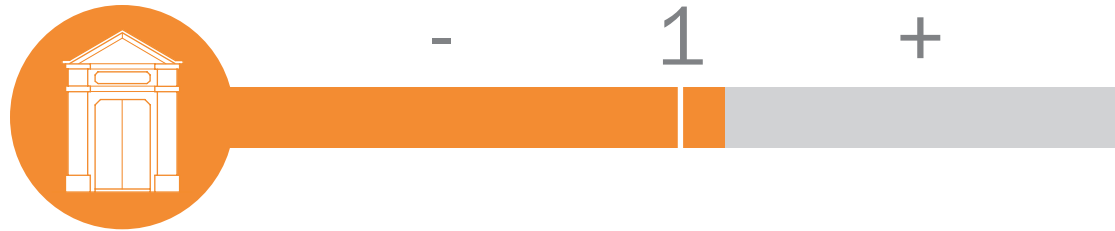
COMPOSITE

> 1 = More Benefit Than Cost

CREATIVE CLUSTER

Cluster A: **LILONG 2**

MEASURING SCALES



CULTURAL

- Adaptive reuse will preserve the built fabric.



SOCIAL

- Displacement will occur and community fabric is lost.



FINANCIAL

- Scenario costs municipality in regard to income from development.



ENVIRONMENTAL

- Continued use of lilong minimizes impact.



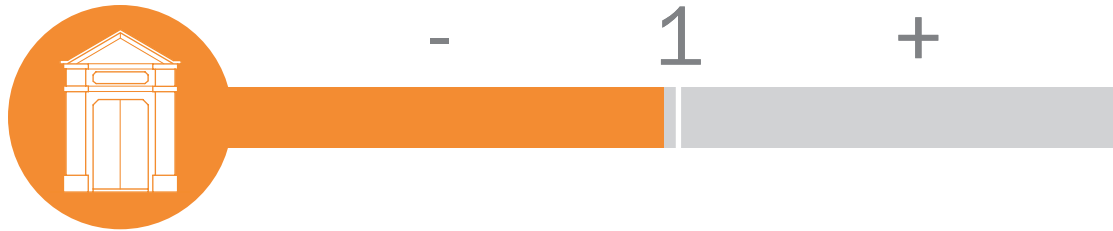
COMPOSITE

> 1 = More Benefit Than Cost

COMMUNITY CENTER

Cluster A: **LILONG 3**

MEASURING SCALES



CULTURAL

- Adaptive reuse will preserve the built fabric.



SOCIAL

- Displacement will occur and social fabric is lost.



FINANCIAL

- Scenario costs municipality in regard to income from development.



ENVIRONMENTAL

- Continued use of lilong minimizes impact.



COMPOSITE

> 1 = More Benefit Than Cost

CLUSTER B

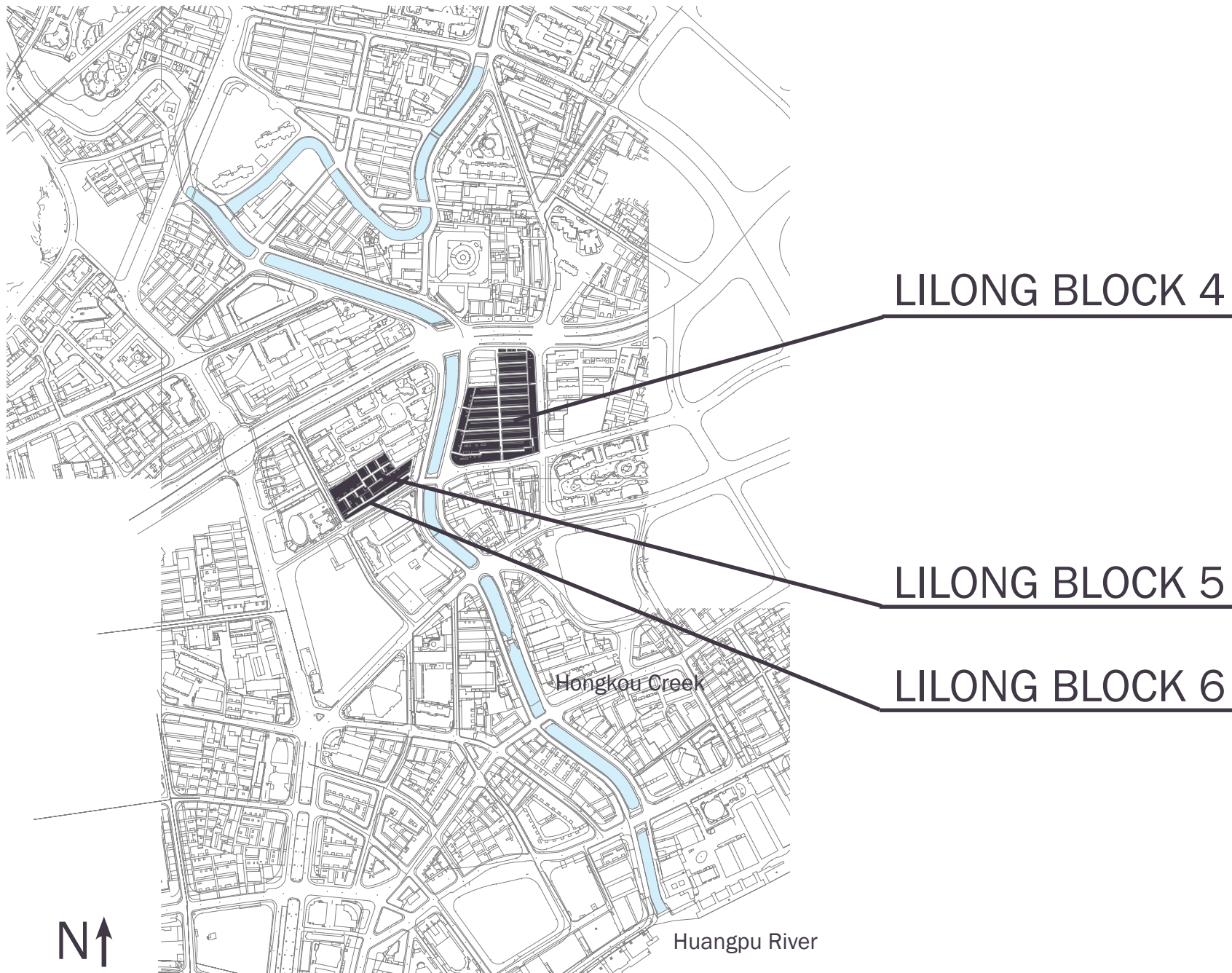
IMPROVED RESIDENTIAL COMMUNITY



RESIDENTIAL COMMUNITY

Cluster B: LILONG 4, 5 & 6

LOCATION



Lilong 4

Chun-yang-li
春阳里

RESIDENTIAL COMMUNITY

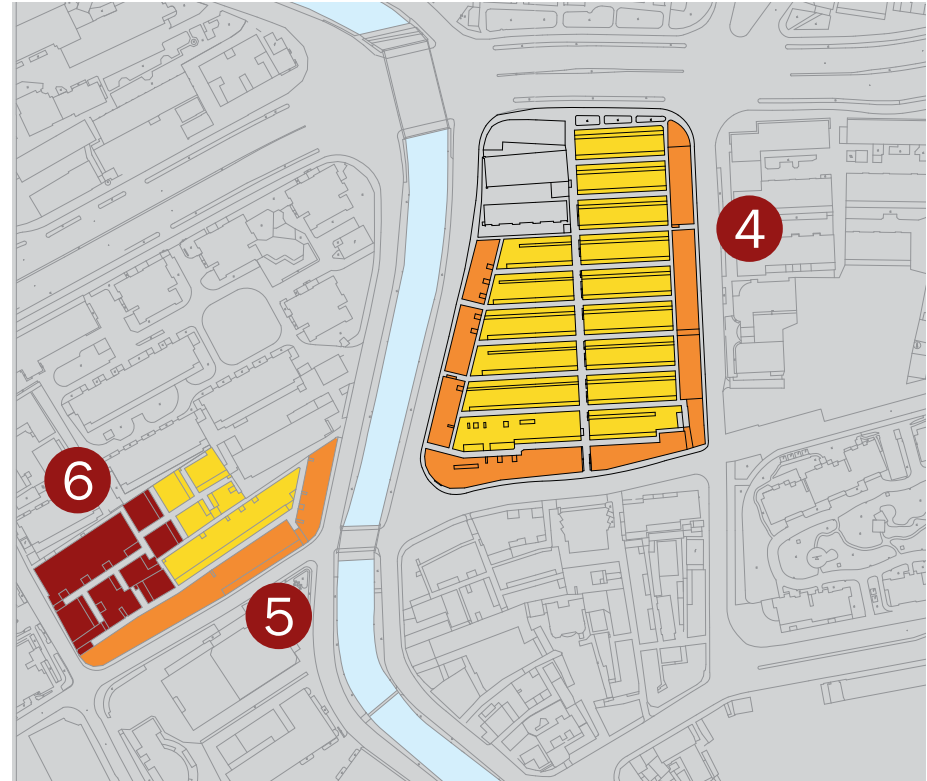
Cluster B: LILONG 4, 5, & 6

ABOUT

- Improve living conditions through de-densification, home ownership, and innovative design.
- Respect existing built fabric.
- Maintain character, scale, and community by heritage neighborhood designation.
- Supply city needs for low-income housing.
- Stimulate economic activity by readapting commercial spaces.
- Enhance visibility of shikumen buildings.

USE

- Revert lilong housing units to single-family occupancy.
- Refit commercial spaces with proper ventilation, sanitation, and thermal comfort through design.
- Experiment with a mixed residential and hotel space to promote heritage tourism.



RESIDENTIAL COMMUNITY

Cluster B: **LILONG 4**

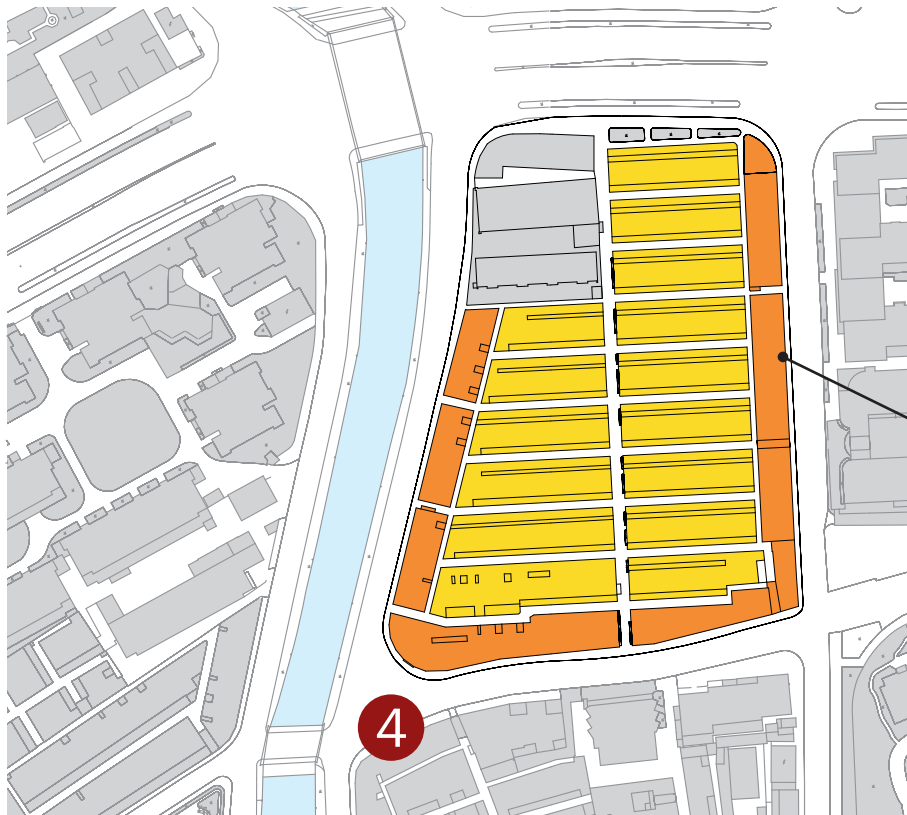
FROM EXISTING CONDITIONS



- Run-down interiors.
- 5-8 people per unit.
- Little money for repairs.
- Strong community.

KEY:

- Mixed Use
- Other Bldg
- Residential



DE-DENSIFICATION

- Revert to single-family units.
- Secure ownership for long term residents.
- Protect adjacent street activity and scale.



TO SPACIOUS LIVING CONDITIONS

Lilong 5

Heng-xiang-li
恒祥里

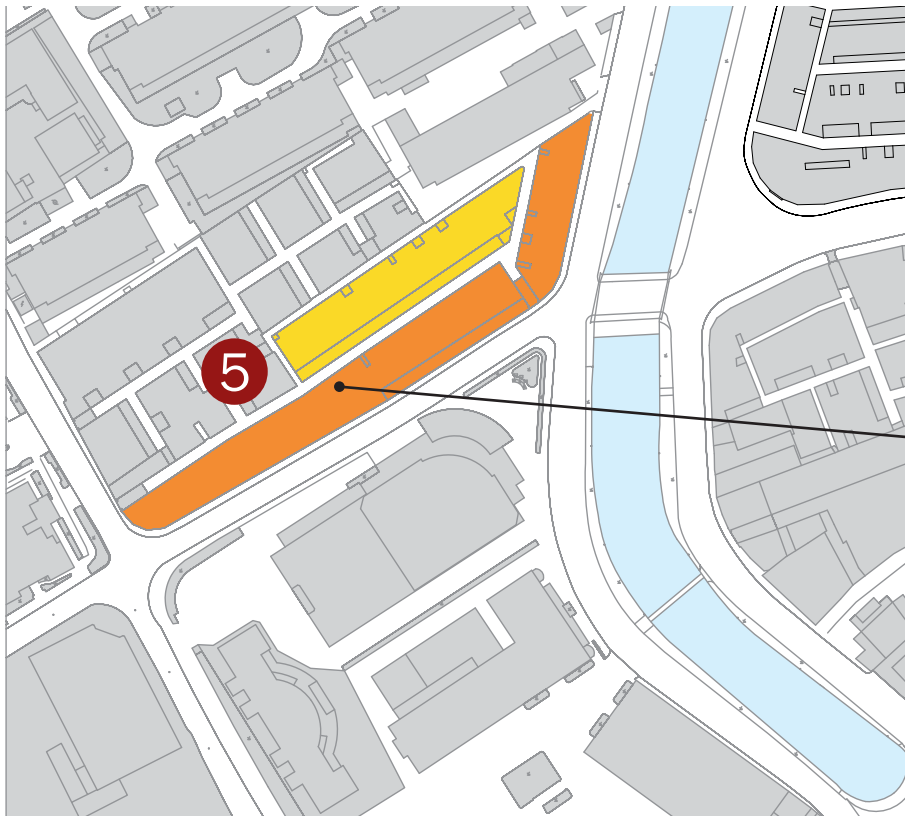
RESIDENTIAL COMMUNITY

Cluster B: **LILONG 5**

FROM EXISTING CONDITIONS



- Businesses serve surrounding area.
- Poor quality spaces, especially for restaurants.



KEY:

- Mixed Use
- Other Bldg
- Residential

BUSINESS AND DESIGN SOLUTIONS:

- Draw on young designers for improvements.
- Test effect of improvements on social mobility and housing.



TO IMPROVED BUSINESS ESTABLISHMENTS

Lilong 6

Xing-ye-li
兴业里

RESIDENTIAL COMMUNITY

Cluster B: **LILONG 6**

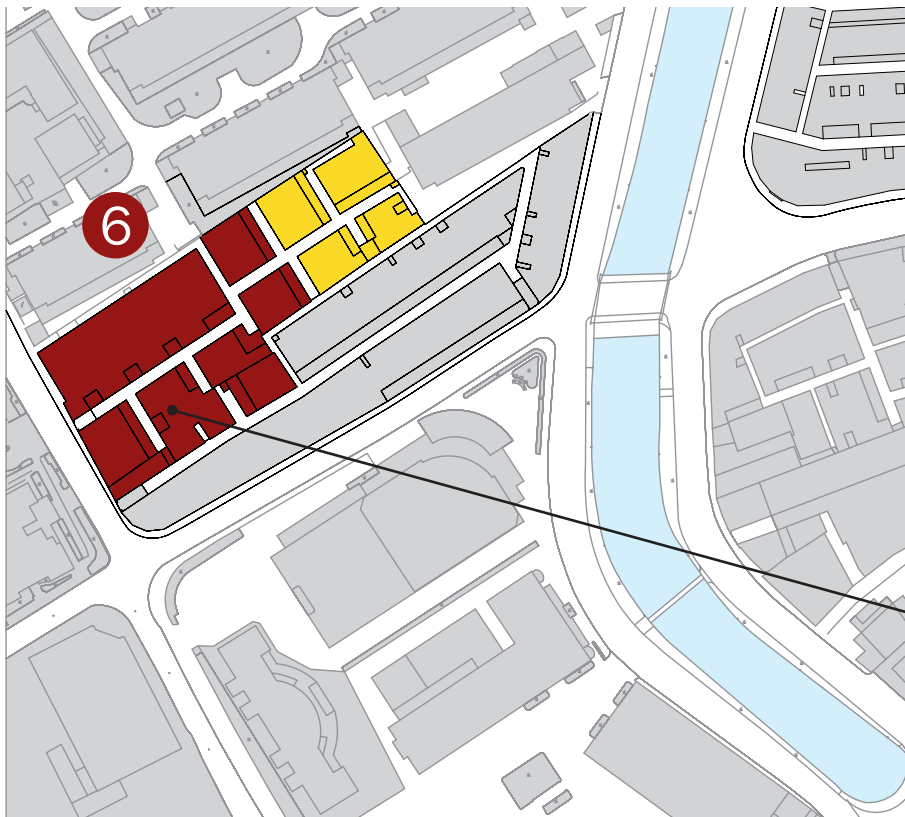
FROM EXISTING CONDITIONS



- Outstanding example of shikumen architecture.
- Aging and moving residents.

KEY:

- Commercial
- Residential



HOTEL AND RESIDENCE:

- Capitalize on superb design and integrity.
- Accommodate a small hotel.
- Use as model for highest preservation standards.



TO OUTSTANDING EXAMPLE

RESIDENTIAL COMMUNITY

Cluster B: LILONG 4, 5 & 6

COST / BENEFIT ANALYSIS

• DIRECT COSTS		
Rehabilitation Cost	-----	58,192,540 RMB
Infrastructure Upgrading Cost	-----	26,891,995 RMB
Relocation Cost	-----	498,793,200 RMB
• INDIRECT COSTS		
Land Lease Loss Cost	-----	2,719,928,140 RMB

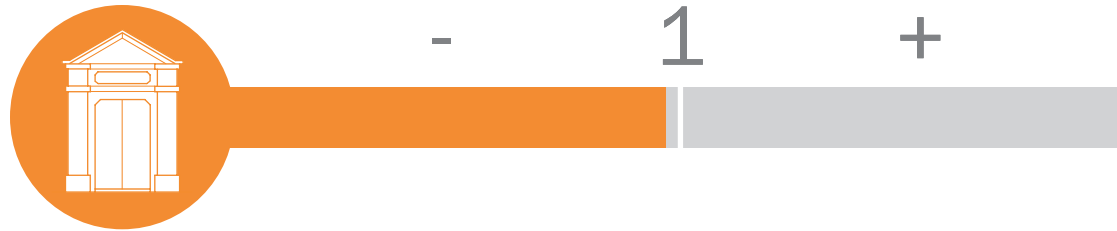
• DIRECT BENEFITS		• VALUE RECAPTURE
Transfer of Development Rights		Rent Income Stream to Government
Redefining Green Space		Growing Value Asset
• EXTERNALITIES		
15% View Premium to Surrounding High-Rises		

• POLICY GOALS	
Historic Preservation & Revitalization	Creative Industry
Green Space Creation	Residential Construction

RESIDENTIAL COMMUNITY

Cluster B: **LILONG 4**

MEASURING SCALES



CULTURAL

- Cultural value traded for increased benefits to social.



SOCIAL

- Efforts to avoid displacement.



FINANCIAL

- Scenario costs municipality in regard to income from development.



ENVIRONMENTAL

- Continued use of *lilong* minimizes impact.



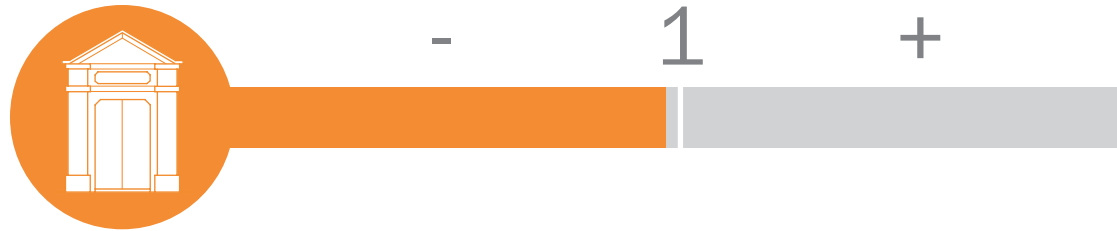
COMPOSITE

> 1 = More Benefit Than Cost

BUSINESS AND RESIDENTIAL

Cluster B: LILONG 5

MEASURING SCALES



CULTURAL

- Emphasis on updating *lilong* results in a cost to built fabric.



SOCIAL

- Focus on strengthening current uses reinforces social fabric.



FINANCIAL

- Scenario costs municipality in regard to income from development.



ENVIRONMENTAL

- Modernizing spaces promotes use of already existing materials.



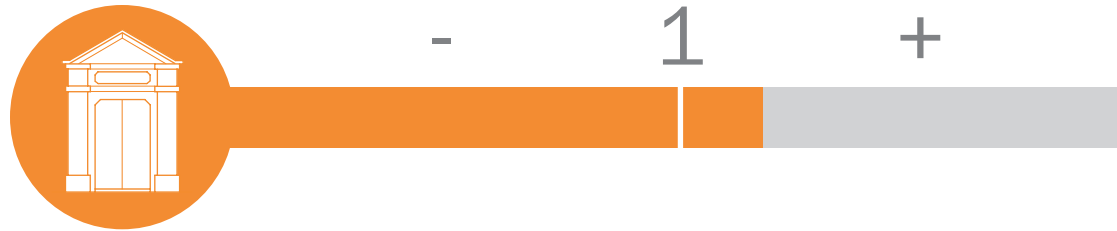
COMPOSITE

> 1 = More Benefit Than Cost

SMALL HOTEL

Cluster B: **LILONG 6**

MEASURING SCALES



CULTURAL

- Hotel allows for interior and exterior restoration of *lilong*.



SOCIAL

- Displacement of current residents affects community network.



FINANCIAL

- Scenario costs municipality in regard to income from development.



ENVIRONMENTAL

- Adaptive reuse of structures a benefit, affected by impact of construction.



COMPOSITE

> 1 = More Benefit Than Cost

CLUSTER C

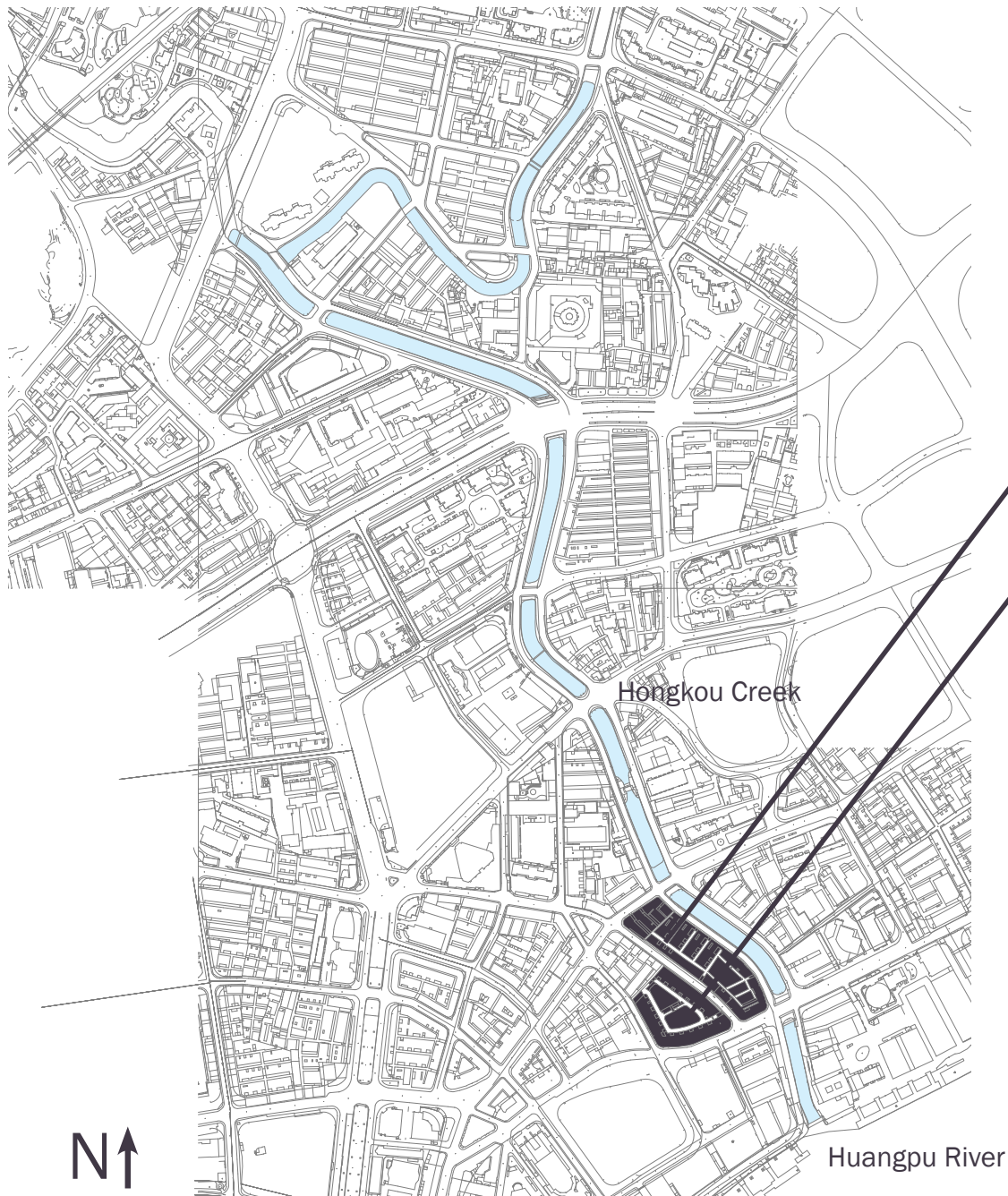
TRADITIONAL ARTIST CORRIDOR



ARTIST CORRIDOR

Cluster C: LILONG 7 & 8

LOCATION



LILONG BLOCK 7

LILONG BLOCK 8

Hongkou Creek

Huangpu River



Lilong 7 & 8

Ping-an-li

平安里

Dui-zhan-long-tang

堆栈弄堂

ARTIST CORRIDOR

Cluster C: LILONG 7 & 8

ABOUT

- Inherent Live/ Work Environment
- Underutilized Adjacent Warehouses
- Intact Architectural Features
- Central Courtyards
- Second Floor Balconies

USE

- LIVE / WORK SPACE
- MAKER SPACES
- ART MARKET

- FOLK ART

Paper Cutting
Puppetry
Handcraft

- VISUAL ARTS

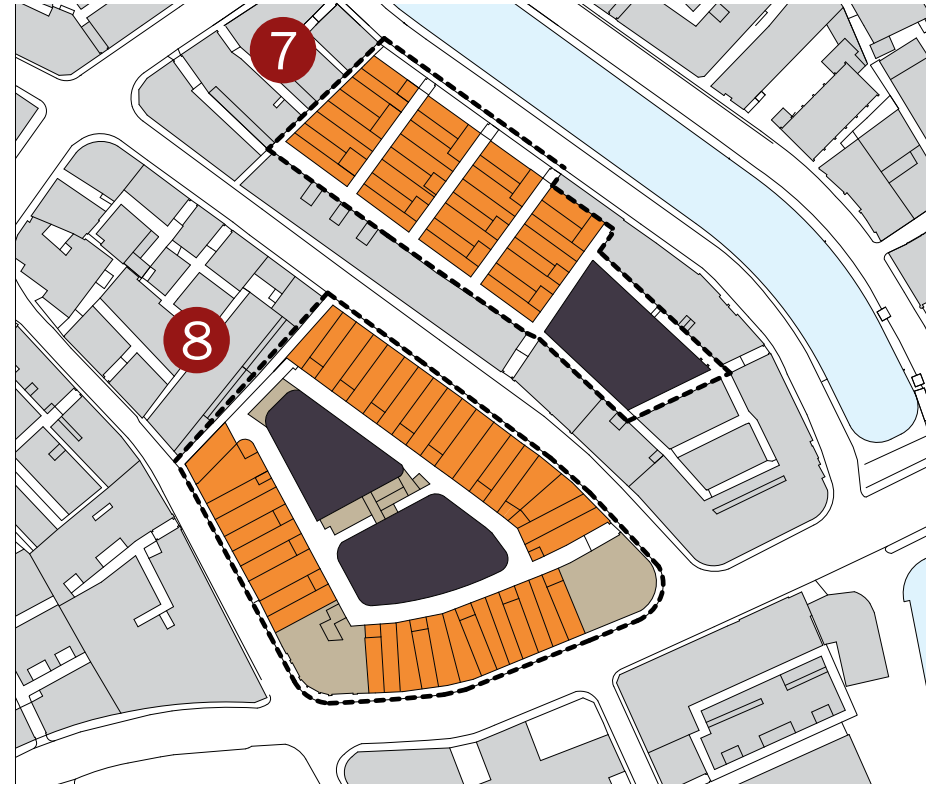
Pottery
Calligraphy
Chinese Painting

- LITERATURE

Dictionary
Poetry
Histography

- DRAMA

Traditional
Opera



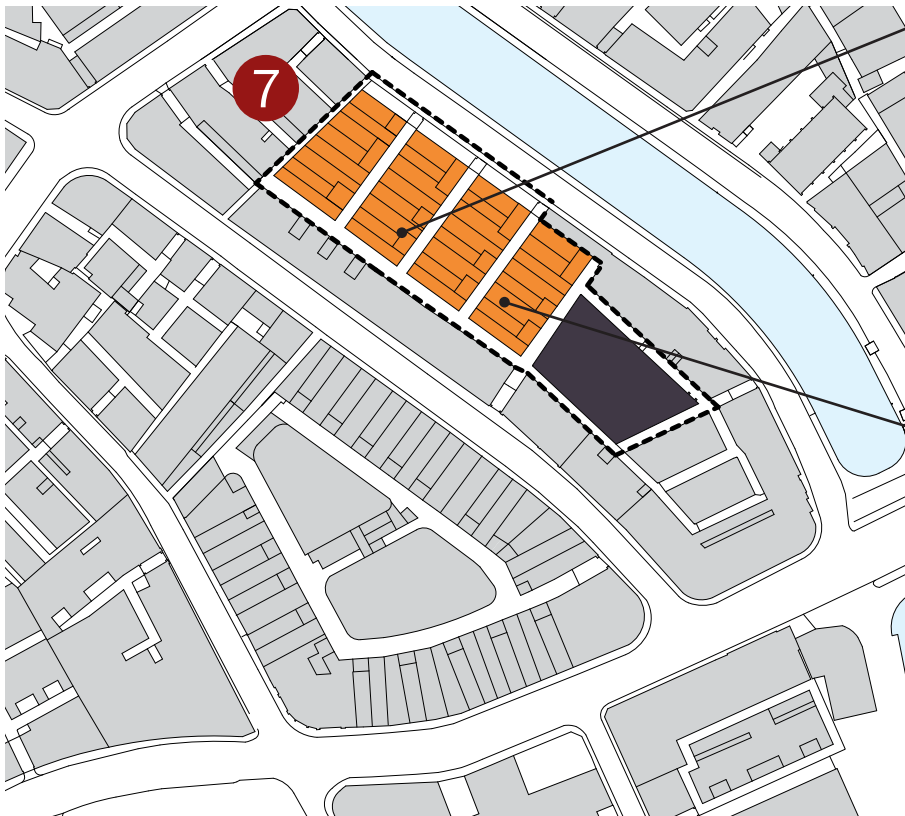
ARTIST CORRIDOR

Cluster C: LILONG 7

FROM EXISTING CONDITIONS



- LIVE / WORK SPACES
Artists live above shops
Sell goods on first floor
32 Units



- LIVE / WORK SPACES
Affordable Community
Artist Haven

KEY:

- Mixed Use
- Other Bldg
- Industrial



TO LIVE /WORK SPACE

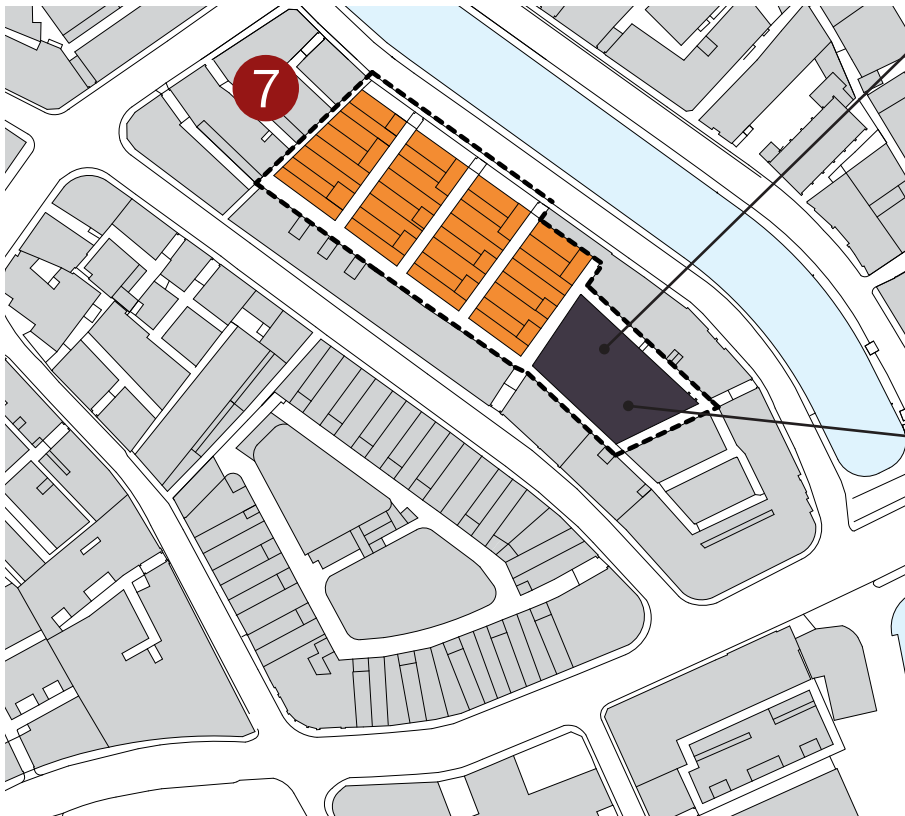
ARTIST CORRIDOR

Cluster C: **LILONG 7**

FROM EXISTING CONDITIONS



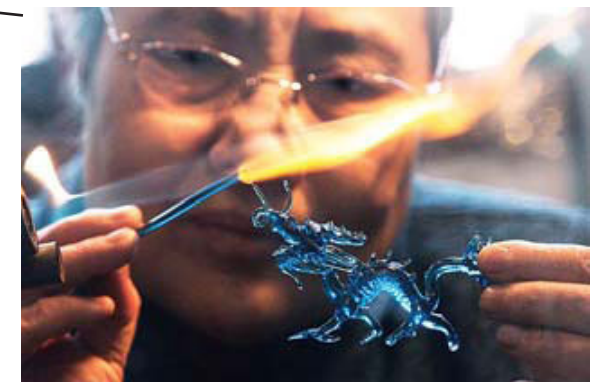
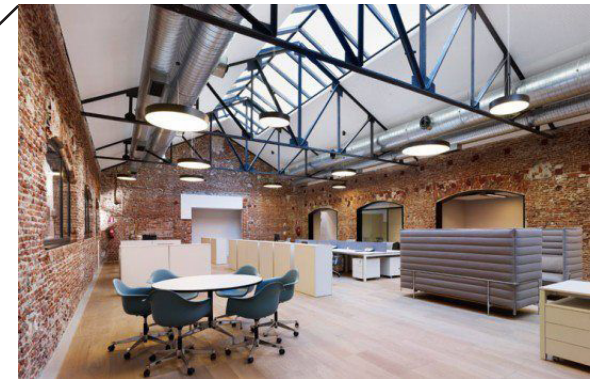
- MAKER SPACES
Raw Industrial Space
Machinery
Fabrication
1 Maker Space



- MAKER SPACES
Ceramics
Textiles
Glass Blowing

KEY:

- Mixed Use
- Other Bldg
- Industrial



TO MAKER SPACE

ARTIST CORRIDOR

Cluster C: **LILONG 8**

FROM EXISTING CONDITIONS



- LIVE / WORK SPACES
Artists live above shops
Sell goods on first floor
84 Units

- LIVE / WORK SPACES
Affordable Community
Artist Haven

KEY:

-  Mixed Use
-  Other Bldg
-  Industrial



TO LIVE / WORK

ARTIST CORRIDOR

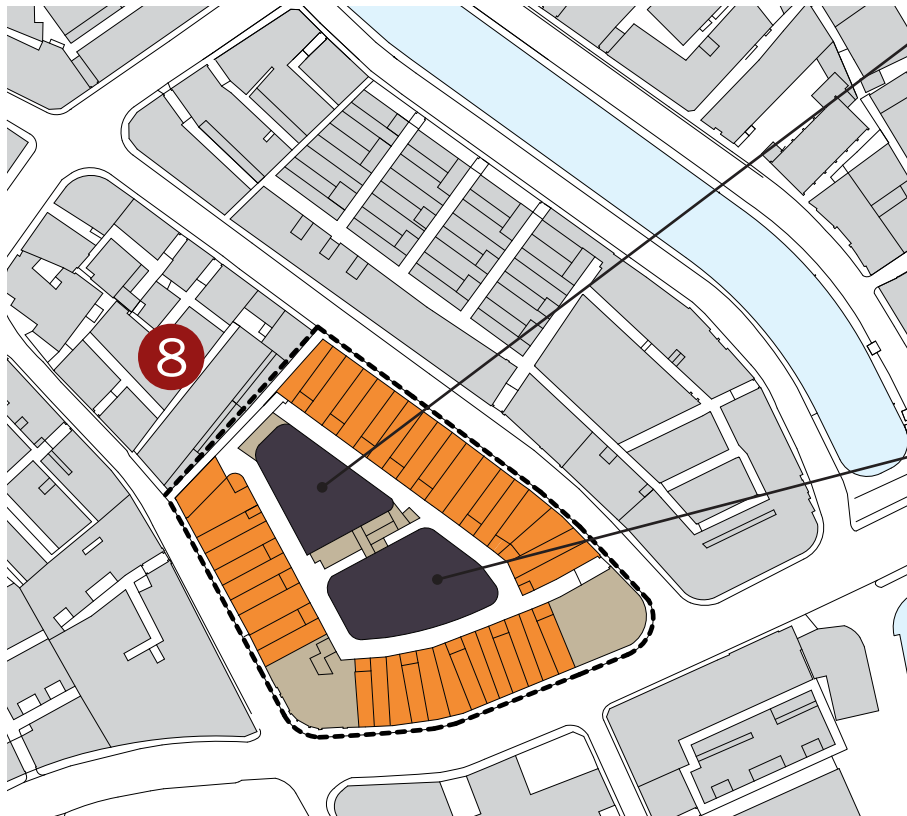
Cluster C: **LILONG 8**

FROM EXISTING CONDITIONS



- MAKER SPACES
- Raw Industrial Space
- Machinery
- Fabrication
- 2 Maker Spaces

- MAKER SPACES
- Ceramics
- Textiles
- Glass Blowing



KEY:

- Mixed Use
- Other Bldg
- Industrial

TO MAKER SPACE

COST/BENEFIT ANALYSIS

• DIRECT COSTS		
Rehabilitation Cost	-----	123,168,500 RMB
Infrastructure Upgrading Cost	-----	10,085,000 RMB
Relocation Cost	-----	1,055,730,000 RMB
• INDIRECT COSTS		
Land Lease Loss Cost	-----	136,874,500 RMB

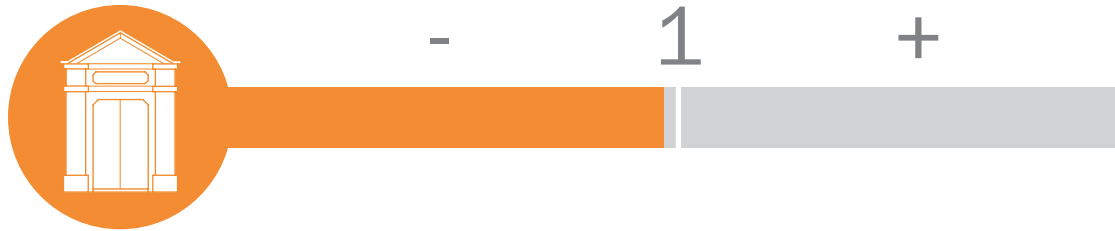
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Rent Income Stream to Government	Transfer of Development Rights
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• EXTERNALITIES	
15% View Premium to Surrounding High-Rises	

• POLICY GOALS	
Historic Preservation & Revitalization	Creative Industry
Green Space Creation	Residential Construction

ARTIST CORRIDOR

Cluster C: **LILONG 7**

MEASURING SCALES:



CULTURAL

- Re-use of traditional central courtyard communal space.



SOCIAL

- Mobile community generates greater social capital.



FINANCIAL

- Costs for preservation of materials.



ENVIRONMENTAL

- Lower density allows for higher quality of life.



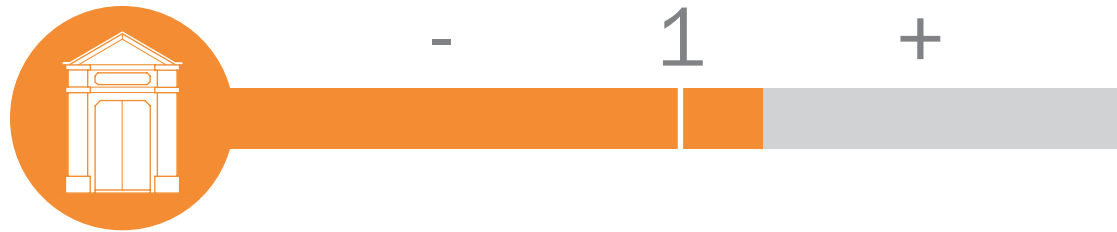
COMPOSITE

> 1 = More Benefit Than Cost

ARTIST CORRIDOR

Cluster C: **LILONG 8**

MEASURING SCALES:



CULTURAL

- Adaptive re-use of industrial architectural heritage.



SOCIAL

- Shared skills and knowledge among artist community.



FINANCIAL

- Costly redevelopment of outdated industrial spaces.



ENVIRONMENTAL

- Better lighting and increased ventilation.



COMPOSITE

> 1 = More Benefit Than Cost

COST/BENEFIT ANALYSIS

COMPARING SCALES



Business District



Creative Cluster



Community Center



Residential Community



Business and Residential



Small Hotel



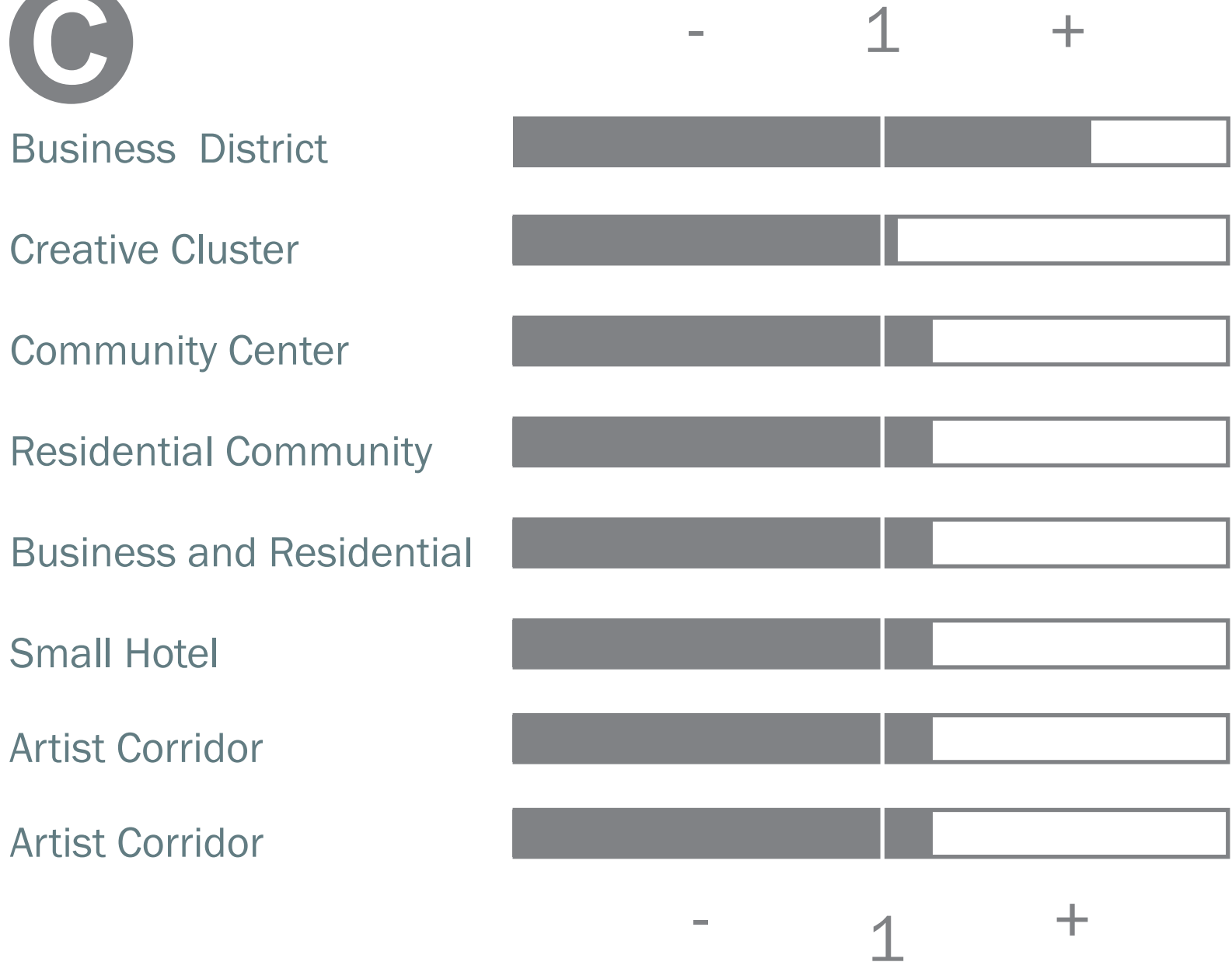
Artist Corridor



Artist Corridor

COST/BENEFIT ANALYSIS

COMPARING COMPOSITE SCALE



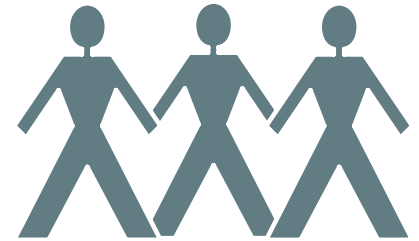
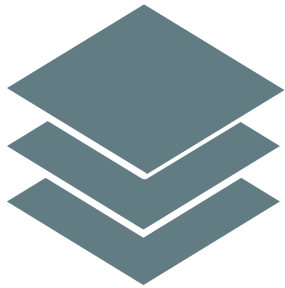
COST/BENEFIT ANALYSIS

PRINCIPLES

Business District					
Creative Cluster					
Community Center					
Residential Community					
Business/Residential					
Small Hotel					
Artist Corridor					
Artist Corridor					

COST/BENEFIT ANALYSIS

PRINCIPLES



OTHER POSSIBLE USES

LILONG 1 - 8

IDEAS

- Do Nothing
- Community Garden
- University Related
- Student Housing
- Senior Housing
- Educational Library
- Workforce Development
- Green Space
- Farmers Market



TOOLS



TOOLS

LILONG 1 - 8

IN THE TOOLKIT:

- Regulatory Systems
- Community Engagement Tools
- Technical Tools
- Financial Tools

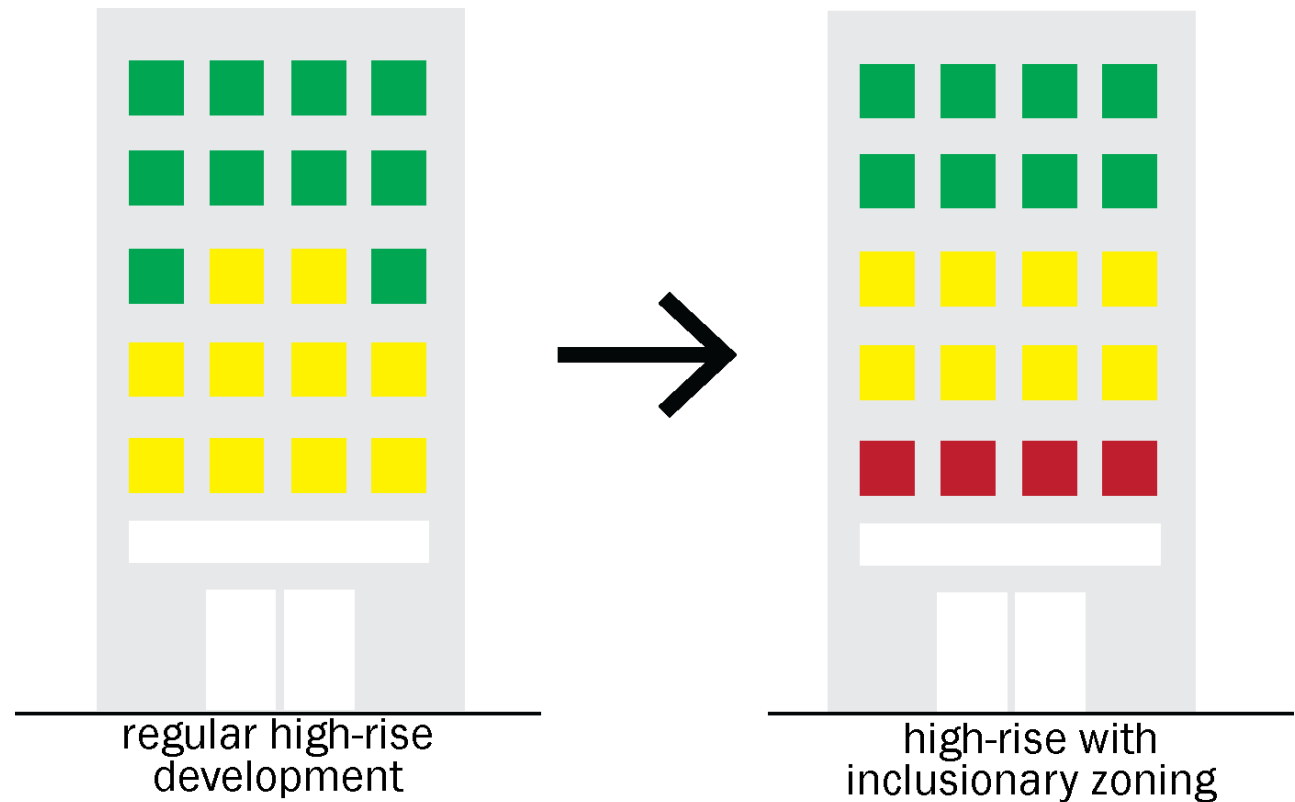
SUPPORTING IDEOLOGY:

- Historic resources are for the public
- Historic values should be identified by the public
- Changes to historic resources should be managed
- Changes must be documented and analysed



POTENTIAL TYPES

- Infill design regulations
- Allow lilong residents to sell units
- Inclusionary zoning of 20%
- Alter definition of greenspace



KEY:

- high income
- mid-range income
- low income

POTENTIAL TYPES

- Stakeholder mapping
- Cultural mapping
- Public meetings
- Revised development process



POTENTIAL TYPES

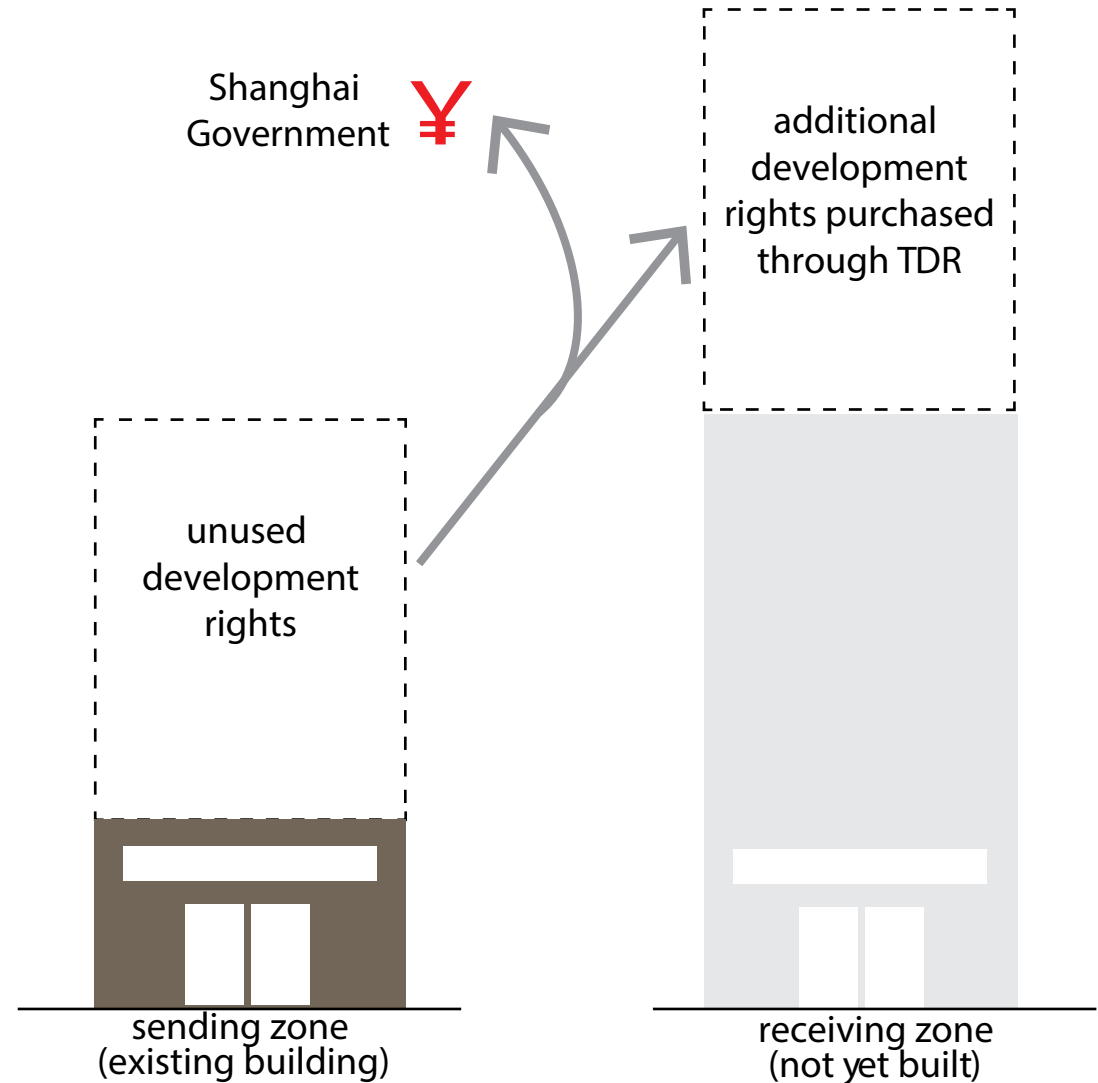
- Impact assessments
- Multi-variable cost-benefit analyses



EXAMPLE: CULTURAL RESOURCE

POTENTIAL TYPES

- Tax Increment Financing (TIF)
- Business Improvement District (BID)
- Revolving Loan Fund (RLF)
- Transfer of Development Rights (TDR)





Thank you
谢谢

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