



# QUITO ACTIVATING HERITAGE ASSETS

ADAPTIVE REHABILITATION + HOUSING IN HISTORIC CITY CENTERS

05 :: 02 :: 14

## PROJECT BRIEF

### ADAPTIVE REHABILITATION IN URBAN HERITAGE CENTERS

#### PART I

- Qualitative assessment of conditions and services within Historic City Center
- Highlight opportunities and barriers for adaptive rehabilitation
- Application to site identification
- Site qualifications and carrying capacity
- Precedent studies

#### PART II

#### PART III



## PROJECT BRIEF

### ADAPTIVE REHABILITATION IN URBAN HERITAGE CENTERS

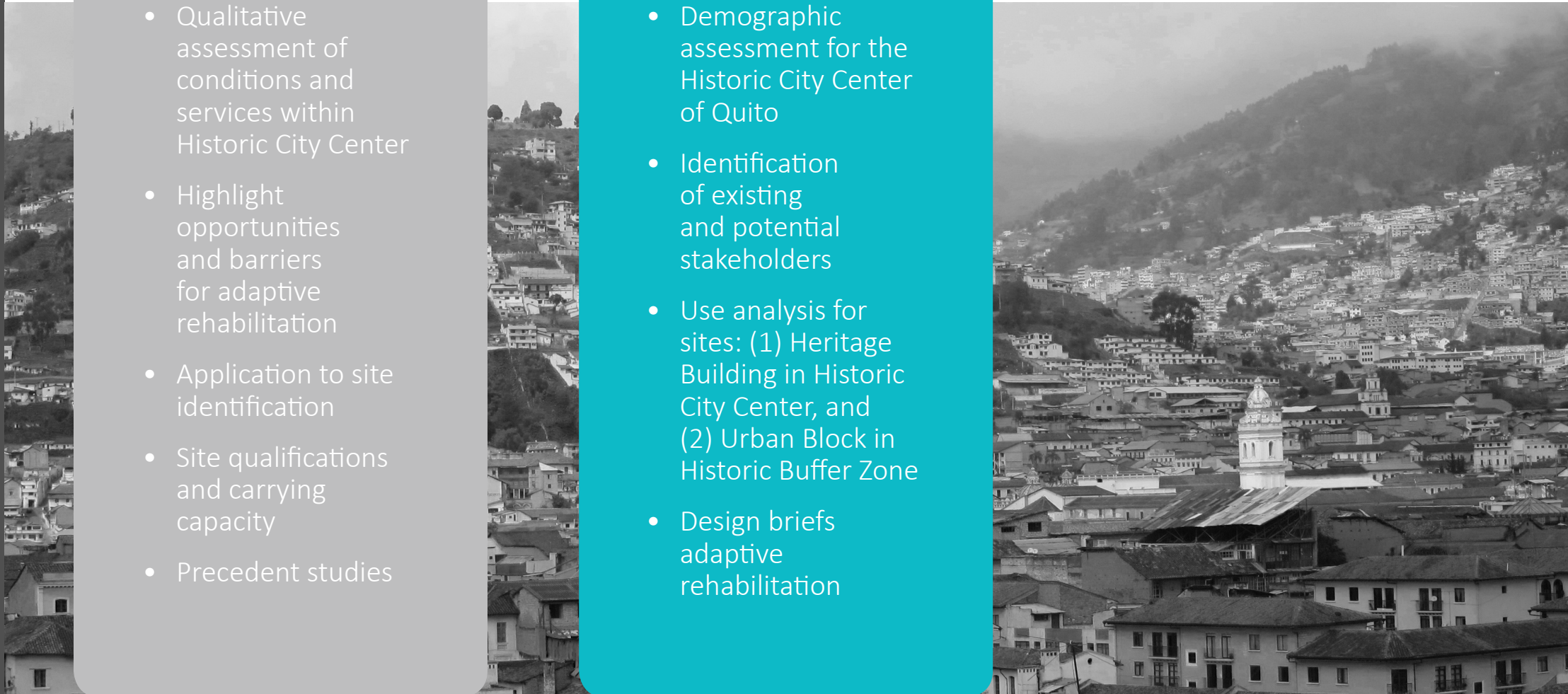
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#### PART II

- Demographic assessment for the Historic City Center of Quito
- Identification of existing and potential stakeholders
- Use analysis for sites: (1) Heritage Building in Historic City Center, and (2) Urban Block in Historic Buffer Zone
- Design briefs adaptive rehabilitation

#### PART III



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#### PART III

- Adaptive Reuse Proposals

# CITYWIDE DEMOGRAPHICS + DYNAMICS

QUITO :: HISTORIC CITY CENTER AND BUFFER ZONE

## INTRODUCTION

### QUITO

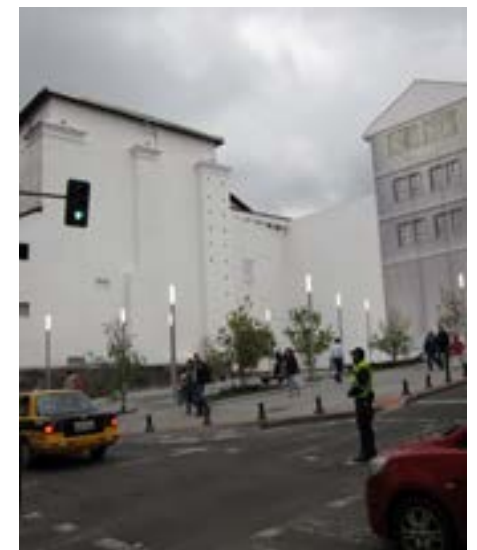
- Capitol of Ecuador
- Founded 1534 (Spanish City)
- Stark Contrast between Old/New and Rich/Poor Neighborhoods



QUITO :: HISTORIC CENTER



## QUITO :: HISTORIC CENTER





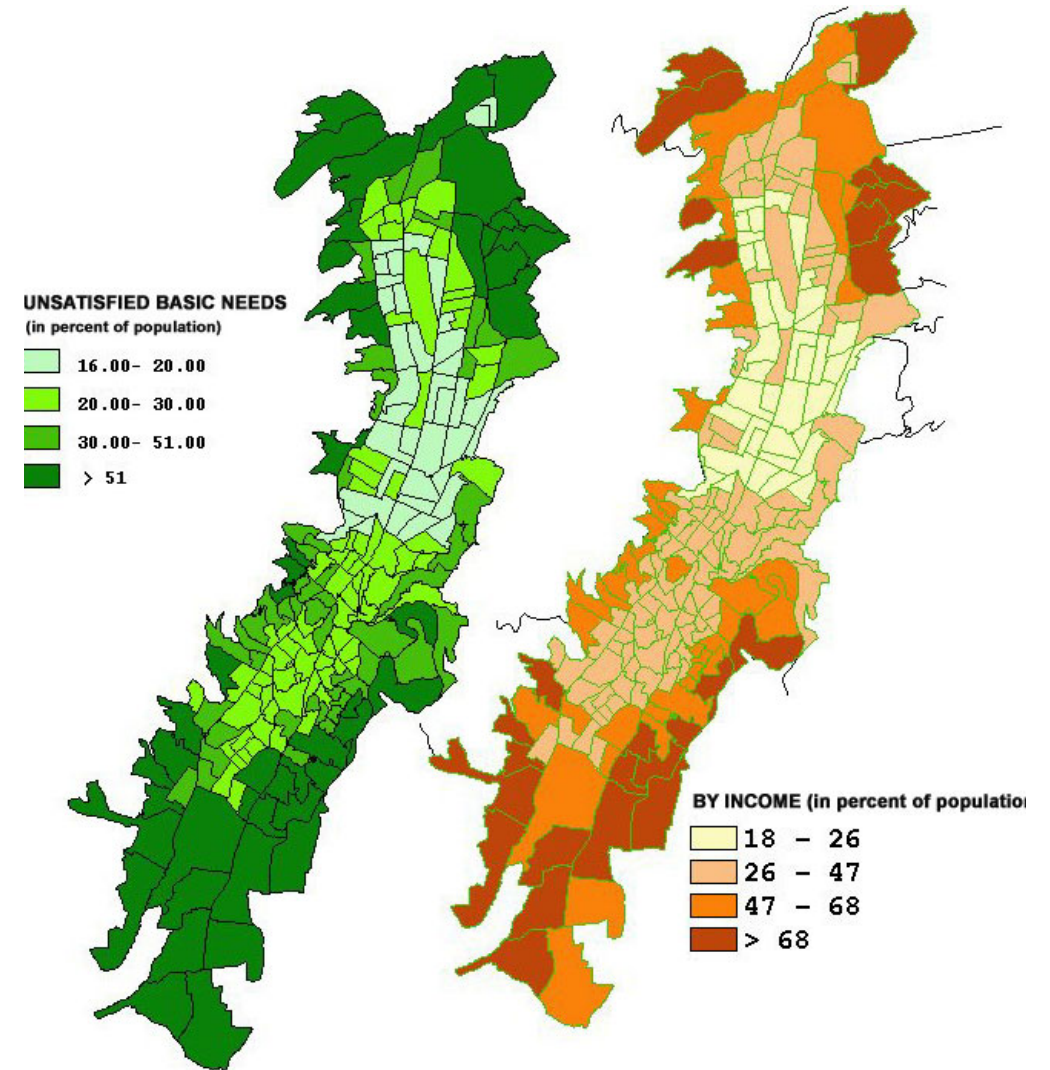
QUITO :: MODERN DISTRICT



## DEMOGRAPHICS

### QUITO

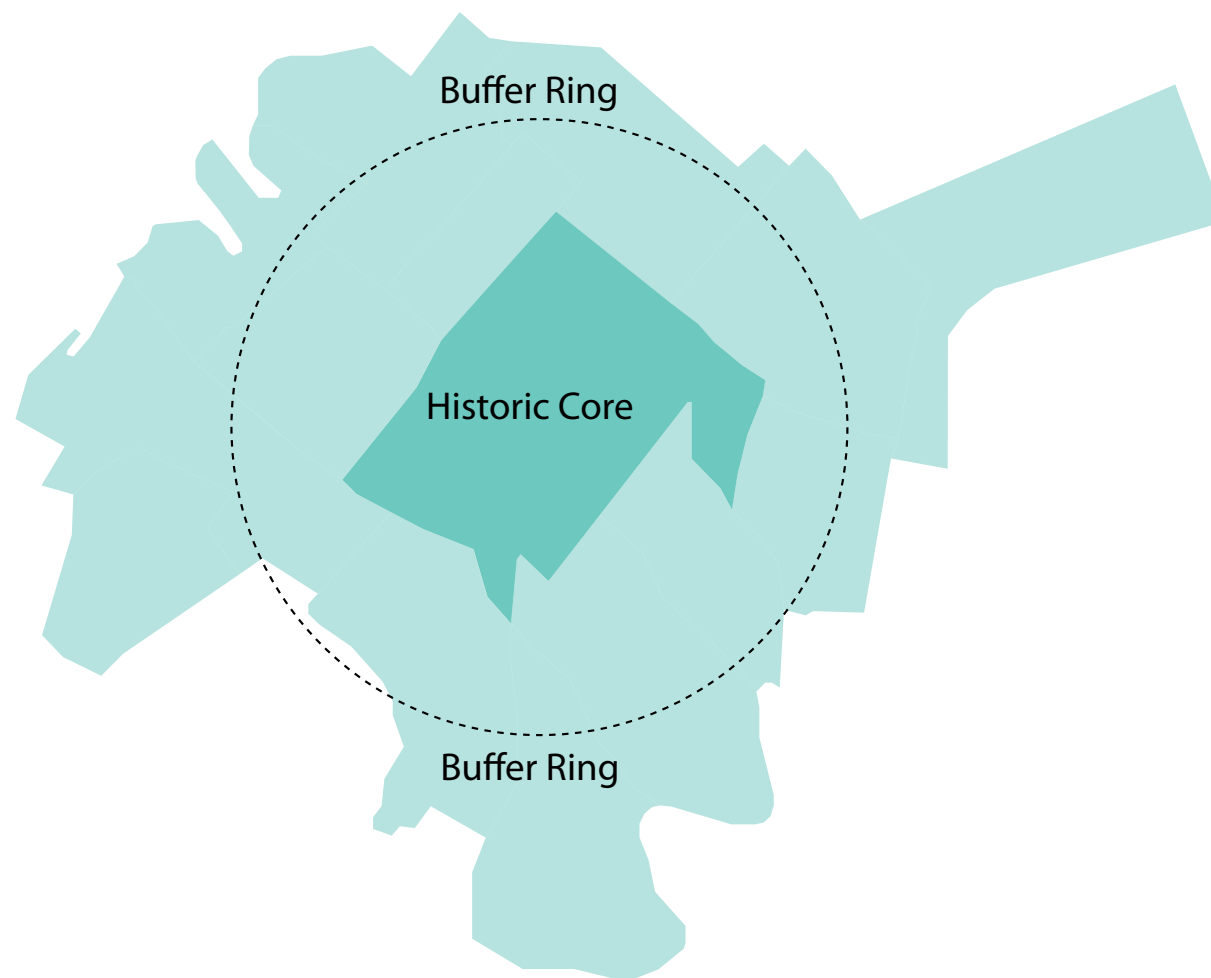
- Areas of high poverty and lack of basic needs are on the periphery of the city, while the city center and modernized northern neighborhoods are more affluent and well served.
- Increasing housing pattern of mixed income communities as wealthy population returns to modernized northern core to be closer to employment
- Due to topographic constraints, high density housing typologies are prevalent
- Quito experiences lower unemployment than neighboring cities and areas, with private labor being the main source of employment. The city also has strong craft/trades.



## DEMOGRAPHICS

### Historic Center of Quito

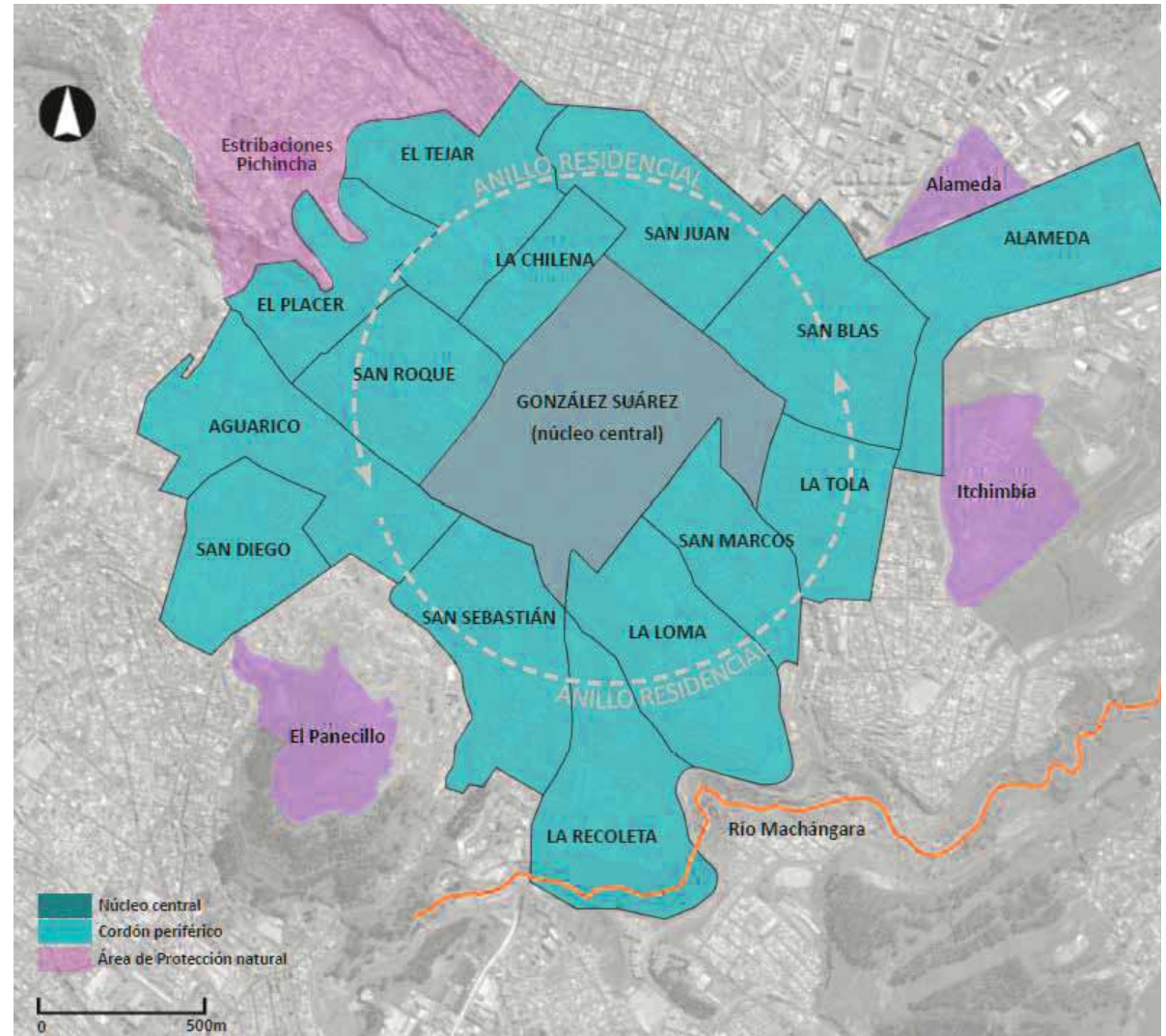
- The majority of the population lives within the buffer ring while most of the retail operations are located in the core.
- This is indicative of the fact that many of the property owners in the core are content to lease only the bottom floors to businesses leaving the top floors vacant.
- Despite the higher population density in the buffer ring most of the infrastructure improvements from the municipality have been done in the core, this includes lighting, trash pick-up service and new cans, new street paving, security and public spaces.
- Although the income levels of the residents have increased dramatically over the past two decades in the buffer ring, the historic core has remained largely middle-low income.
- The majority of the residents in both the buffer ring and the core work in the service industry, given that there is little of that activity in the HCQ as a whole it is likely that these individuals are commuting out of the area for work, and that those working in the HCQ are from elsewhere.



## DEMOGRAPHICS

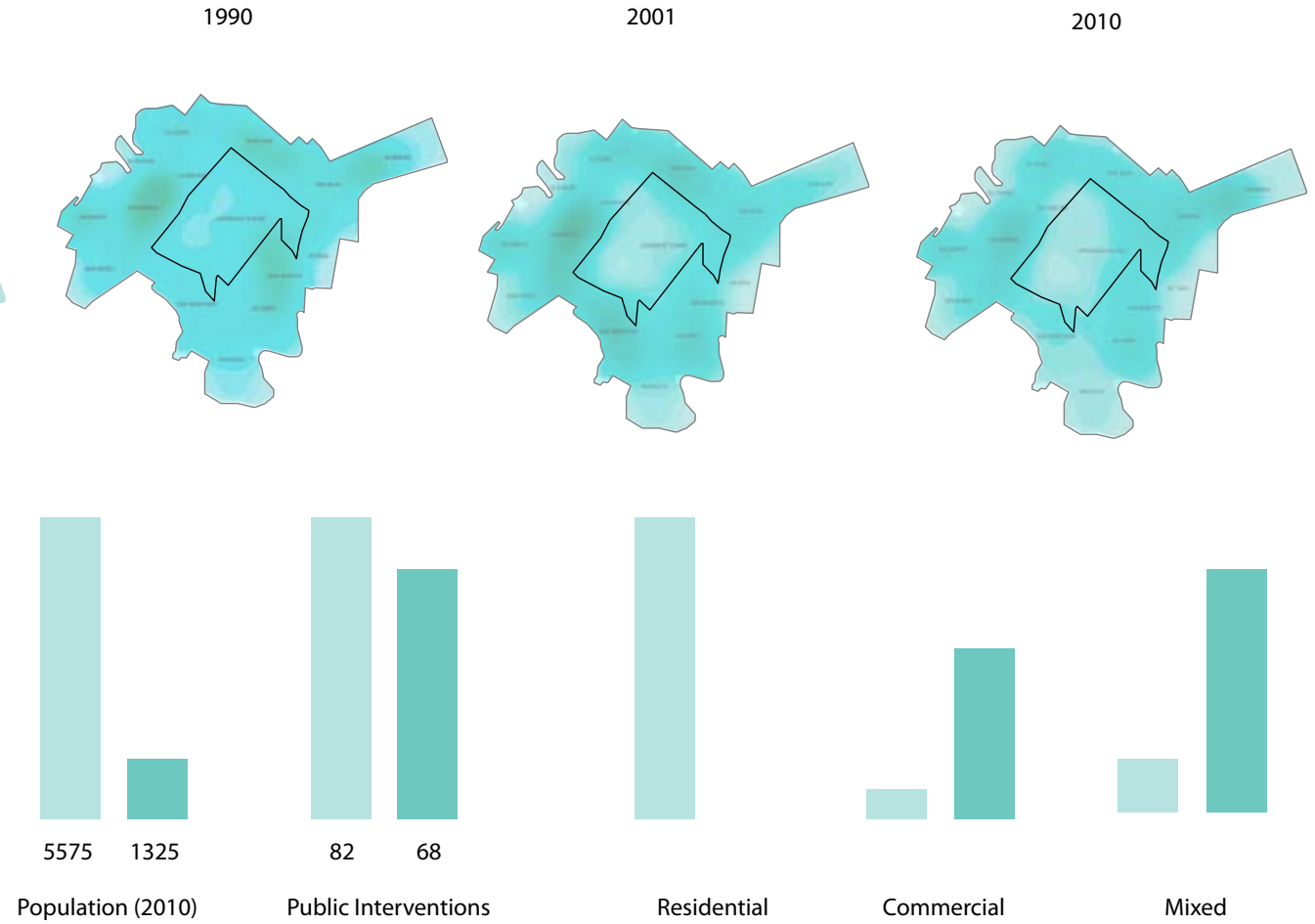
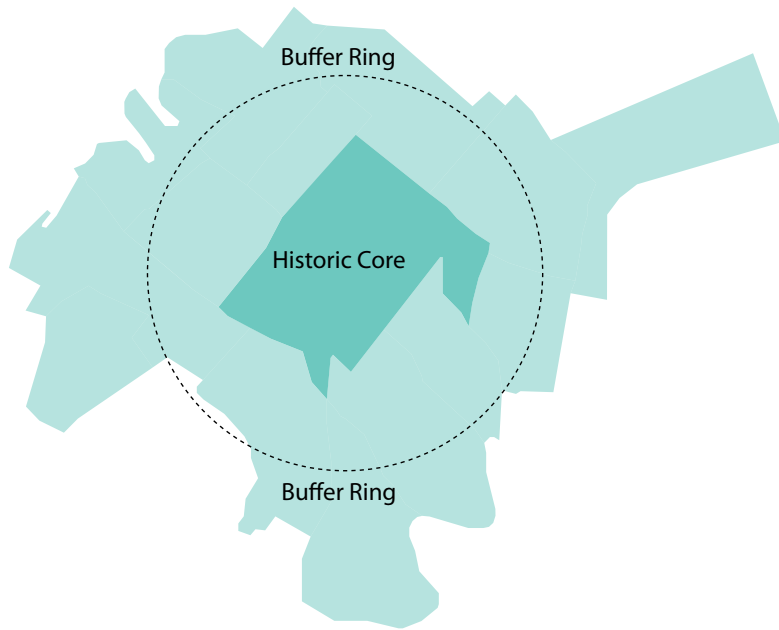
### Neighborhoods of the HCQ

- For the past two decades the income levels of the neighborhoods have changed dramatically, being heavily low income in 1990 to predominantly high income in some neighborhoods toward the north in 2010. The highest of these being in the San Juan, El Tejar, and Alameda neighborhoods.
- The neighborhoods of San Roque, Gonzalez Suarez, San Diego, and parts of Aquarico have remained largely low and medium-low income.
- Population density has decreased as a whole over the past two decades and however the highest densities remain concentrated in the poorer and wealthier areas in the buffer ring.
- The highest populations are included in the northernmost neighborhoods such as Alameda, San Juan, San Blas, and El Tejar. However the historic core of Gonzales Suarez remains average, this could be indicative of the fact that its easier to develop higher densities of housing in the buffer zone which is less protected.



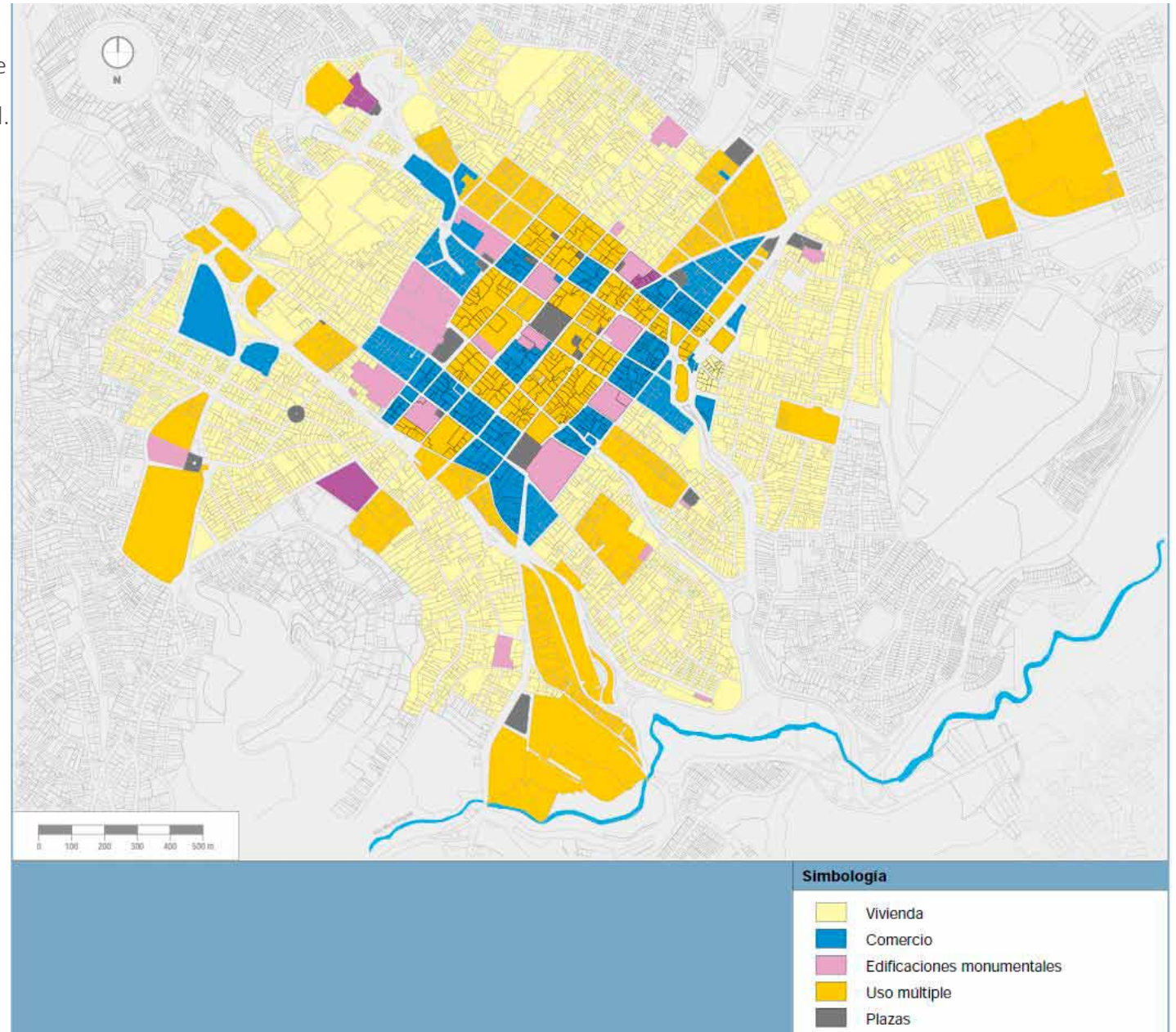
## DEMOGRAPHICS

HCQ VS. Buffer Ring



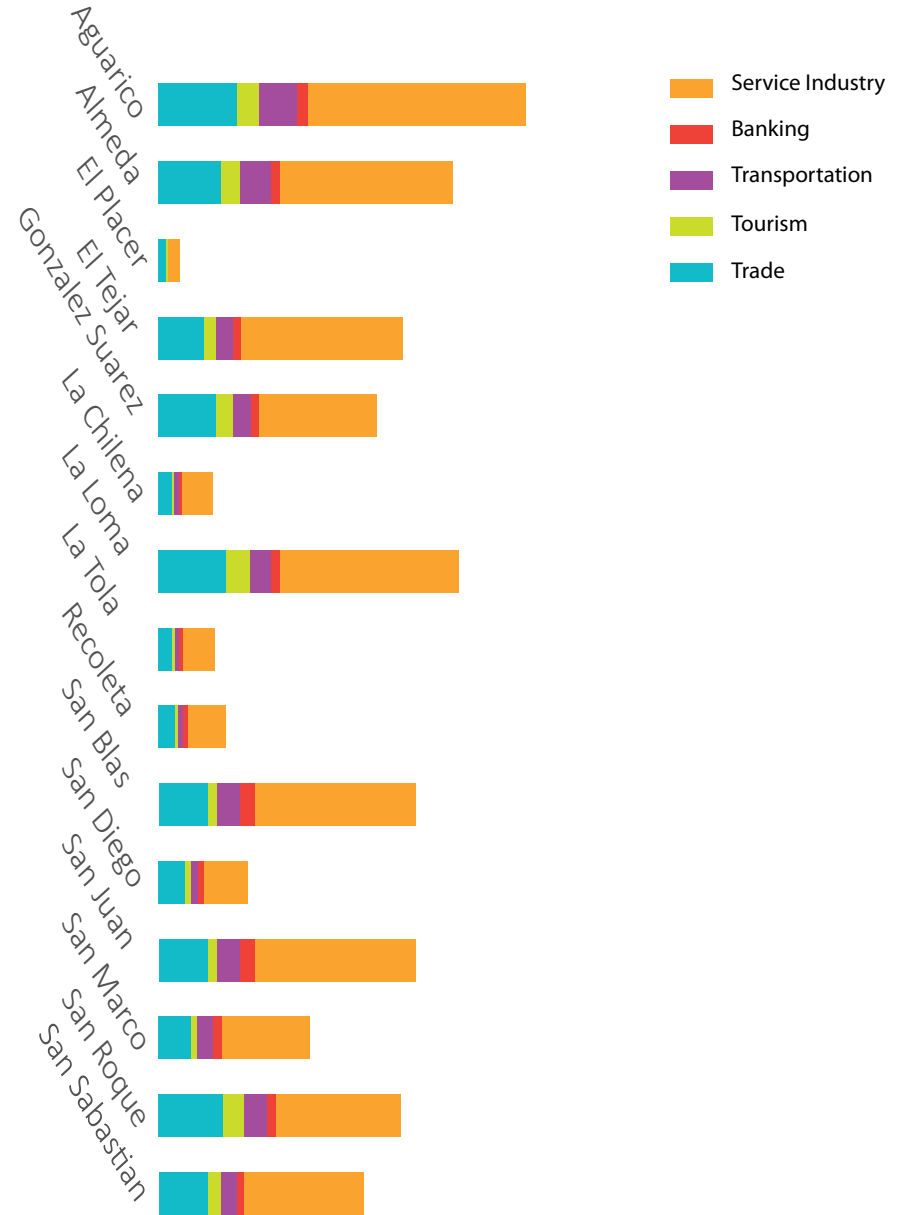
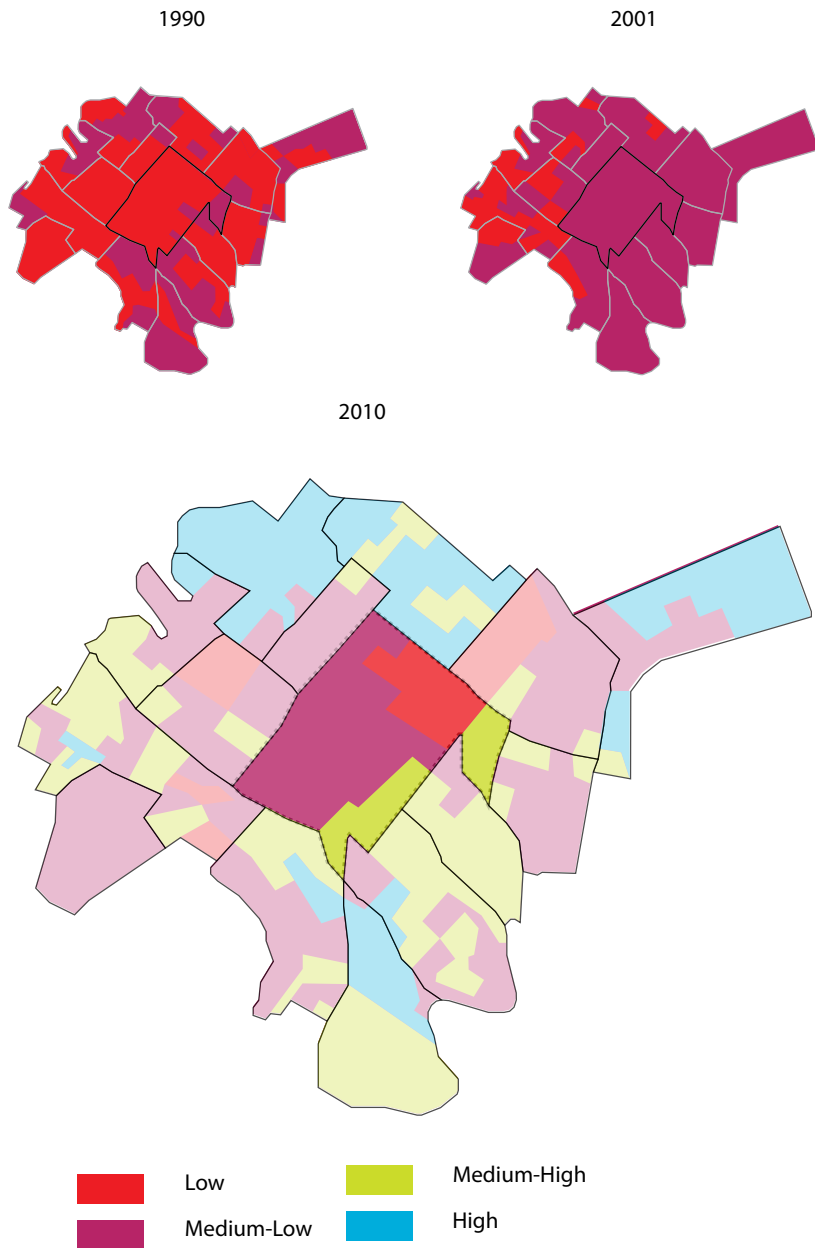
## ZONING

- The majority of Mixed and Commercial spaces is located within the HCQ while the buffer ring is almost exclusively residential.
- The Buffer Ring therefore tends to lack many of the services and conveniences of the core, while the core lacks the quiet residential characters of the periphery.
- Zoning is very compartmentalized and needs to allow for more flexibility to provide for amenities that would attract a new group of users.



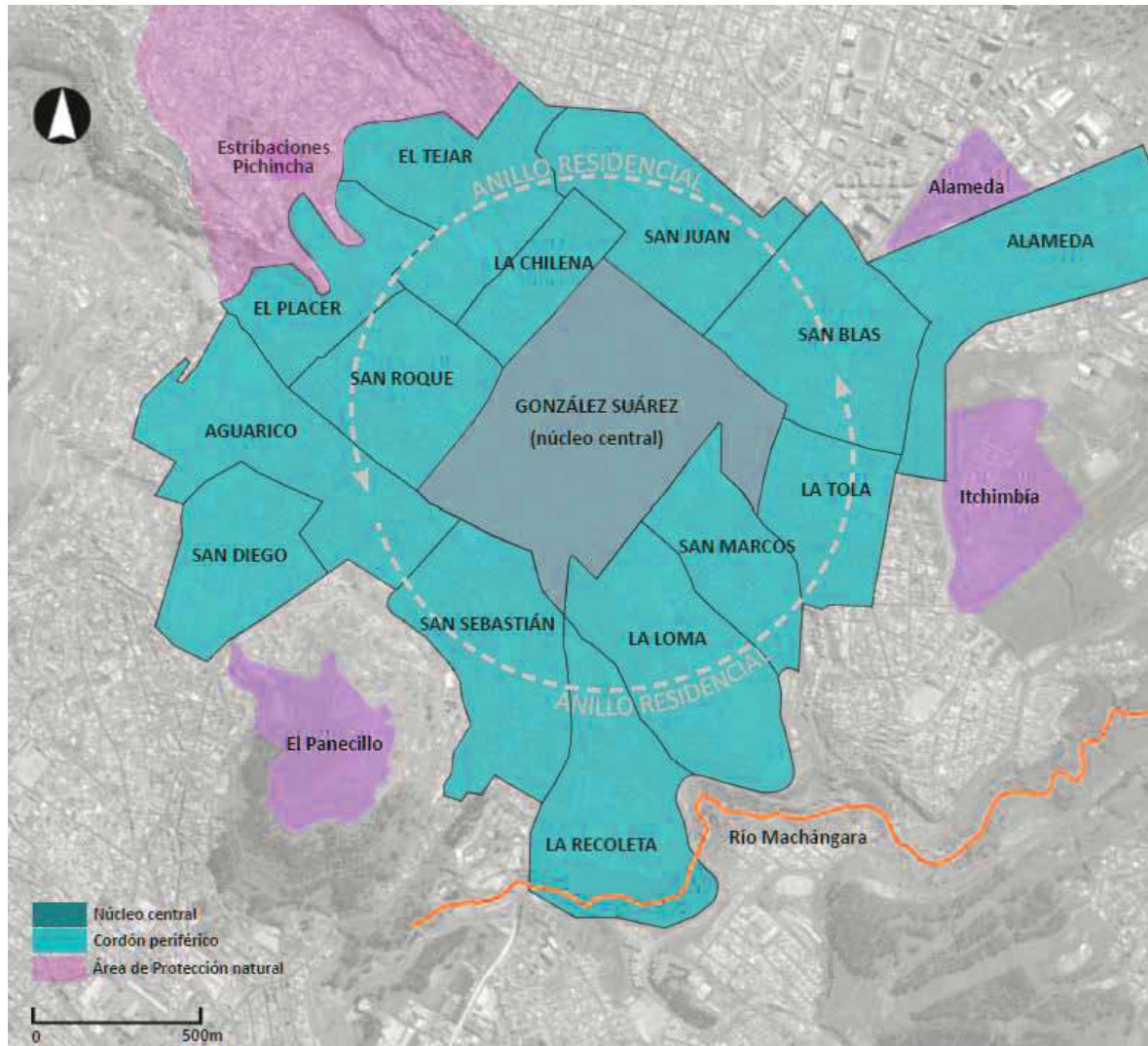
## DEMOGRAPHICS

### Income and Labor



## DEMOGRAPHICS

### Population Dispersal



San Roque



Gonzalez Suarez



El Tejar



Alameda



La Chilena



San Diego



La Loma



San Sebastian



La Chilena



San Juan



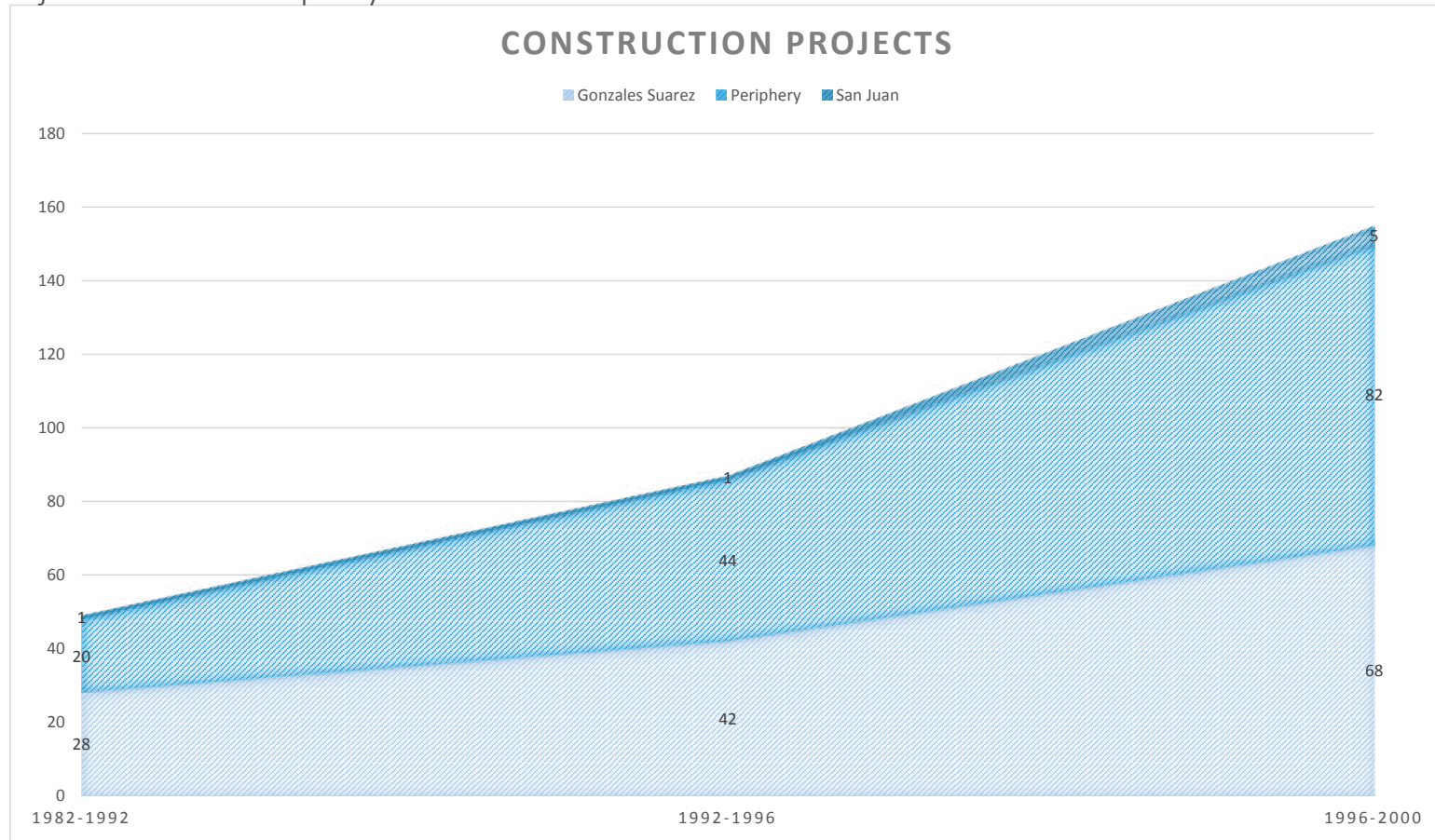
San Marco





## DEMOGRAPHICS

### Construction Projects from Municipality



#### San Juan

Architecture	4
Public Space	1
Utilities	0
Infrastructure	0

#### CHQ

Architecture	199
Public Space	31
Utilities	67
Infrastructure	30

# REHABILITATION ASSESSMENT + ANALYSIS

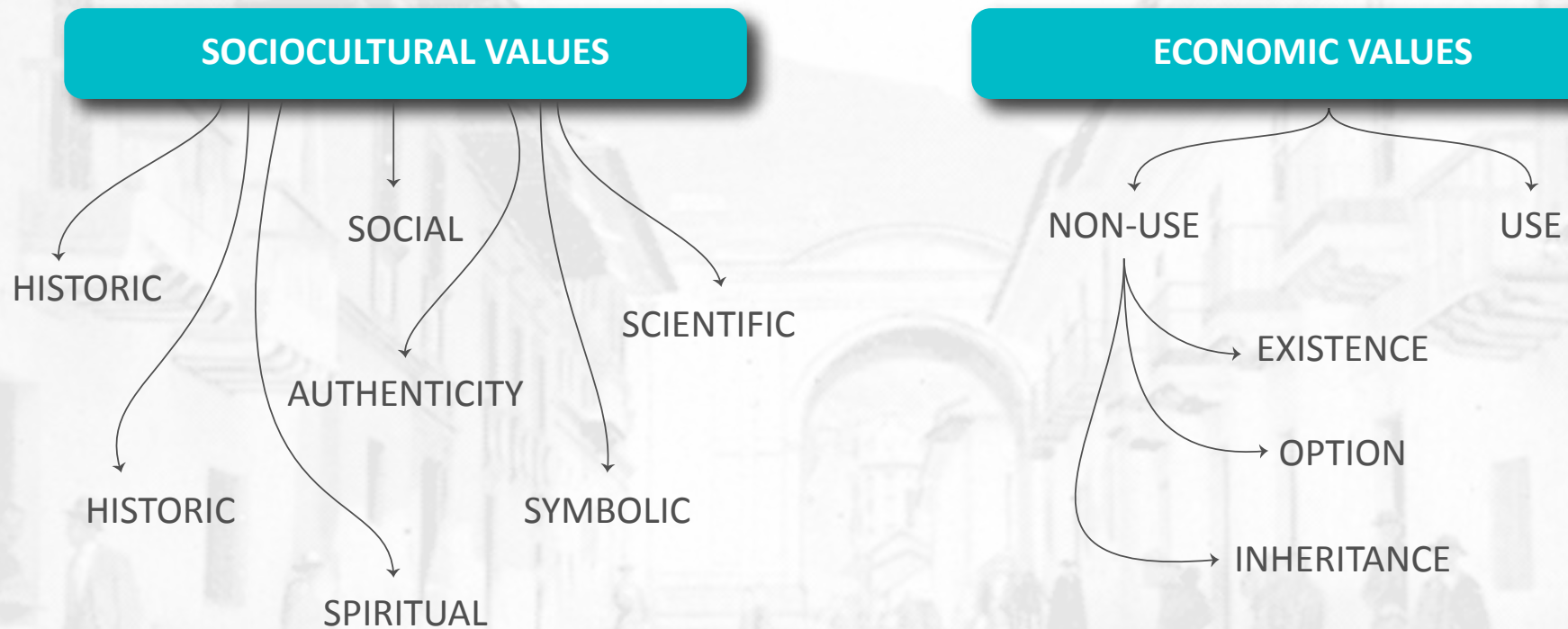
QUITO :: HISTORIC CITY CENTER AND BUFFER ZONE

## PROJECT FRAMEWORK

### KEY ASPECTS OF DECISION-MAKING

#### 1 :: VALUES

Since its nomination as one of the first two UNESCO World Cultural Heritage Sites in 1978, the historic city core of Quito has served as a cultural and historical beacon to the people of Ecuador. The historic core's sociocultural and economic values, which were originally grounded in social, spiritual, use, and non-use, have since expanded to cover the entire range of heritage values.

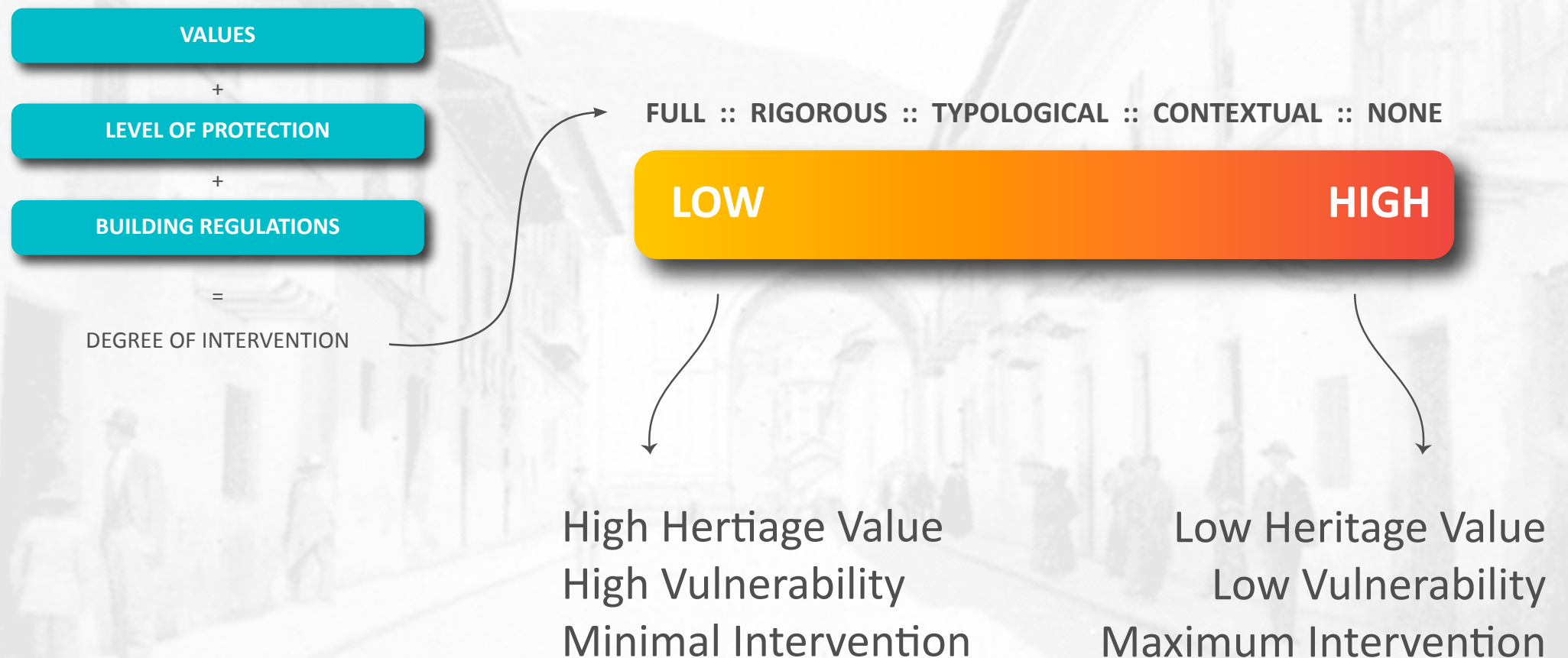


## PROJECT FRAMEWORK

### KEY ASPECTS OF DECISION-MAKING

## 2 :: CARRYING CAPACITY

Since its nomination as a UNESCO World Heritage Site, the Historic Core of Quito has ossified to the point where many of its once densely populated buildings stand largely vacant. The local metropolitan government is seeking new forms in investment in the Historic core aside from museums and religious centers. The ability for buildings to 'carry' new uses is largely dependent on the level of protection and set of building regulations imposed by the municipal government



## PROJECT FRAMEWORK

KEY ASPECTS OF DECISION-MAKING

### 3 :: USE / USERS

Historic buildings cater best to uses and users that allow the building to maintain its heritage values while maximizing carrying capacity.

**EXISTING**

**POTENTIAL**

Demand  
Users  
Stakeholders  
**Carrying Capacity**

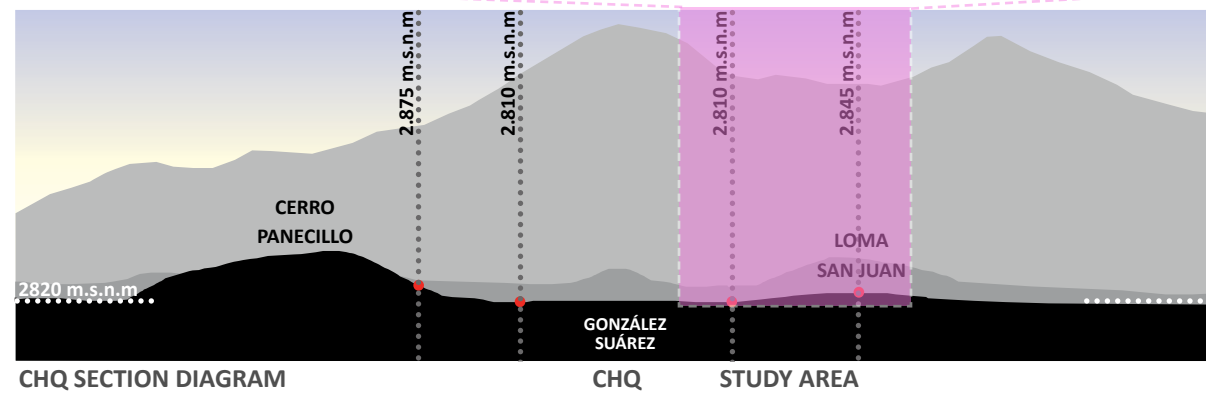
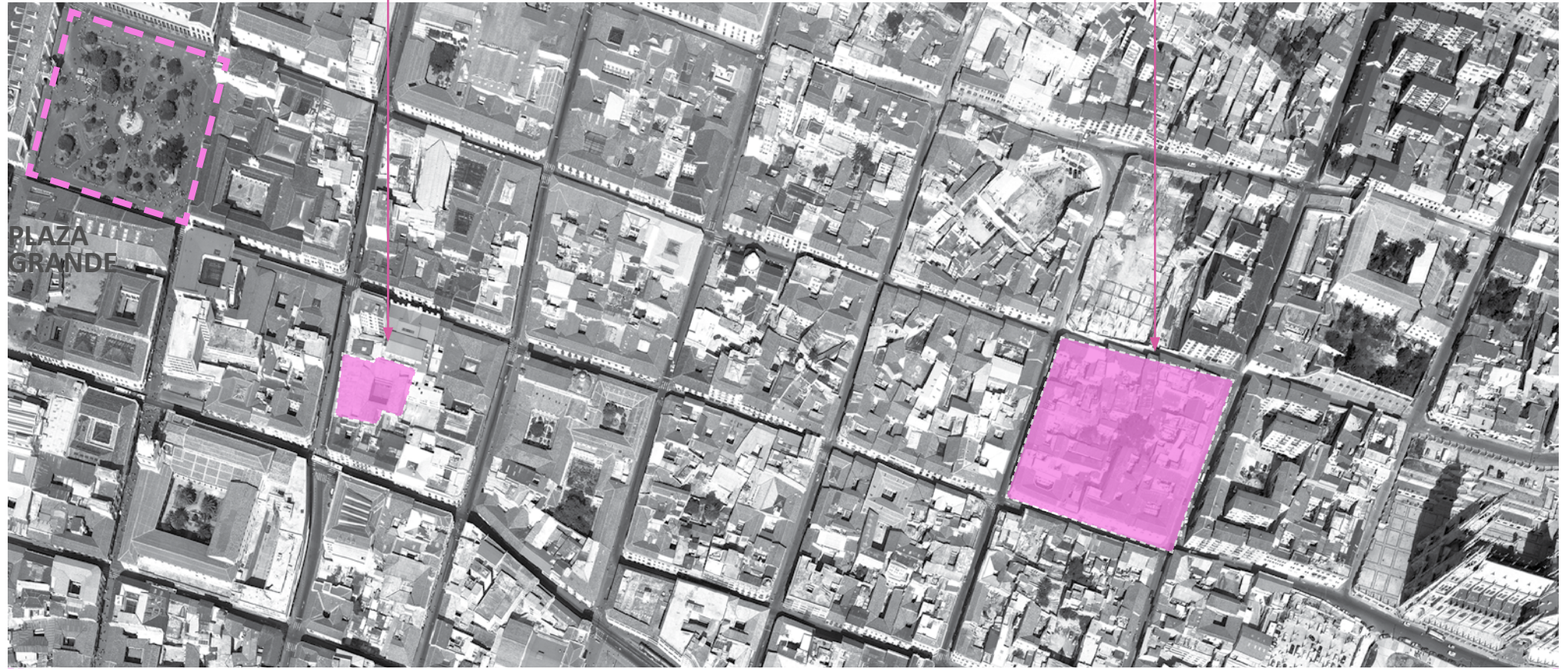
ADAPTIVE PROGRAM / DESIGN

## PROJECT FRAMEWORK

### SCALES OF INTERVENTION

SCALE 1 :: Heritage Building

SCALE 2 :: Residential Block

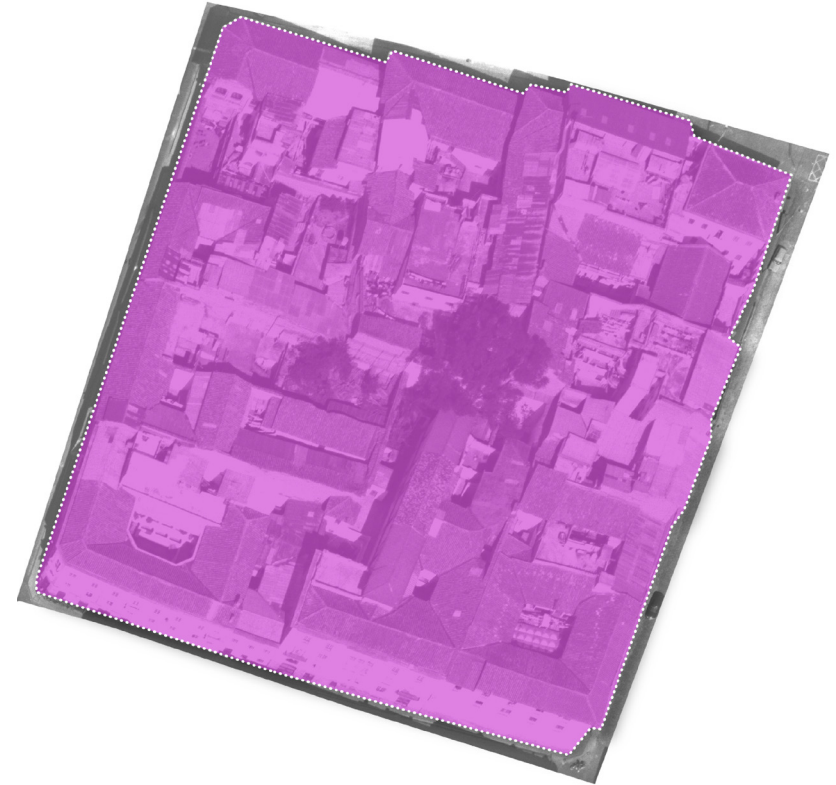
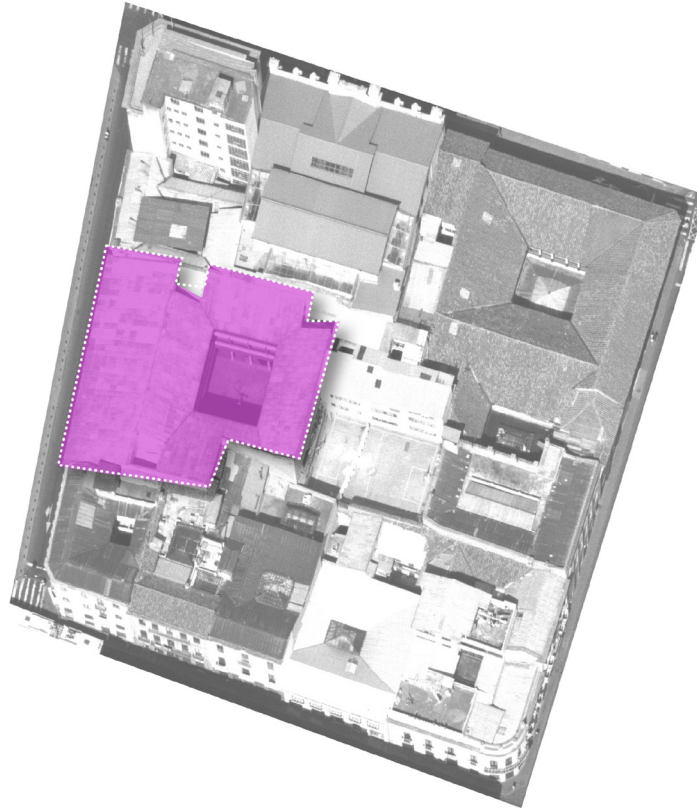


## PROJECT FRAMEWORK

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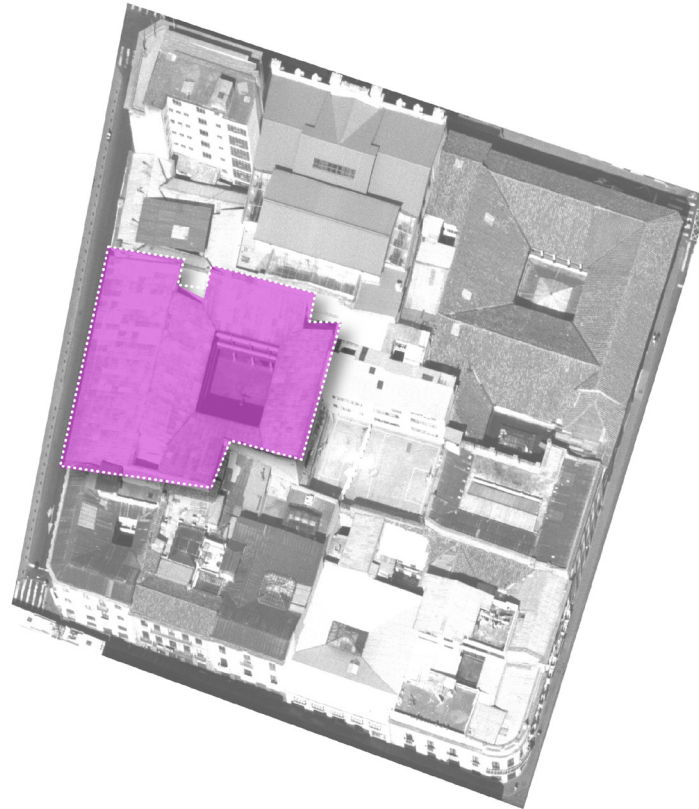


Historic City Core	<b>Location</b>	Historic "Buffer" Zone
Vacant	<b>Occupancy</b>	Vacancy Mix
1	<b>Parcels</b>	17
2,907 square meters	<b>Area</b>	7,564 square meters
Moderate	<b>Terrain</b>	Steep

## PROJECT FRAMEWORK

SCALES OF INTERVENTION :: SELECTION CRITERIA

### SCALE 1 :: Heritage Building



- Archetype of Republication Era architecture in CHQ
- Listed on the Local Register of Historic Places
- Owned by the government > Reserved for Urban Redevelopment plans within the context of the Master Plan for Rehabilitation of Historic Areas of Quito

### SCALE 2 :: Residential Block



- Plumbing and drainage infrastructure - though in need to repair - already exists and will need less intervention
- Prime location between Plaza Teatro and Plaza Grande, quick access to Trolley stations and future Metro stations
- **Catalyst for change for other historic buildings**



## PROJECT FRAMEWORK

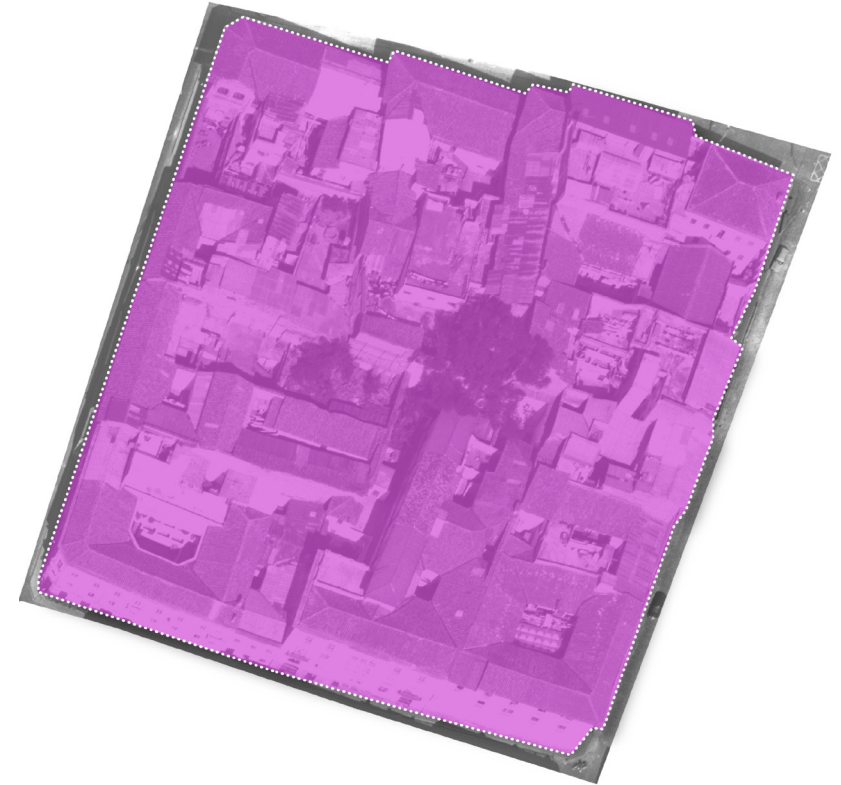
### SCALES OF INTERVENTION :: SELECTION CRITERIA

#### SCALE 1 :: Heritage Building



- Strong example of typical use mix contained within a single block
- Aligned with Metropolitan District of Quito’s priorities of “block revitalization” in the buffer zone
- More development flexibility beyond CHQ, high real estate value

#### SCALE 2 :: Residential Block



- Strong articulation of floors in the building alignment on a steep incline key for innovative rehabilitation strategies
- Prime location just beyond the CHQ for development; walking distance and transit access to historic core
- **Stimulate change in nearby blocks**

# SCALE 1 HERITAGE BUILDING

CALLE MEJIA + CALLE GUAYAQUIL

## SCALE 1 :: HERITAGE BUILDING

MINISTRY OF EDUCATION, CALLE MEJIA

### BUILDING



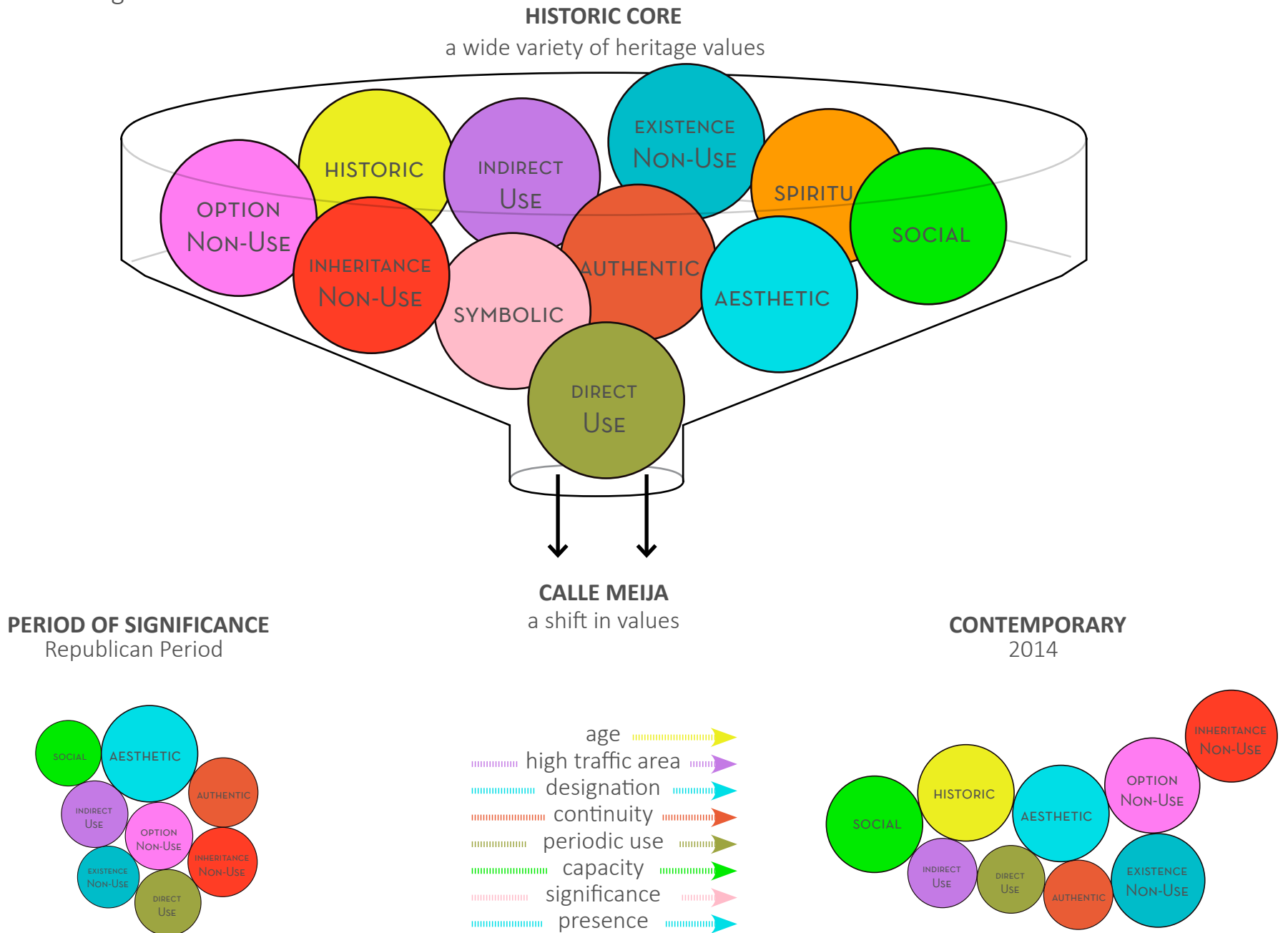
### SITE



- Republican Era complex purchased in 1977 by the Ecuadorian State and National Government
- Ministry of Education transferred the property rights to the Ministry of Tourism in July 2013
- Falls under the Master Plan for Rehabilitation of Historic Areas of Quito and inscribed to the historic register in 2011
- Higher orders in 2014 prioritized site for “a comprehensive urban redevelopment project,” negating intended use for Ministry of Tourism

# VALUES: INTRODUCTION

Metropolitan heritage assessment

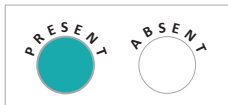


## SCALE 1 :: HERITAGE BUILDING

### MINISTRY OF EDUCATION, CALLE MEJIA

#### USE AND DEMAND

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING	●	●	◐	●
PENSIONS / LOW-INCOME	●	◐	◐	●
HOTEL	○	◐	◐	◐
OFFICE	◐	◐	●	◐
COMMERCIAL	○	◐	●	●
EDUCATIONAL / INSTITUTIONAL	●	◐	●	●
WAREHOUSE / STORAGE OTHER	○	○	○	●



**USE ANALYSIS**  
 Assessment of the use potential for historic buildings based on the current conditions of the Historic City Center, assessment of demand, regulatory overlays, and carrying capacity potential.

#### SITE



- Formally zoned H2 (D203H-70) - *Med. Density Residential*
- Principle use ascribed to site - R3 Zoning, **High Density Residential**
- Potential Housing Users: Low-income Families, Creative Class Singles
- Potential Institutions: Child Day Care Services

## SCALE 1 :: HERITAGE BUILDING

### KEY PLAYERS

KEY PLAYERS		INTERNATIONAL ORGANIZATIONS	STATE GOVERNMENT	LOCAL GOVERNMENT	CORPORATIONS/INSTITUTIONS	COMMUNITY ORGANIZATIONS	PHILANTHROPISTS	CONSERVATORS	REAL ESTATE INVESTORS	MERCHANTS	CONSUMERS	RESIDENTS	HOUSEHOLDS	TOURISTS
QUITO HISTORIC CENTER	ACTIVE	●	●	●	●	◐	◐	●	◐	●	◐	●	◐	◐
	POTENTIAL	●	●	●	●	●	●	●	●	●	●	●	●	●
CALLE MEIJA	ACTIVE	●	●	●	◐	◐	○	◐	○	○	○	○	○	○
	POTENTIAL	●	●	●	●	●	◐	●	●	●	●	●	●	●



## SCALE 1 :: HERITAGE BUILDING

CARRYING CAPACITY

### ASSETS

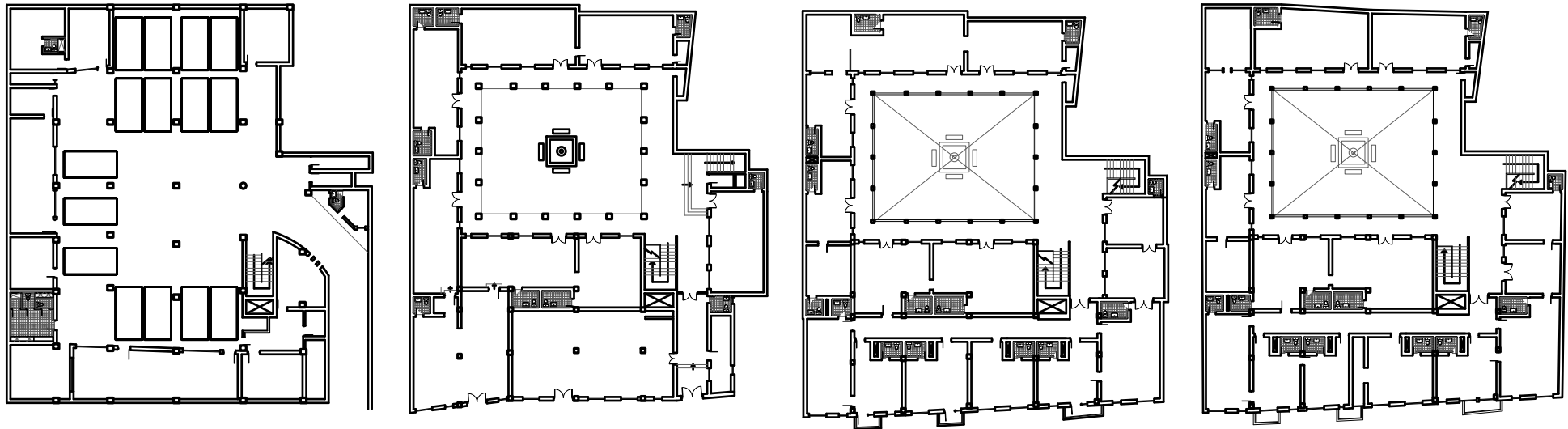
STRUCTURE :: *FIRMITAS*



AESTHETICS :: *VENUSTAS*



USES :: *UTILITAS*



LEVEL OF PROTECTION DESIGNATED HISTORIC; HISTORIC PLAN

BUILDING REGULATION UNESCO; MUNICIPAL ZONING CODE

## SCALE 1 :: HERITAGE BUILDING

### DESIGN BRIEF



### VALUE

- Historic
- Aesthetic
- Social
- Use
- Existence
- Option
- Inheritance

### CARRYING CAPACITY

Medium :: Contextual Preservation

### USE

Low-Medium Income Rental Residential  
Ground Floor Commercial / Institutional  
Social Services Storefronts  
Public / Private Open Space Development



## PRECEDENT STUDIES

### DESIGN :: FUNF HOFE

- Located within Munich's historic core
- Creation and renovation of interior arcades and courtyards
- Juxtaposition of contemporary and historic architecture
- Integrates retail, housing, and offices
- Successful example of mixed-use intervention in to historic city center



Funf Hofe Entrance :: MUNICH, Germany

### MANAGEMENT :: MITCHEL-LAMA PROGRAM

- Affordable Cooperative Housing Program provides developers with construction loans and mortgages for development of affordable cooperatives
- Maximum of 25% of development at market price
- Currently 97 Cooperatives in New York City
- Resulted in economically and racially diverse developments
- Resulting stability has translated into increased property values of developments and surround area



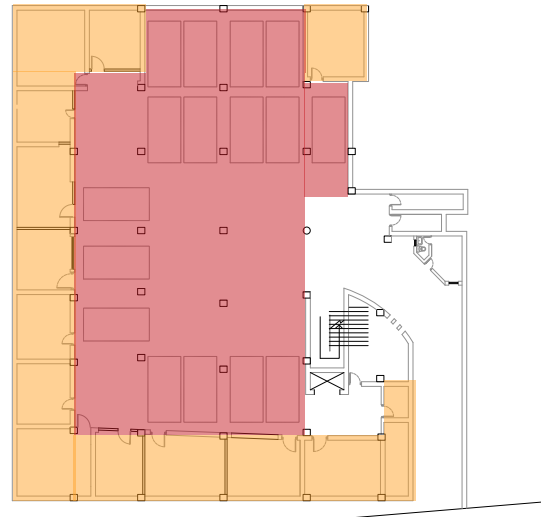
Housing Cooperative :: NEW YORK, New York, United States

## SCALE 1 :: HERITAGE BUILDING

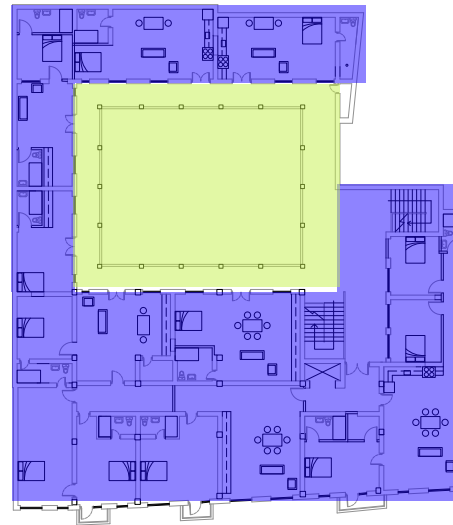
CONCEPTUAL

### Option 3 :: HIGH Intervention

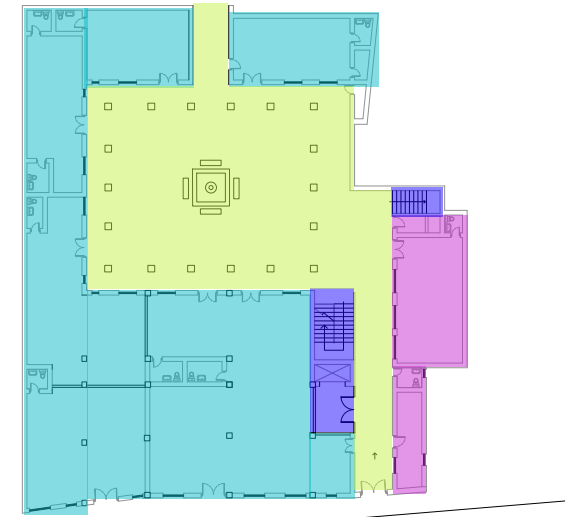
- Introduce mixed use
- Adapt existing offices for ground floor commercial, office, or social service facilities; develop 2 floors of residential units above public 1st floor
- Explore potential for office spaces or community use rooms in garage
- Emphasize public realm and connectivity
- Redefine the interior plaza (while retaining historic integrity) through its connectivity to the rest of the block
- Break through a single unit on back to link to existing arcade, opening the plaza to the public



BASEMENT



FIRST FLOOR



GROUND FLOOR



SECOND FLOOR

## INSPIRATION

### PEDESTRIAN CIRCULATION IN CHQ



## SCALE 1 :: HERITAGE BUILDING

### ALLEY SYSTEM



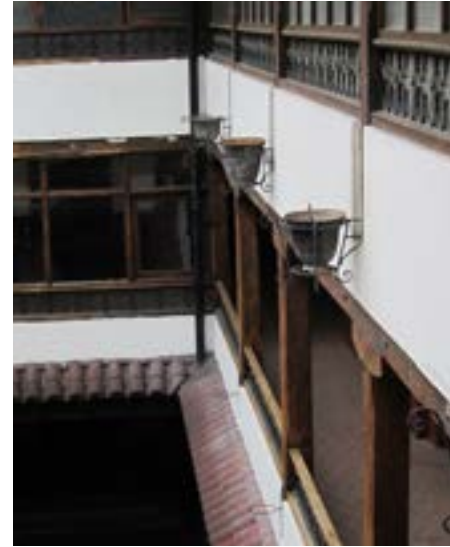
## SCALE 1 :: HERITAGE BUILDING

### BLOCK SYSTEM



## SCALE 1 :: HERITAGE BUILDING

PHYSICAL ELEMENTS TO KEEP DUE TO CONTEXT, TYPOLOGY AND UNIQUE ARCHITECTURAL ELEMENTS



## SCALE 1 :: HERITAGE BUILDING

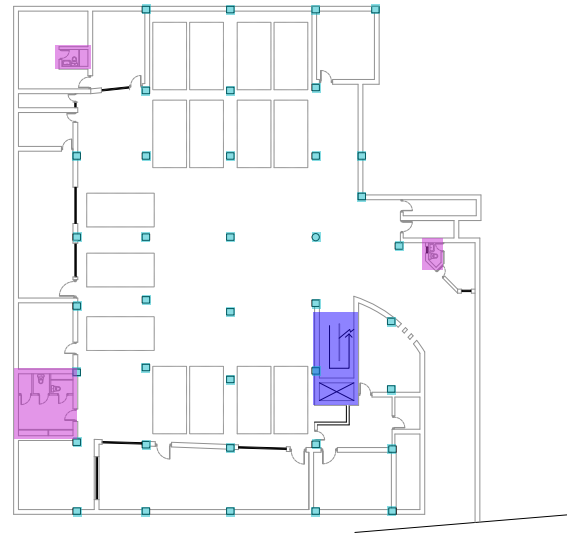
PHYSICAL ELEMENTS TO ALTER/REMOVE



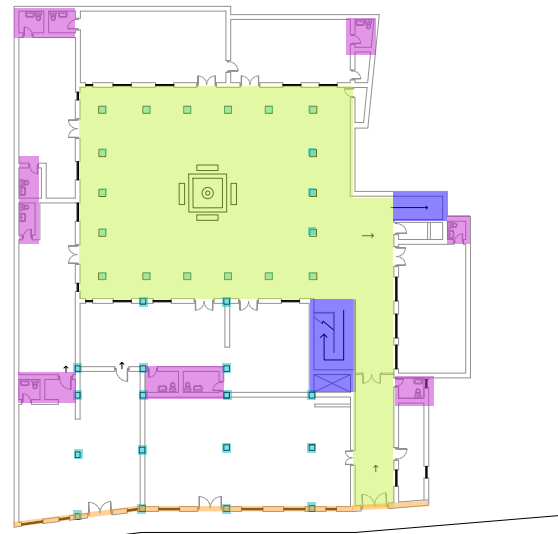
# CALLE MEIJA

## EXISTING ARCHITECTURAL CONDITIONS

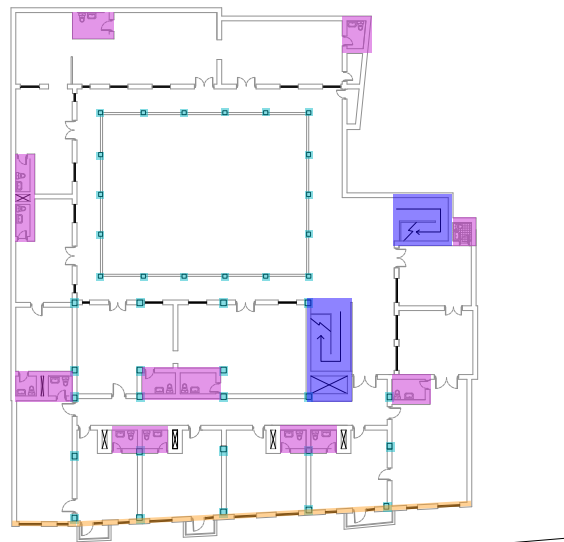
- STRUCTURAL COLUMN GRID
- PLUMBING
- FACADE
- CIRCULATION
- COURTYARD



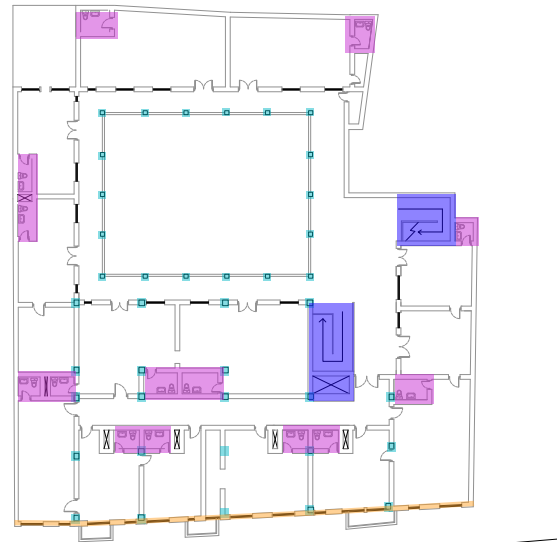
BASEMENT



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR



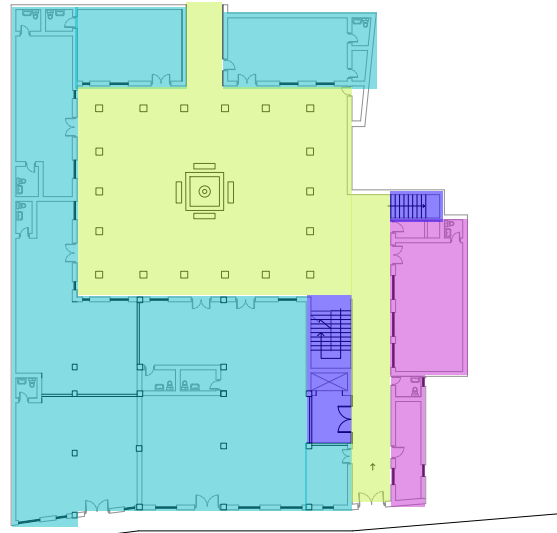
# CALLE MEIJA

## PROPOSED INTERVENTION

- COMMERCIAL/RETAIL SPACE
- MANAGEMENT OFFICE
- STORAGE
- RESIDENTIAL
- COURTYARD
- RESIDENTIAL PARKING



BASEMENT



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR

# CALLE MEIJA

PROPOSED INTERVENTION :: BASEMENT



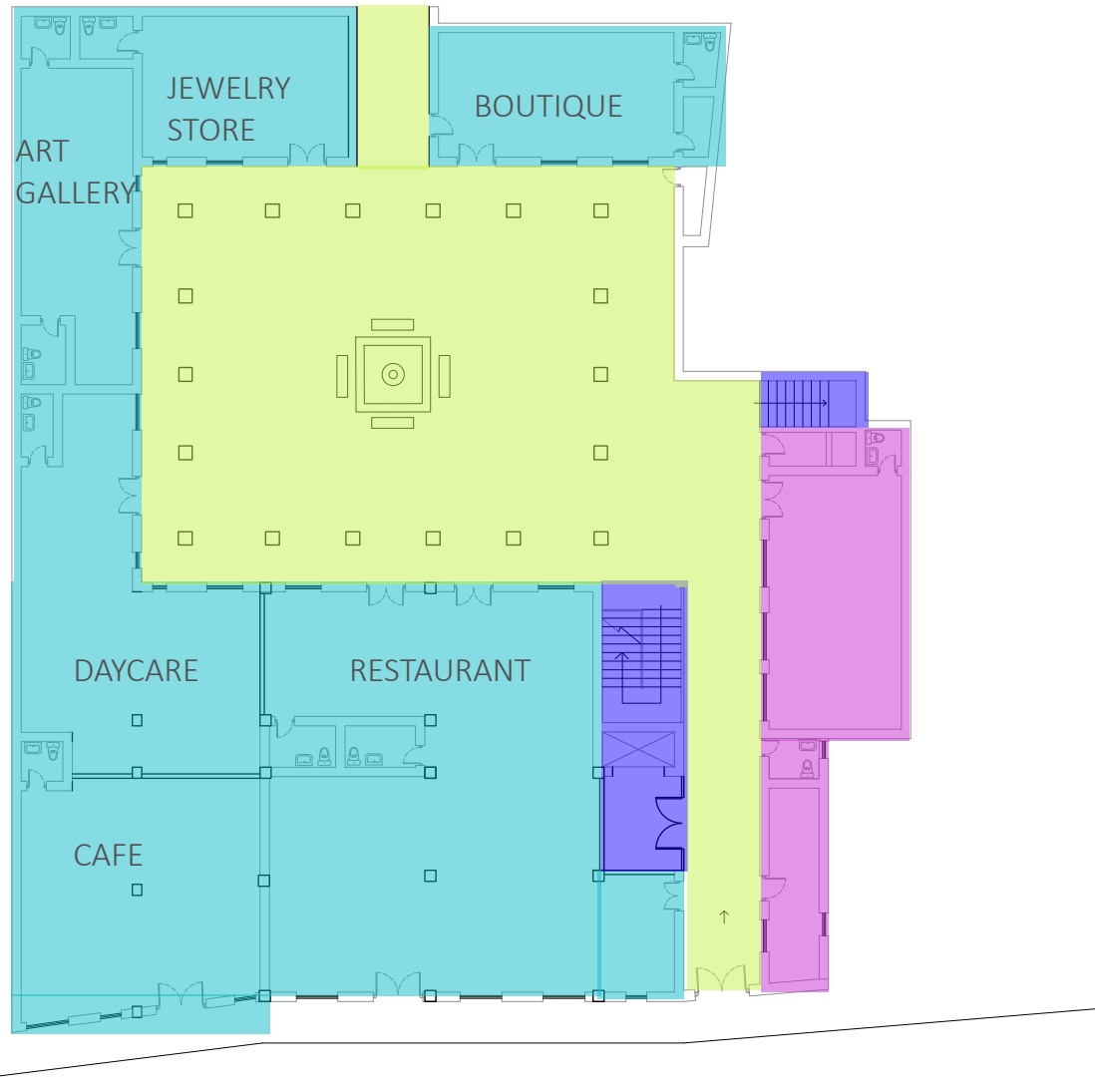
■ STORAGE :: 4100 SF

■ RESIDENTIAL PARKING :: 5550 SF

- INDIVIDUAL STORAGE SPACES FOR RESIDENTS OR COMMERCIAL TENANTS

# CALLE MEIJA

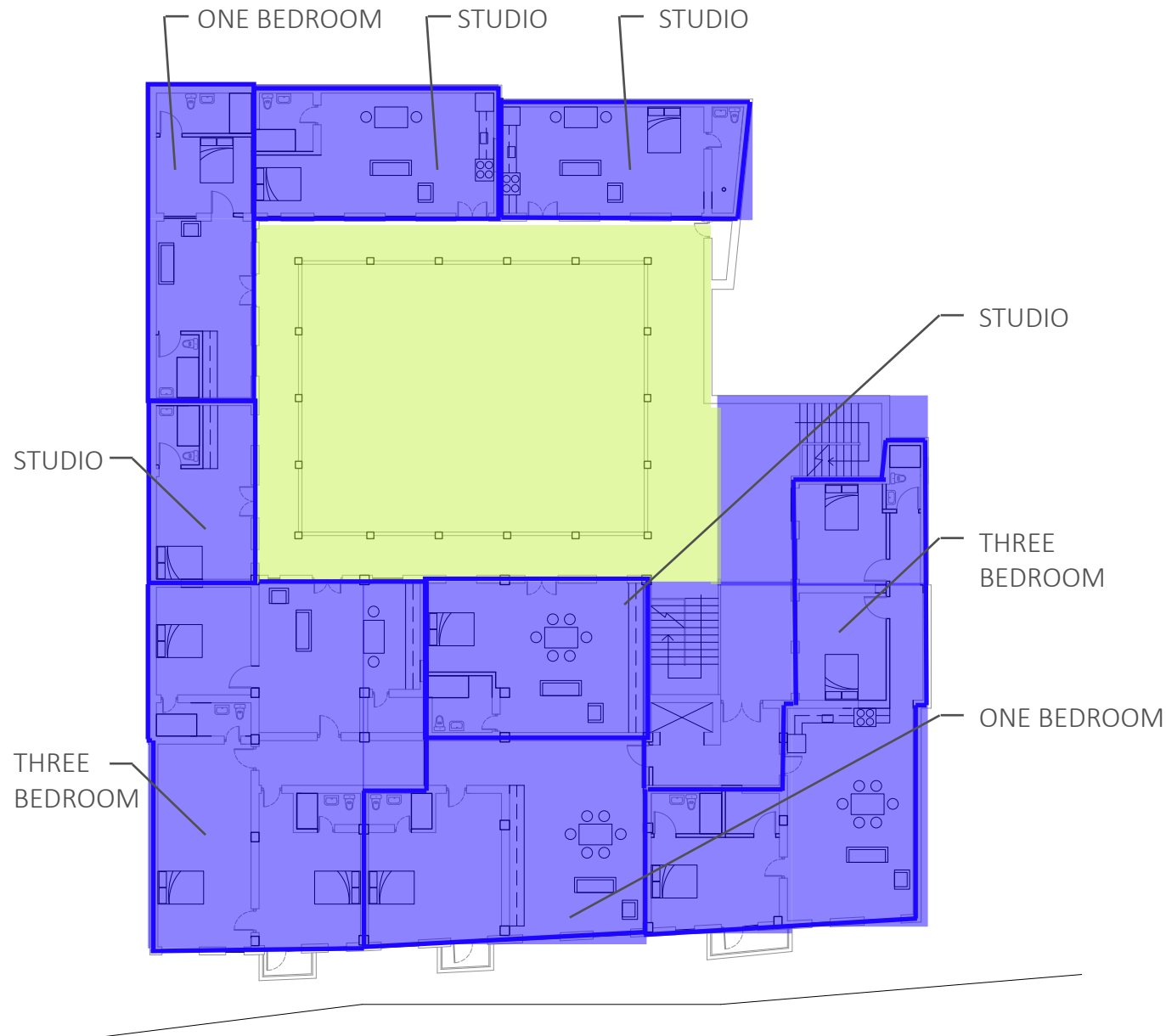
PROPOSED INTERVENTION :: GROUND FLOOR



- PUBLIC COURTYARD :: 3800 SF
- COMMERCIAL/RETAIL SPACE :: 5700 SF
  - RESTAURANT
  - CAFE
  - DAYCARE
  - ART GALLERY
  - BOUTIQUE
  - JEWELRY STORE
- RESIDENTIAL AREAS :: 450 SF
  - ELEVATOR LOBBY
  - STAIRS
- MANAGEMENT OFFICE :: 880 SF

# CALLE MEIJA

## PROPOSED INTERVENTION :: FIRST FLOOR



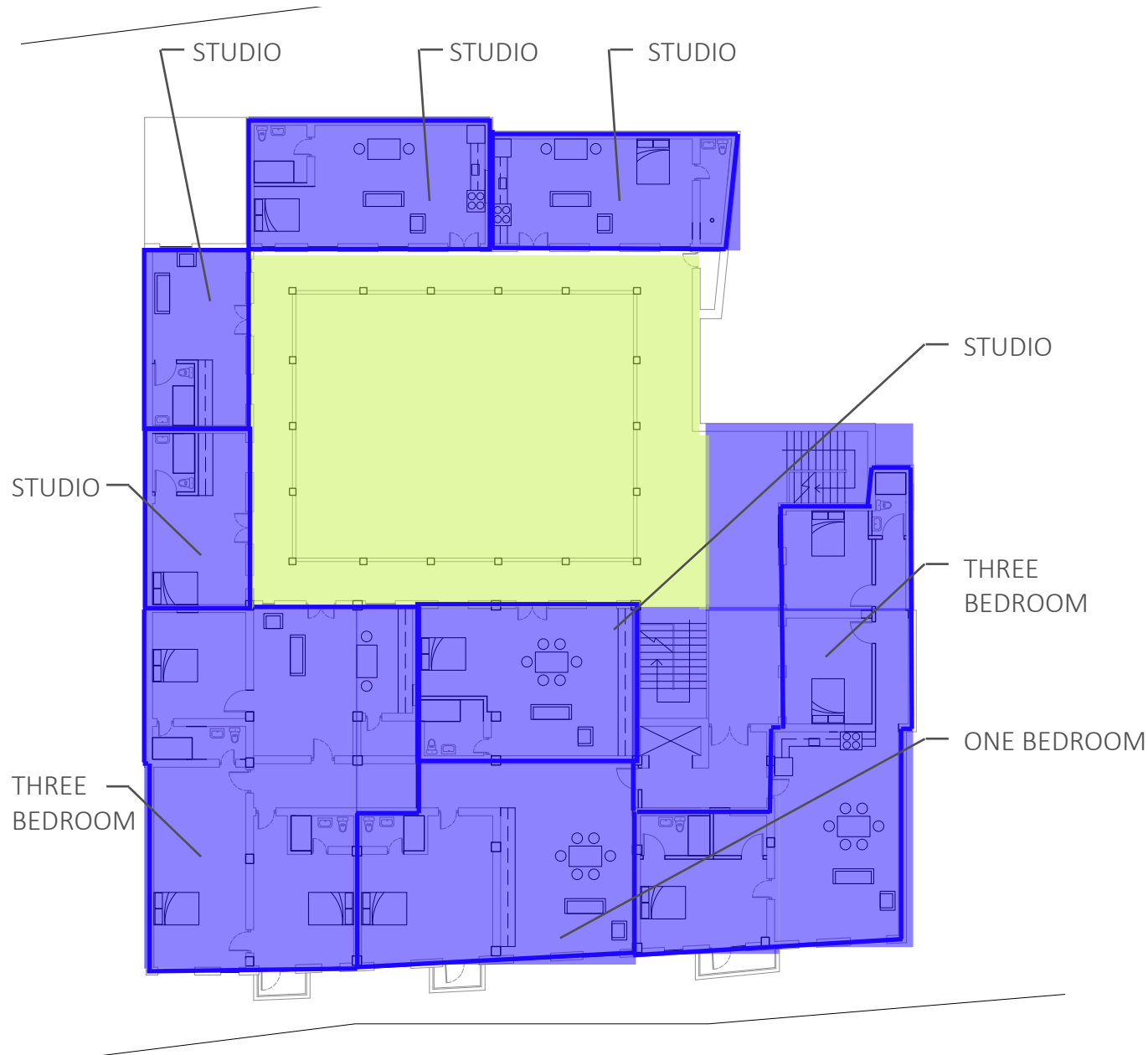
COURTYARD BELOW :: 3000 SF

RESIDENTIAL :: 8000 SF

- STUDIO :: 4 @ 500 SF
- 1 BEDROOM :: 2 @ 700 SF
- 3 BEDROOM :: 2 @ 1400 SF

# CALLE MEIJA

PROPOSED INTERVENTION :: SECOND FLOOR



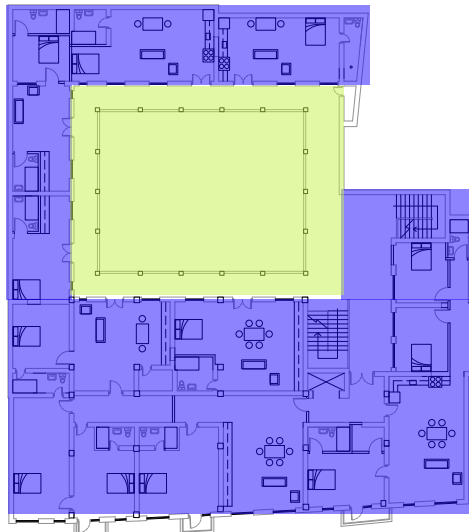
- COURTYARD BELOW :: 3000 SF
- RESIDENTIAL :: 7500 SF
  - STUDIO :: 5 @ 500 SF
  - 1 BEDROOM :: 2 @ 700 SF
  - 3 BEDROOM :: 2 @ 1400 SF

# CALLE MEIJA

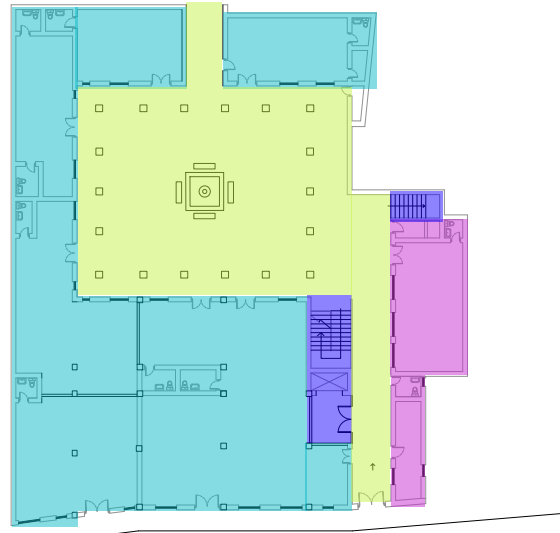
## PROPOSED INTERVENTION



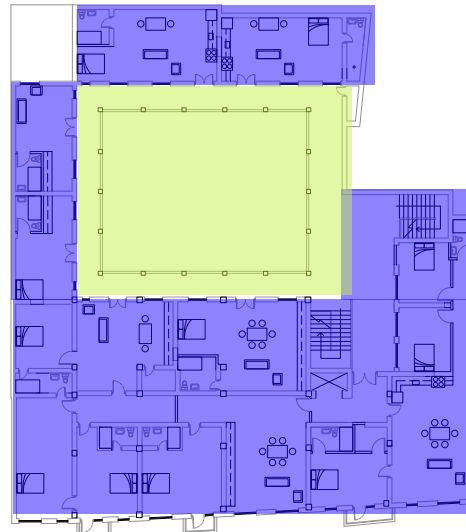
BASEMENT



FIRST FLOOR



GROUND FLOOR



SECOND FLOOR

■ COMMERCIAL/RETAIL SPACE

- Restaurant
- Cafe
- Daycare
- Art Gallery
- Boutique
- Jewelry Store

■ MANAGEMENT OFFICE

■ STORAGE

■ RESIDENTIAL

- Studio :: 9 :: 9 Occupants
- 1 Bedroom :: 4 :: 8 Occupants
- 3 Bedroom :: 4 :: 20 Occupants
- 37 Total Occupants

■ PUBLIC COURTYARD

■ RESIDENTIAL PARKING

## SCALE 1 :: HERITAGE BUILDING

### HORIZONTAL MANAGEMENT STRATEGY

**FLOOR 2** →

Residential

**FLOOR 1** →

Residential

**GROUND FLOOR** →

Commercial  
Social Services  
Public Use

**SUB-STRUCTURE** ----->

Parking  
Storage  
Community Space



**RESIDENTIAL  
MANAGEMENT  
CO-OP**

## SCALE 1 :: HERITAGE BUILDING

### HORIZONTAL MANAGEMENT STRATEGY

**FLOOR 2** →

Residential

**FLOOR 1** →

Residential

**GROUND FLOOR** →

Commercial  
Social Services  
Public Use

**SUB-STRUCTURE** - - - - - →

Parking  
Storage  
Community Space



————— **PUBLIC / PRIVATE  
MANAGEMENT  
ENTITY**



## SCALE 1 :: HERITAGE BUILDING

### TAKE-AWAYS

- Adapt ground floor for mixed-uses, including commercial and institutional programs
- Provide storage spaces in the sub-structure to maximize ground floor activity
- Construct multiple apartment sizes to attract creative-class singles and low-income families
- Include a horizontal management strategy to encourage full occupancy of the building
- Limit parking space availability to one per apartment to encourage transit-oriented development
- Use an alley system to connect Plaza Grande and Plaza Teatro through this block and to increase public access to this heritage asset



# SCALE 2 BUFFER ZONE BLOCK

ANILLO MANZANA

## ANILLO MANZANA

Block 48



- Entire block is zoned for residential
- Surrounding areas are also residential however include more contemporary high-rise development.
- Our block is unique in that it contains almost entirely historical structures.
- There is evidence that many of these buildings are occupied however the condition of these structures is questionable.
- The steep topography of the site has made it difficult for businesses to develop on the ground floors and on most structures the basement level has the most contact with the street not the first floor.



## ANILLO MANZANA

Block 48 Context



High Rise Living



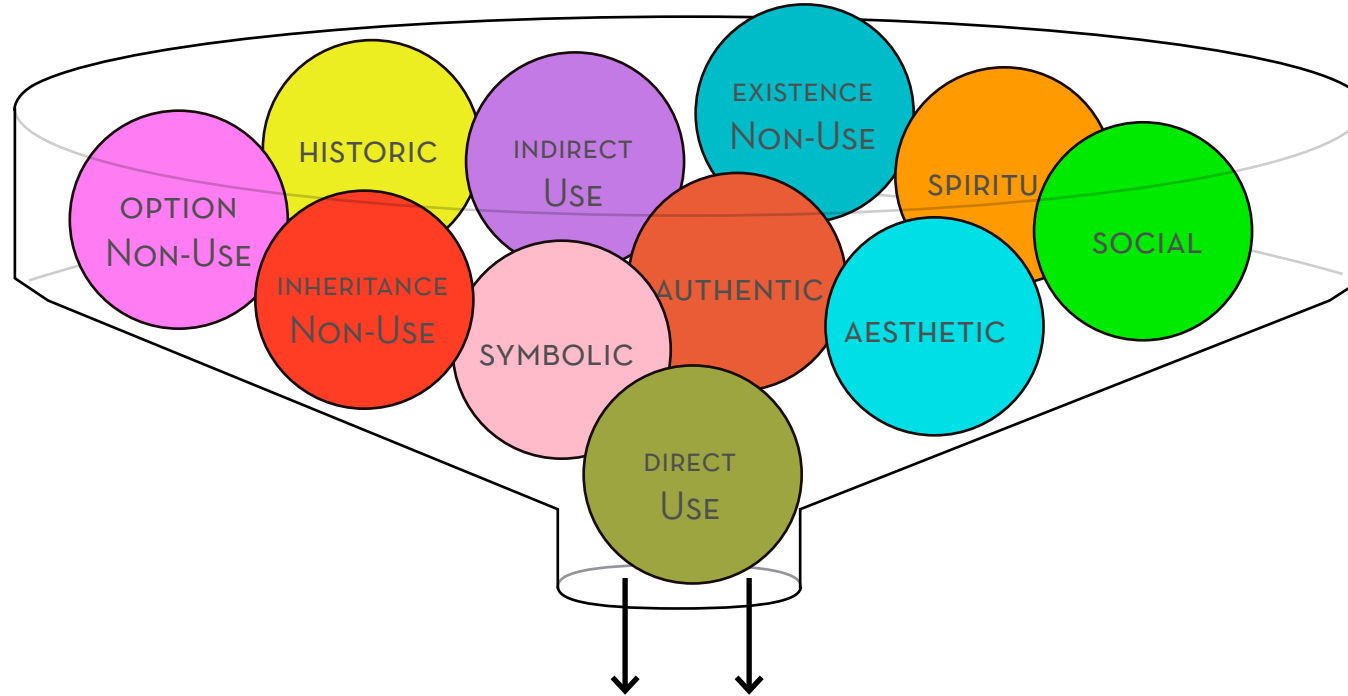
- Although little public interventions have been done in San Juan, there is much evidence of private developments. These usually include the demolition of historic infrastructure and replacing it with denser modern high rises.
- These tend to be exclusively residential

# VALUES: INTRODUCTION

Metropolitan heritage assessment

## HISTORIC CORE

a wide variety of heritage values

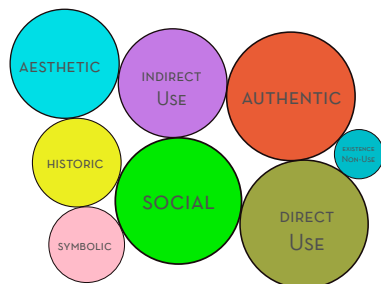


## BLOCK

a shift in values

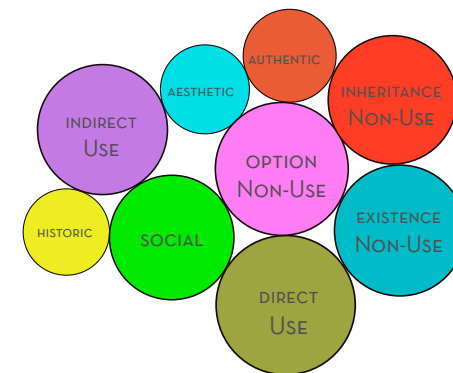
## PERIOD OF SIGNIFICANCE

Republican Period through mid-1900's

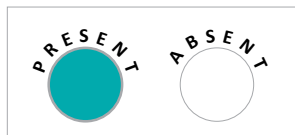


## CONTEMPORARY

2014



USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING				
PENSIONS / LOW-INCOME				
HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				



**USE ANALYSIS**

Assessment of the use potential for historic buildings based on the current conditions of the Historic City Center, assessment of demand, regulatory overlays, and carrying capacity potential.

**USE AND DEMAND  
 BREAKDOWN ANALYSIS**



- Green Spaces
- Plazas
- CHQ
- SITE

## SCALE 2 :: ANILLO MANZANA

### KEY PLAYERS

KEY PLAYERS		INTERNATIONAL ORGANIZATIONS	STATE GOVERNMENT	LOCAL GOVERNMENT	CORPORATIONS/INSTITUTIONS	COMMUNITY ORGANIZATIONS	PHILANTHROPISTS	CONSERVATORS	REAL ESTATE INVESTORS	MERCHANTS	CONSUMERS	RESIDENTS	HOUSEHOLDS	TOURISTS
QUITO HISTORIC CENTER	ACTIVE													
	POTENTIAL													
ANILLO MANZANA	ACTIVE													
	POTENTIAL													





## SCALE 2 :: ANILLO MANZANA

### CONTEXT



### SITE OVERVIEW

- Variable occupancy
- Structures date from late 1800's through mid-20th Century
- San Juan neighborhood suffers from over-abundance of ground-floor warehouse spaces
- Many historic buildings near Basilica have been demolished to make way for new construction high-rise apartment buildings.



## SCALE 2 :: ANILLO MANZANA

CARRYING CAPACITY



### **FIRMITAS**

- Most buildings have intact facades dating from original construction.
- Palimpsest and steeply sloped site have led to poor building conditions at center of block.

### **UTILITAS**

- Ground Floor Commercial / Retail presence
- Mixed Income residential ownership

### **VENUSTAS**

- Several buildings exhibit authentic historic architectural details
- Many buildings have been renovated with modern materials, using plaster to emulate stone, etc.

## SCALE 2 :: ANILLO MANZANA

### DESIGN BRIEF



### VALUE

- Historic
- Aesthetic
- Social
- Authentic
- Use
- Inheritance

### CARRYING CAPACITY

Low to Med :: Rigorous, Typological, Contextual

### USE

Mixed Income Residential Ownership  
Ground Floor Commercial / Retail  
Block Synchronization

# ANILLO MANZANA

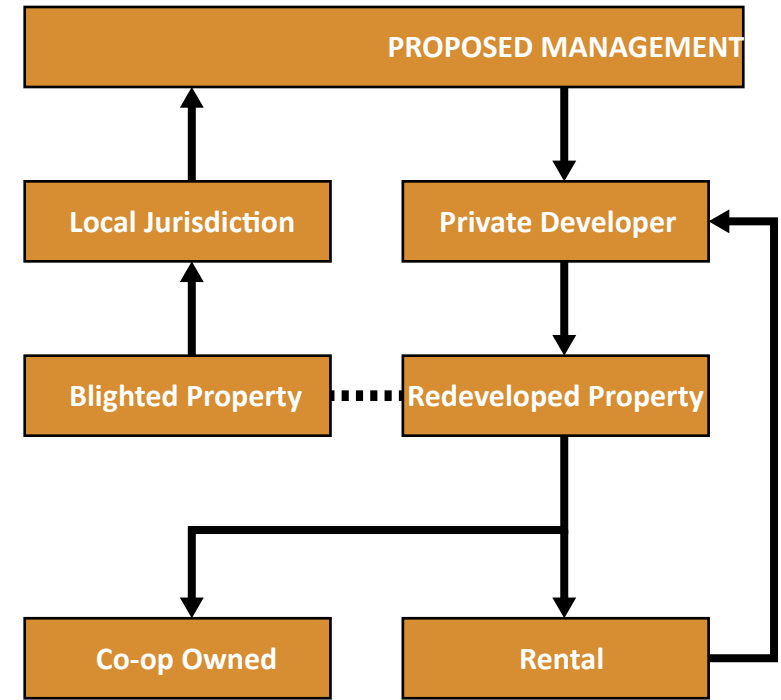
PRECEDENT STUDY

## Affordable Housing Cooperative Program

Affordable Housing Cooperative Program/ Mitchell-Lama Program  
 New York, New York

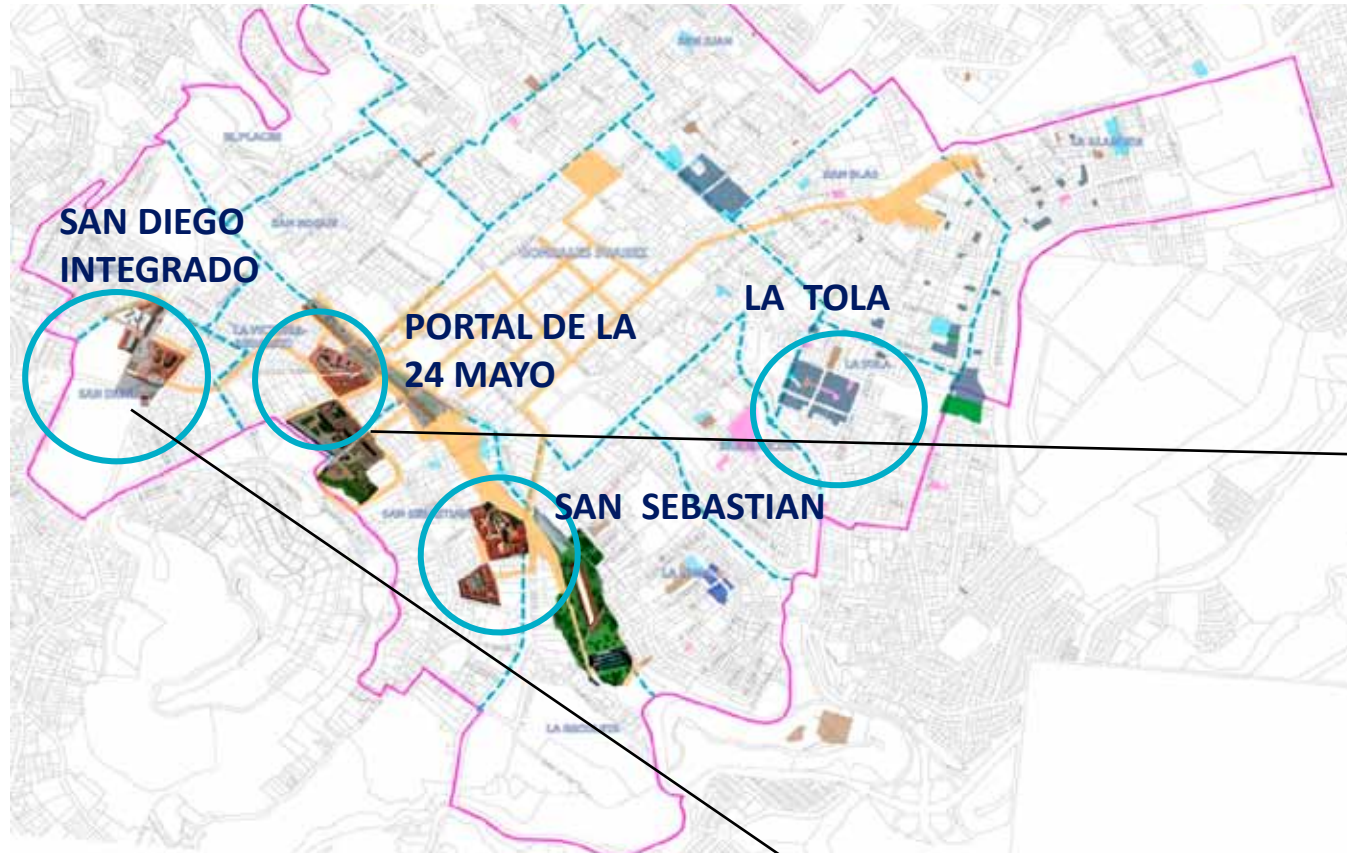
The Affordable Cooperative Housing Program in New York provides developers with construction loans and a permanent mortgages for the development of affordable cooperatives. These loans are financed by the NYC Housing Development Corporation. In return for the support, developers are required to build at least 50 affordable units and to sell a maximum of 25% of the total units at market price. The affordable units are available to tenants with up to 175 percent of the AMI (Area Median Income). There are currently 97 cooperative in New York City with more than 44,600 total units.

The program has resulted in developments that are both economically and racially diverse. If a resident's economic situation improves, they are not required to move out of the building, but rather must pay a surcharge. This policy helps to develop economic diversity, while forming stable communities. This stability then translates into increased property values of both the developments and the surrounding buildings.



# ANILLO MANZANA

Precedents



## Phase 1 Housing Projects

- Current developments already underway from the municipality, targeting low-income families.
- These Projects also look to develop and entire city block at once combining private and public space.
- Our project differs from these in that it targets the younger creative class and therefore affords alternate amenities that would be more desirable to that demographic.



## ANILLO MANZANA

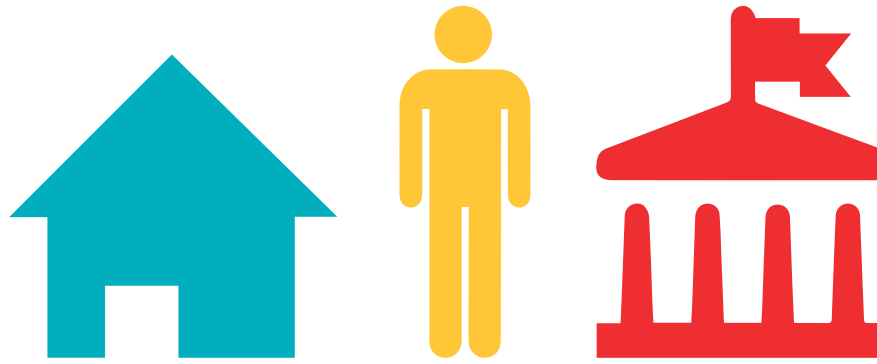
Design Precedents

Quito Museum



- Like our site this project also looked at connected existing historical infrastructure with new additions that would create a cohesive part to whole dynamic on the site.
- Shows a contrast between contemporary and historic construction.
- Uses new construction as a tool to create more courtyard spaces as well as roof terraces.





### LOW-INCOME HOUSING

- Low-Income housing

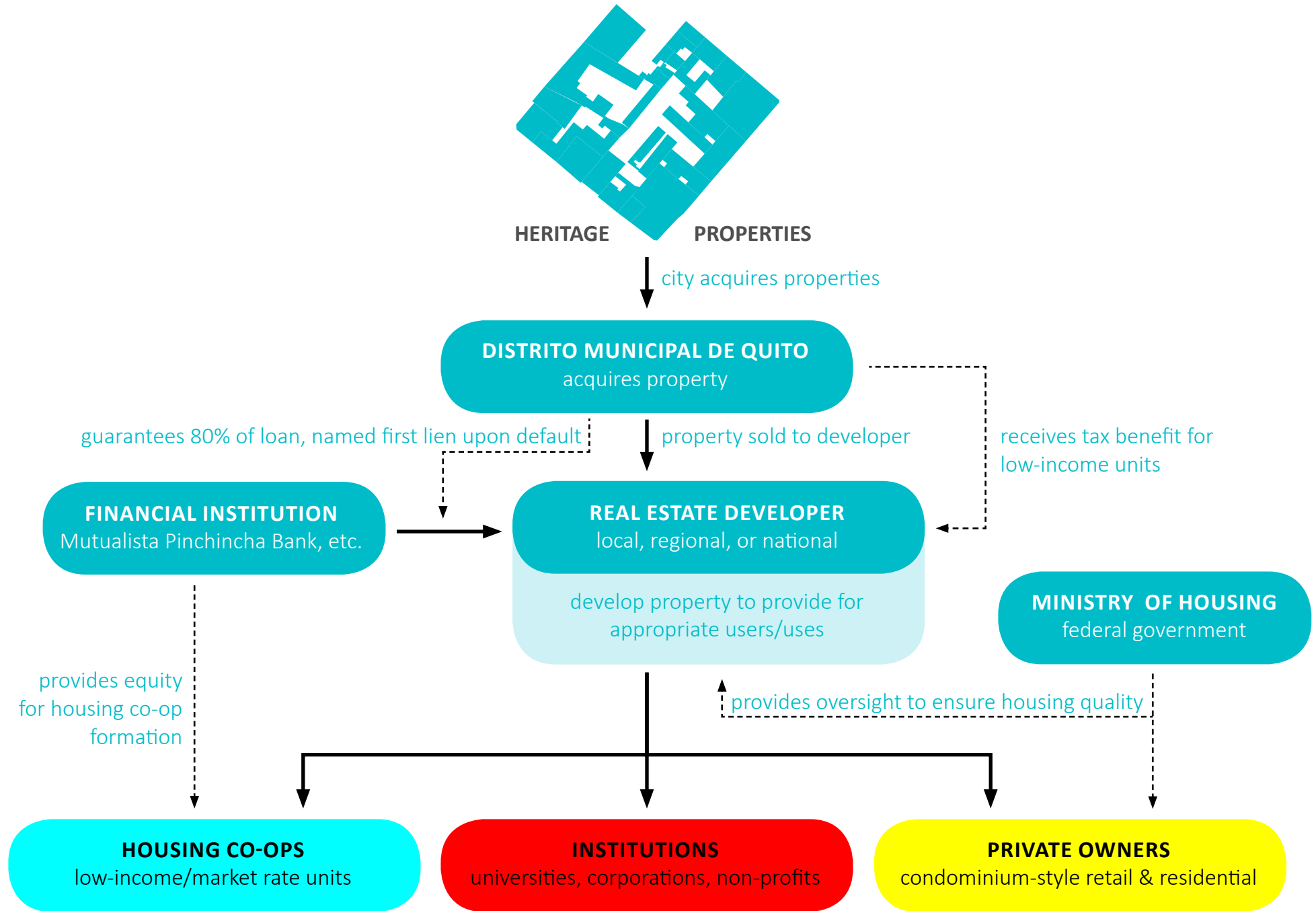
### PRIVATE OWNERS

- Middle-income (young professionals)
- Retail space
- Packaging/Marketing Center
- Co-op public space
- Rotating retail incubator space

### INSTITUTIONS

- Computer lab and Technology
- Conference/Meeting Rooms
- Space Share for Start-ups
- Classrooms
- Partnership with tech. developer

# MANAGEMENT STRUCTURE





# BLOCK STUDY

## ANALYSIS AND PROPOSAL

GIANFRANCO CANIGGIA & GIAN LUIGI MAFFEI  
BUILDING AS HISTORIC INDIVIDUATION OF THE TYPOLOGICAL PROCESS  
FROM ELEMENTARY MATRIXES TO COMPLEX DERIVATION

### Copresence

Direct spatial correlation between two objects  
“the moment in which there are several buildings  
in the same moment in adjoining spaces”

### Derivation

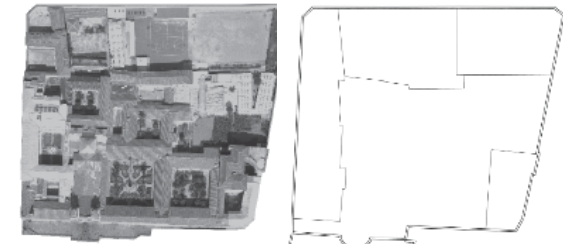
Indirect temporal correlation between two objects  
“the diachronic relation between two objects of  
the same nature”

### Serial

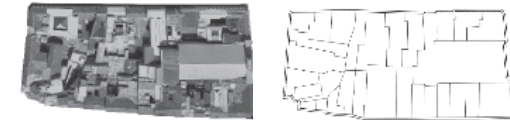
Interchangeable and liable to repetition  
“The characteristic of an aggregation consisting  
of repeated, interchangeable elements”

### Organic

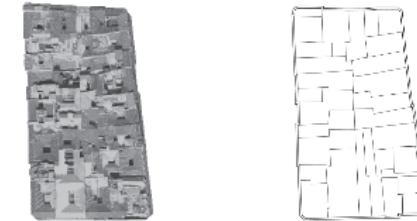
Neither repeatable nor interchangeable  
“The nature of an aggregation consisting of  
elements identified on account of their peculiar  
position and shape”



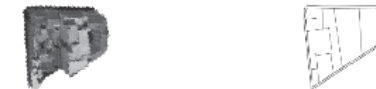
“Macromanzana” Megablock



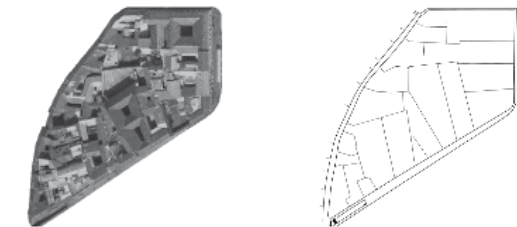
Longitudinal block



Vertical block



“Micromanzana” Microblock



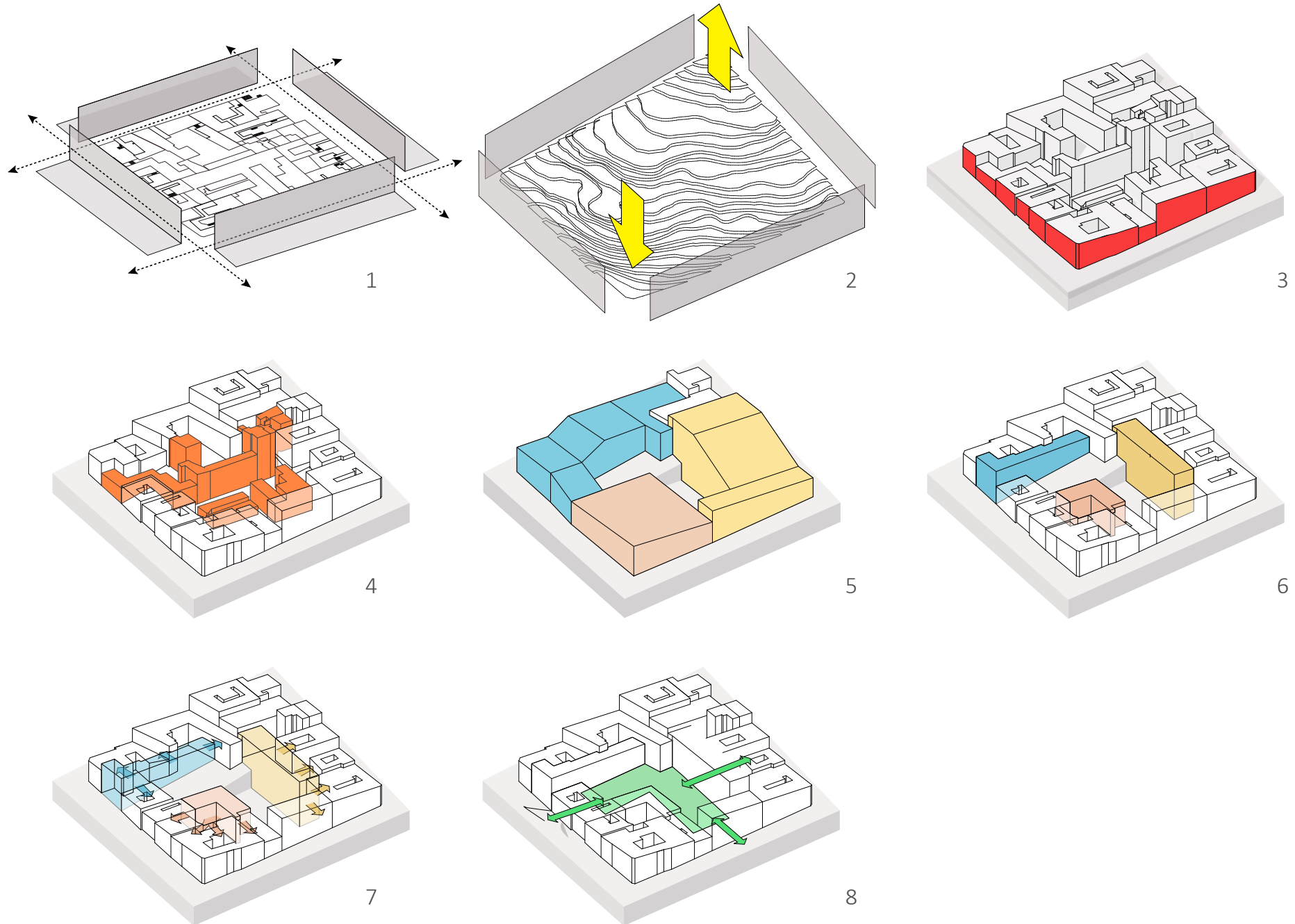
Irregular block



Regular block

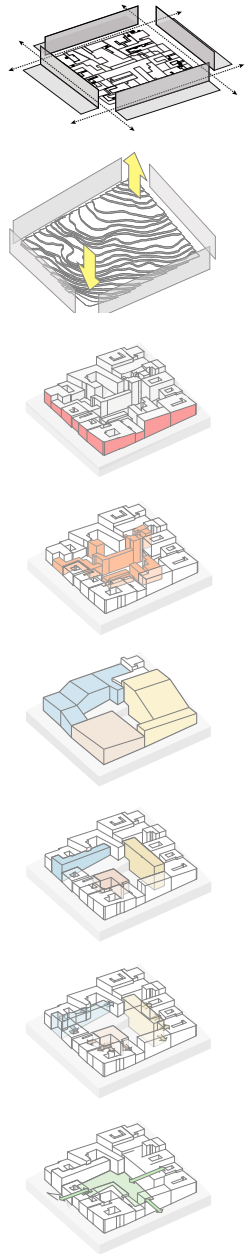
# BLOCK STUDY

## ANALYSIS AND PROPOSAL

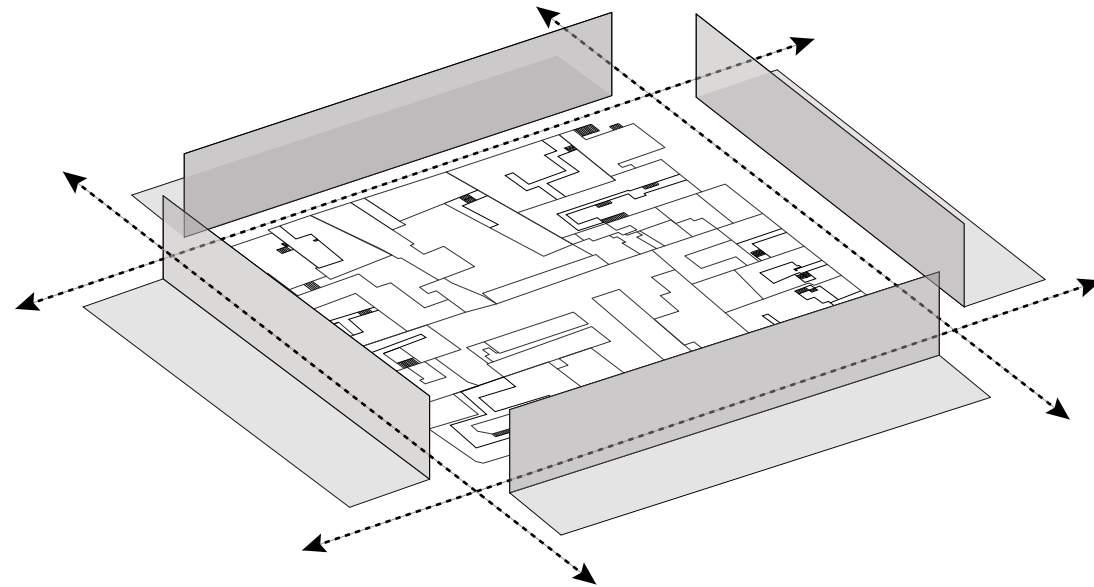


# BLOCK STUDY

## ANALYSIS AND PROPOSAL

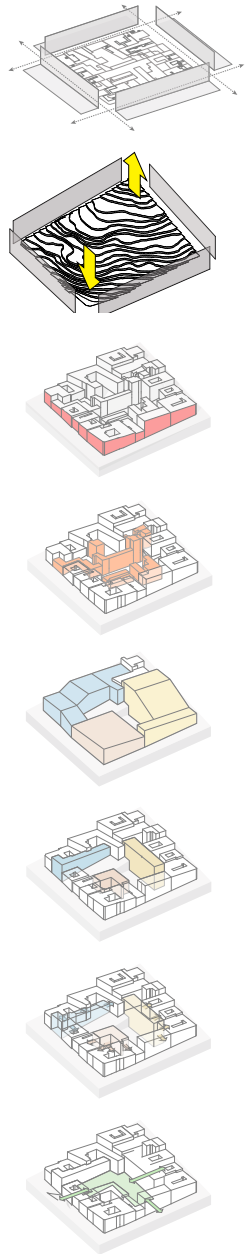


### STEP 1 Barrio Connectivity

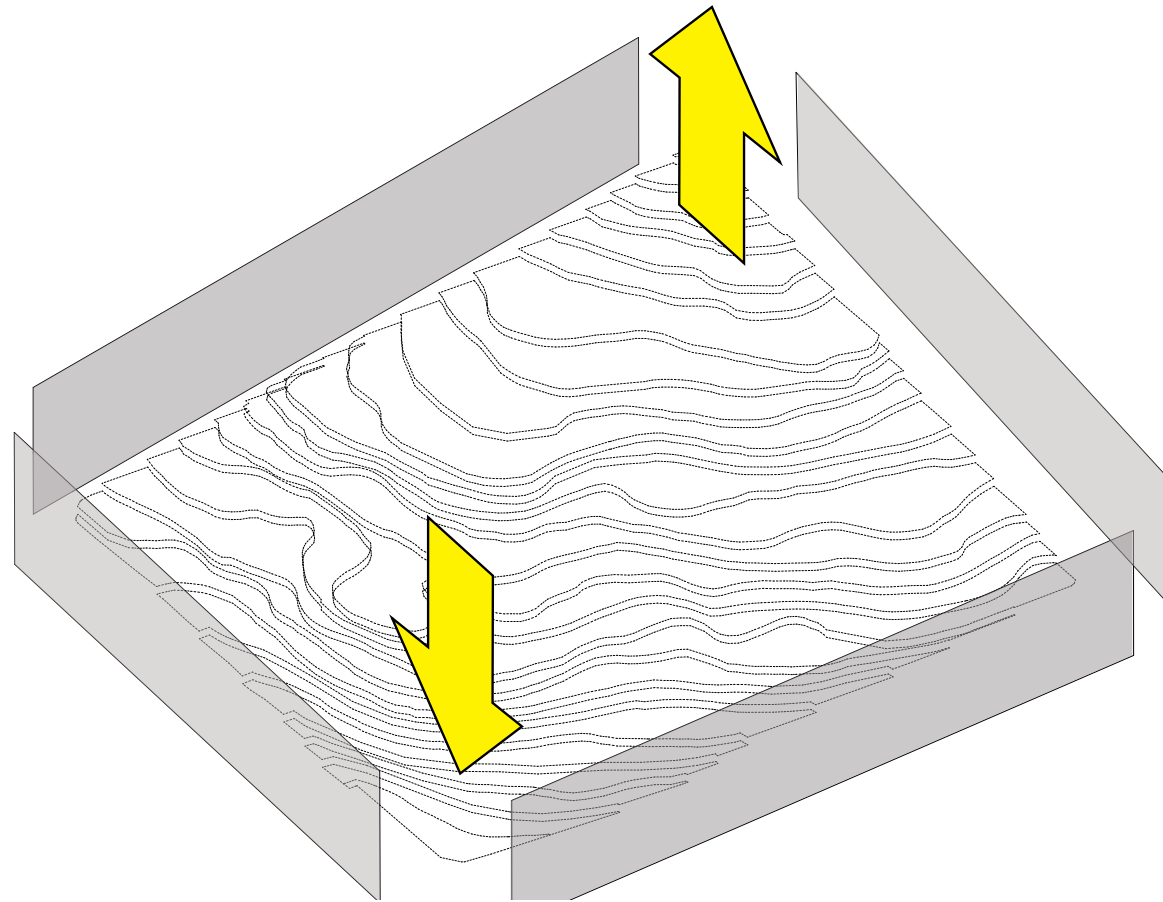


# BLOCK STUDY

## ANALYSIS AND PROPOSAL

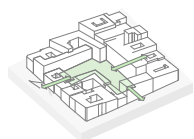
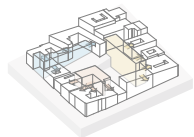
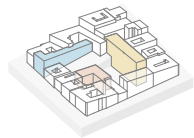
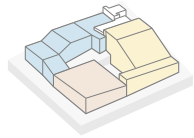
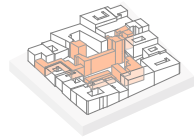
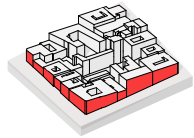
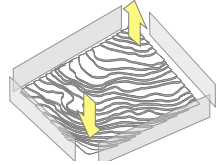
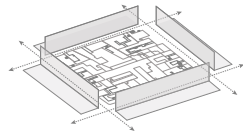


### STEP 2 Topographical Considerations

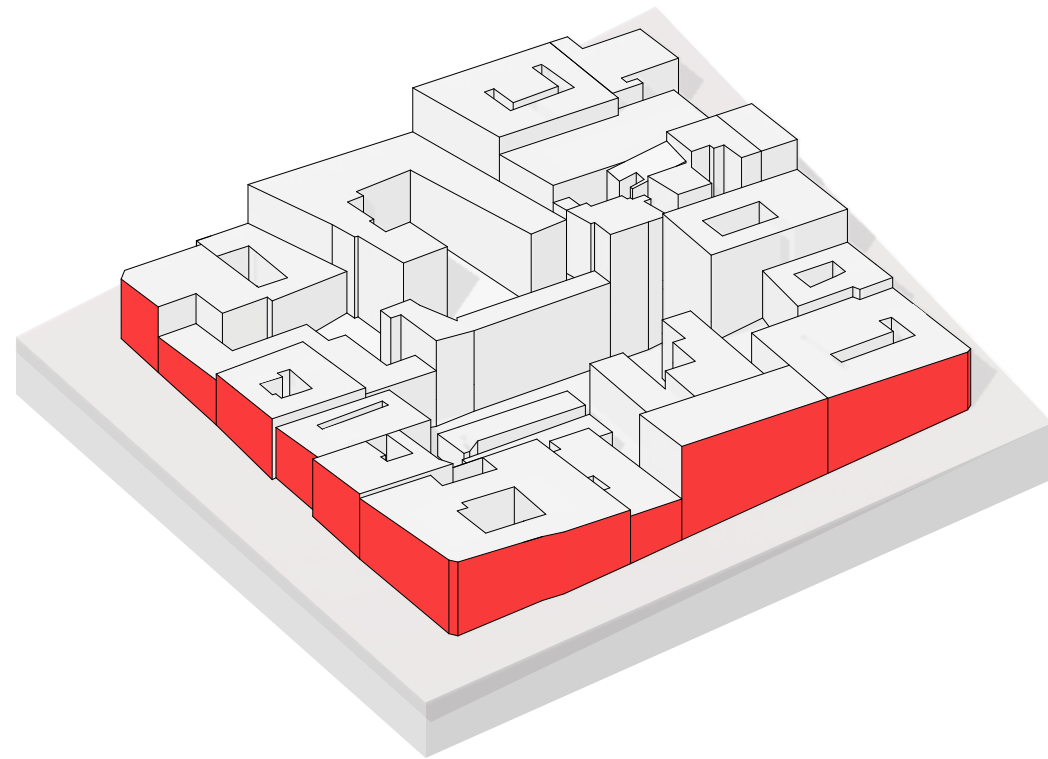


## BLOCK STUDY

### ANALYSIS AND PROPOSAL

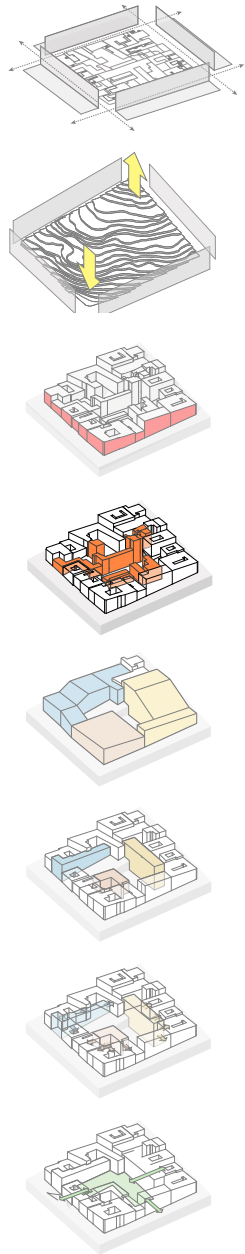


**STEP 3** Existing buildings exhibit non-porous street-facing facades

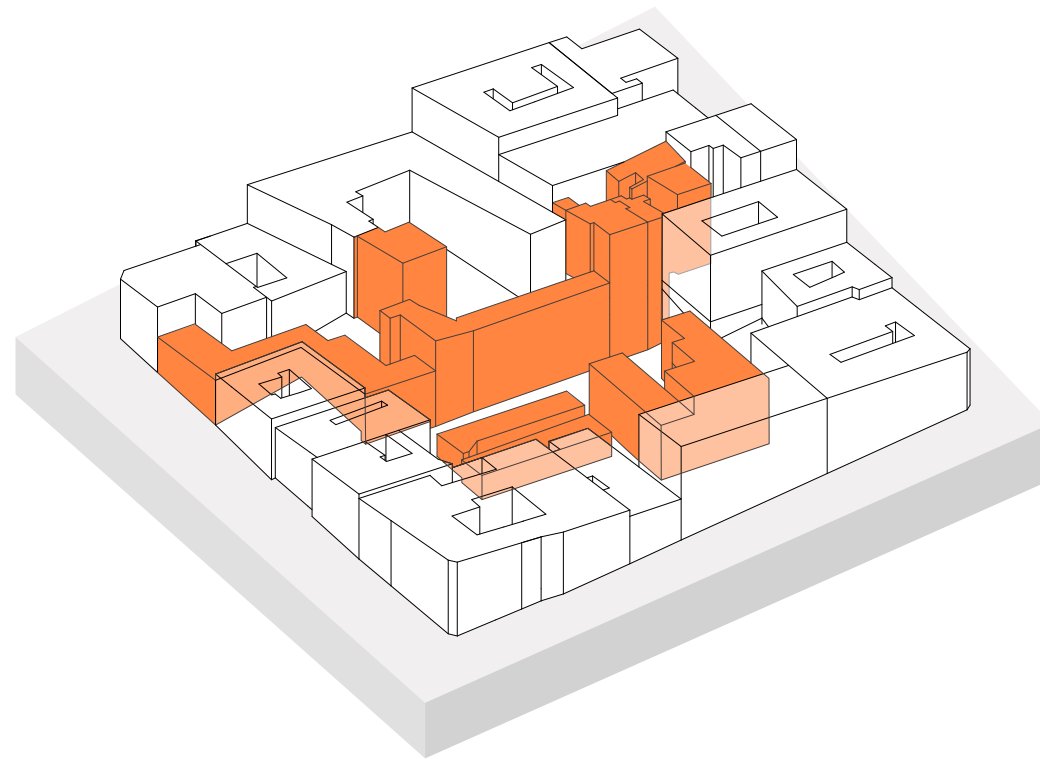


## BLOCK STUDY

### ANALYSIS AND PROPOSAL

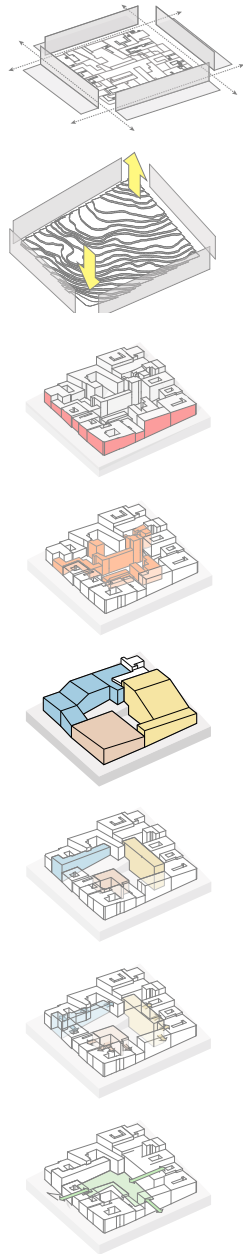


**STEP 4** Block interior contains non-contributing palimpsest that can be removed

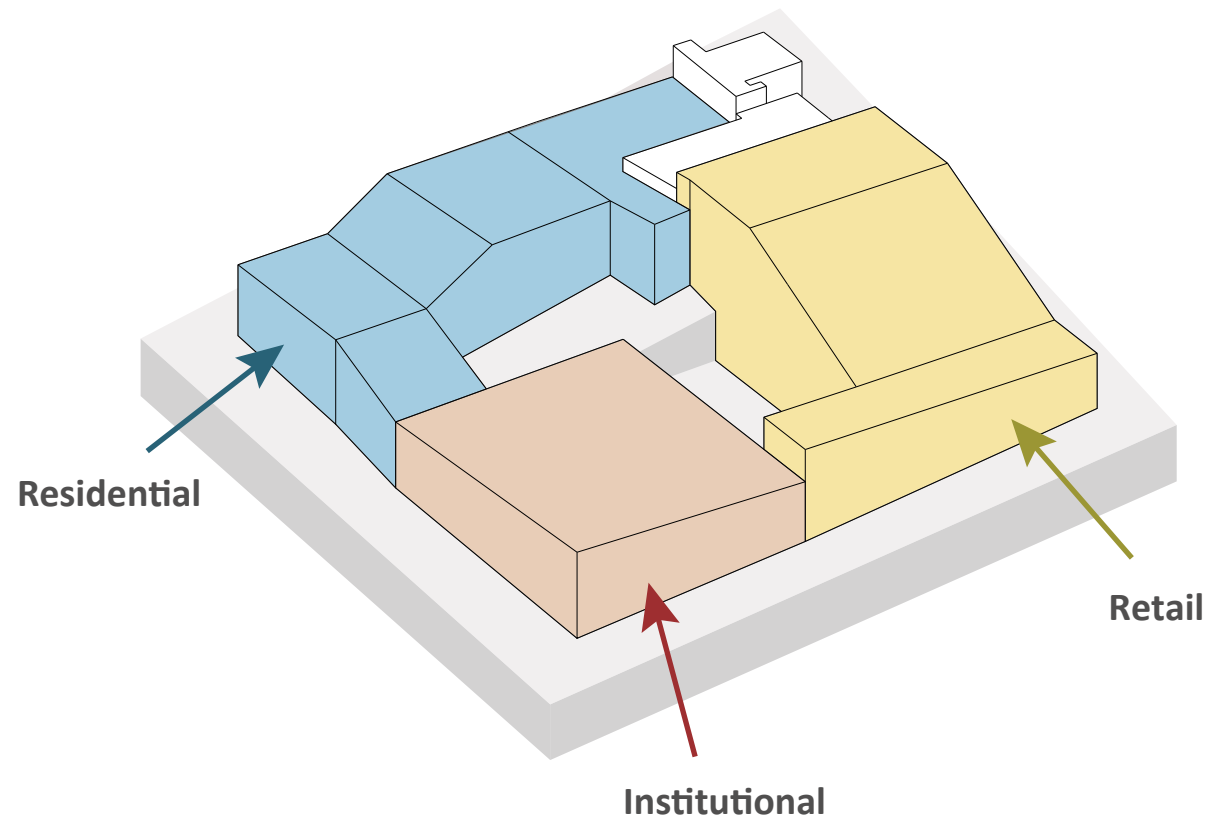


## BLOCK STUDY

### ANALYSIS AND PROPOSAL

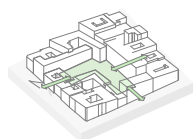
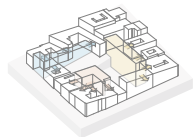
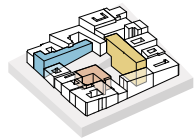
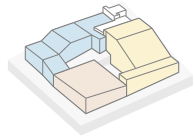
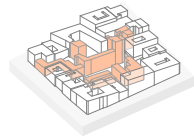
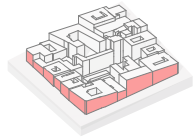
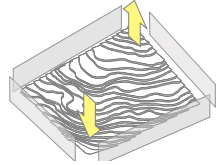
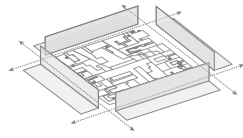


**STEP 5** Reorient block into three sub-groups:  
Residential, Institutional, and Retail

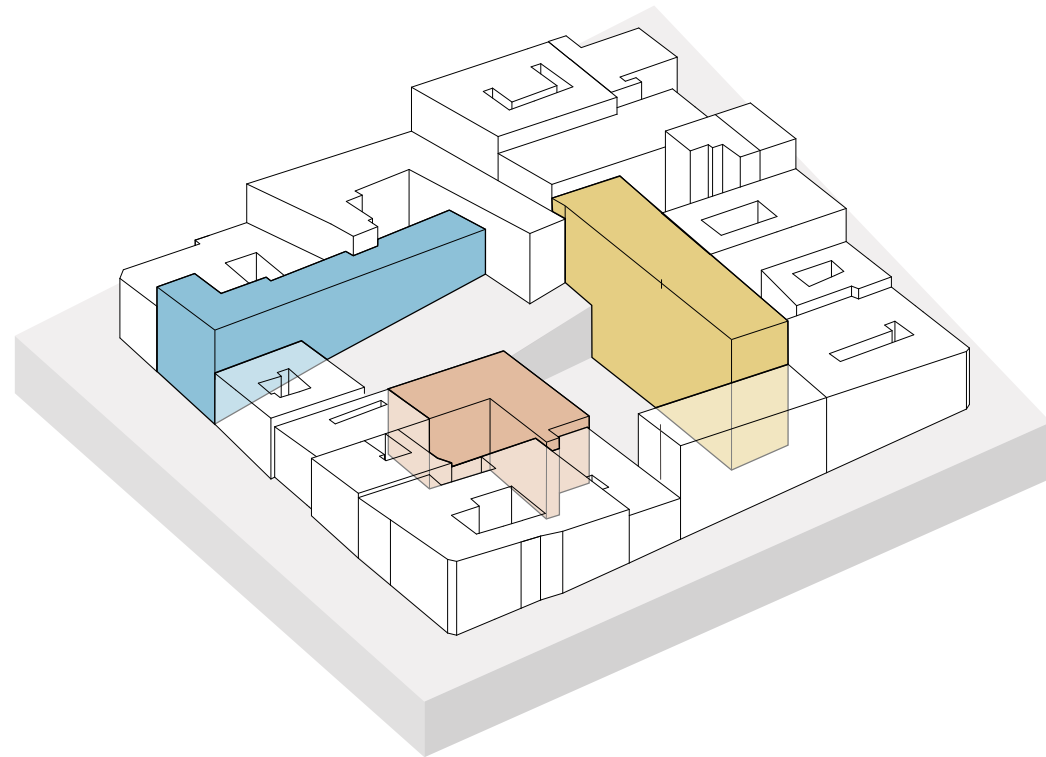


## BLOCK STUDY

### ANALYSIS AND PROPOSAL



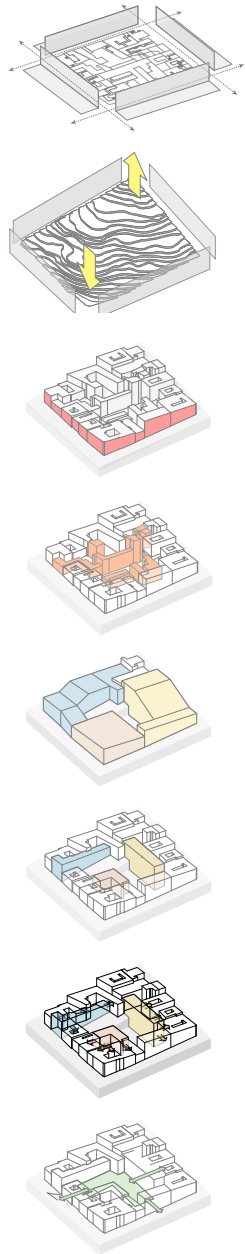
**STEP 6** Connect subdivided block with service/redevelopment structures.



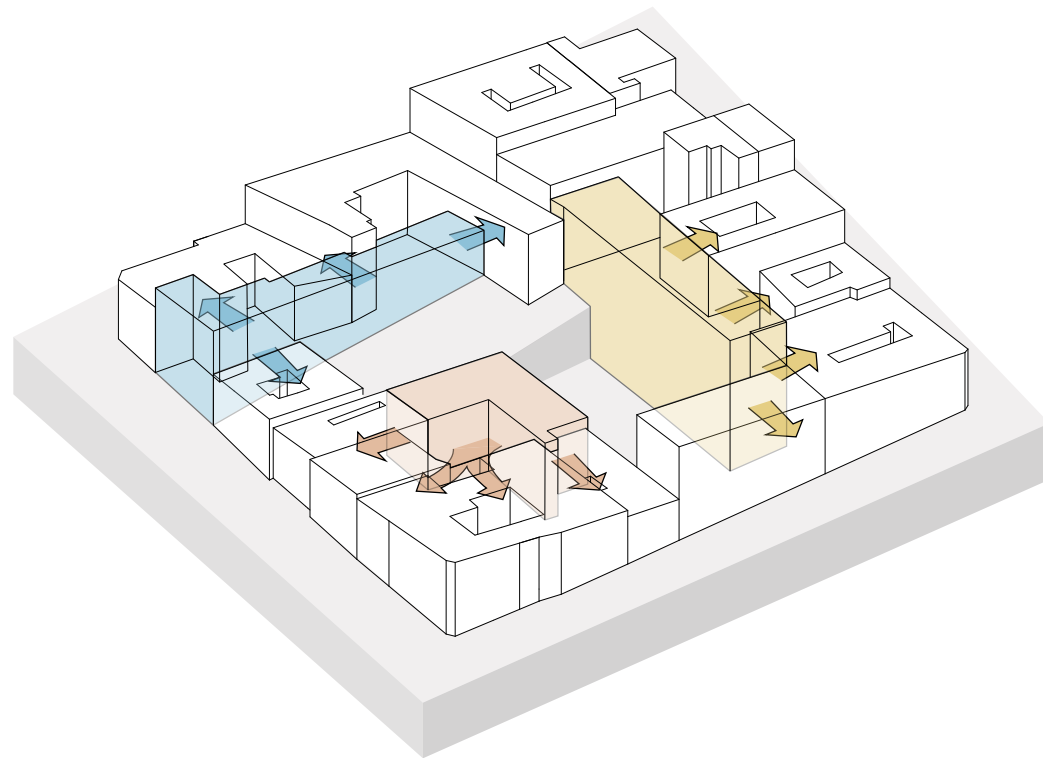


## BLOCK STUDY

### ANALYSIS AND PROPOSAL

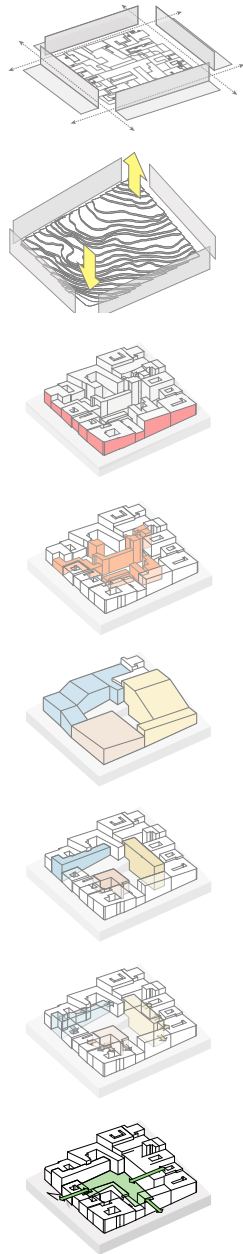


**STEP 6** Redevelopment structures link together existing buildings..

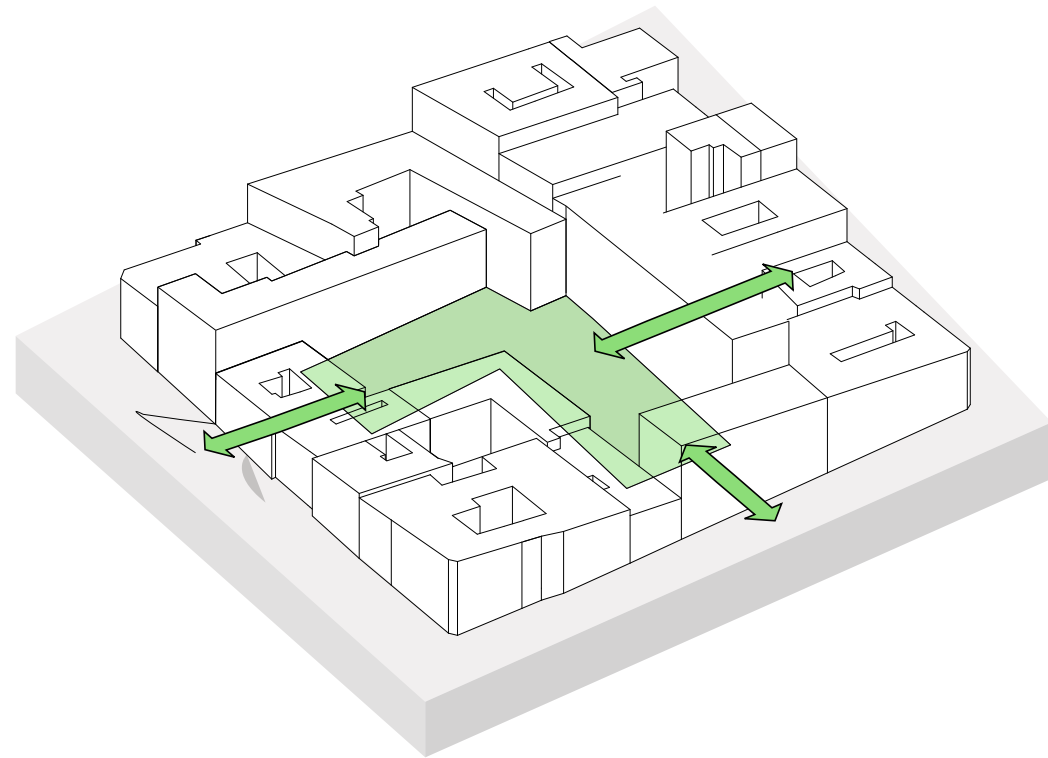


## BLOCK STUDY

### ANALYSIS AND PROPOSAL

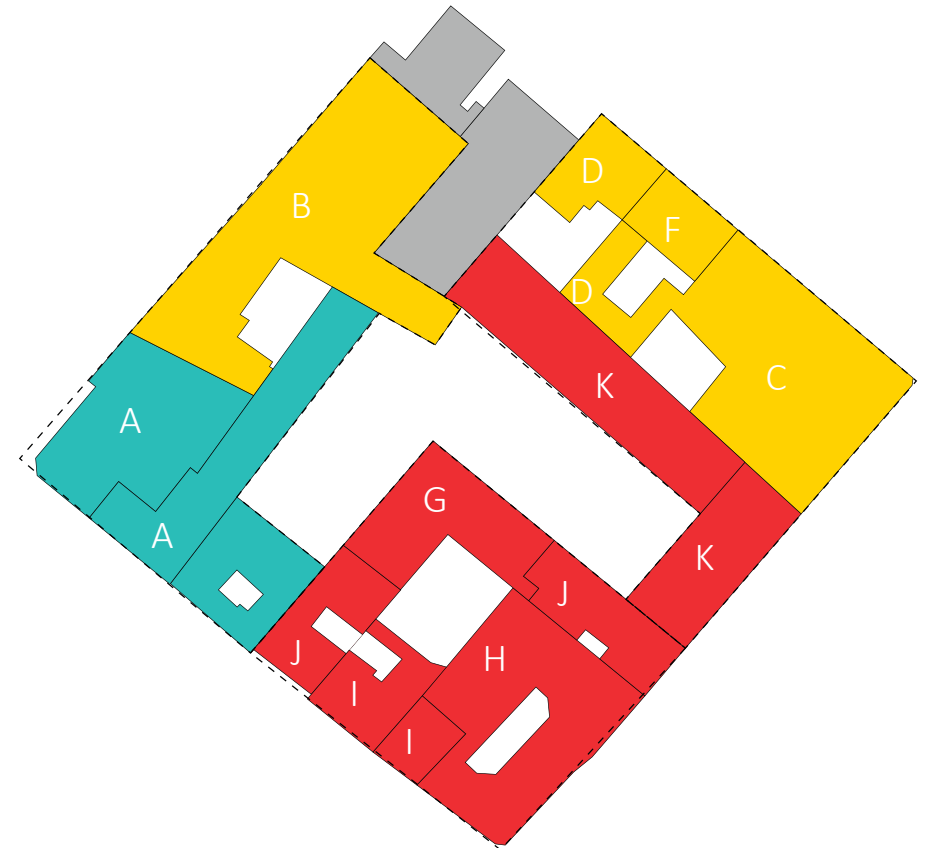
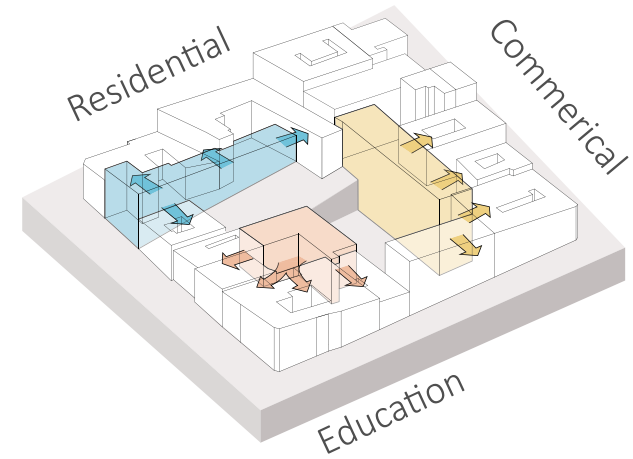


**STEP 7** Central open space functions as private community block space

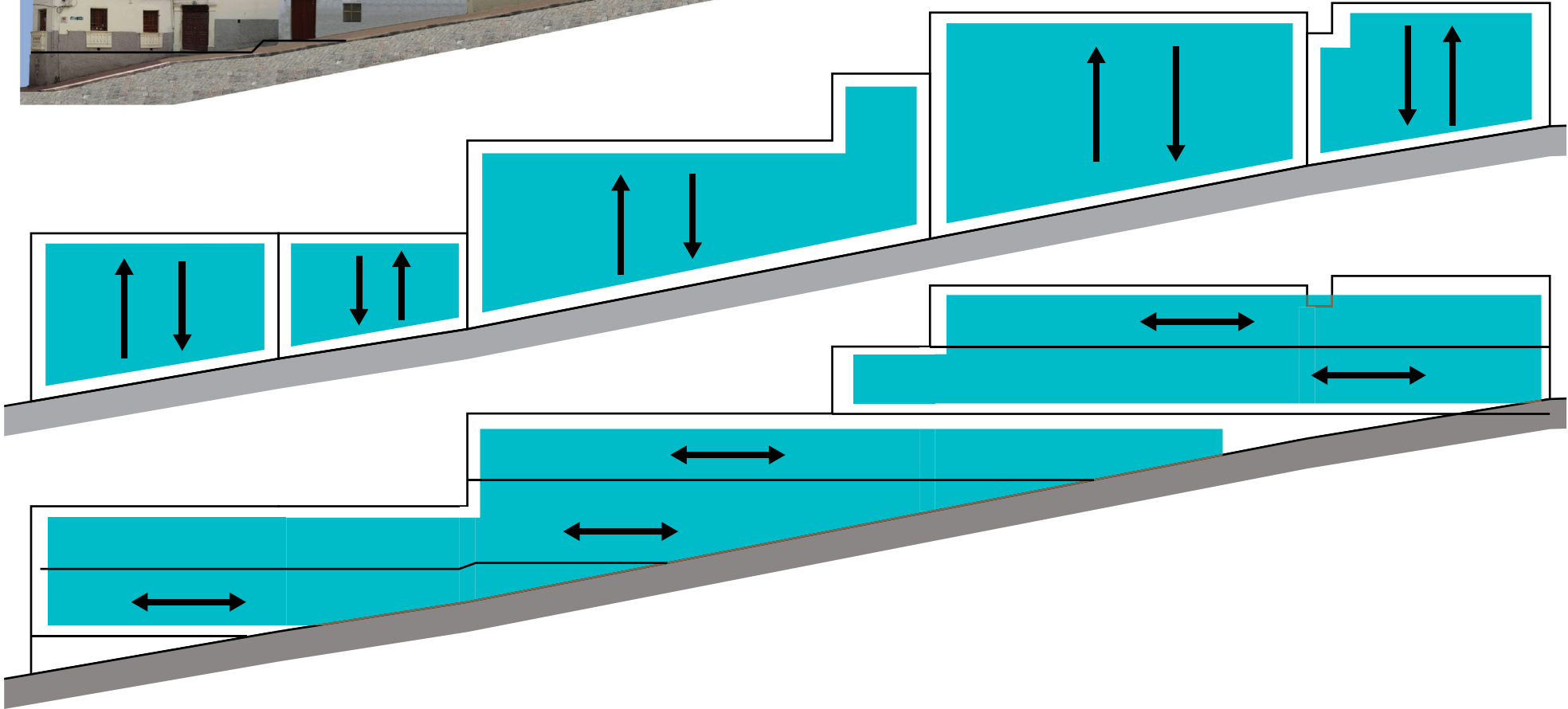


# DEMAND AND USE

## PROGRAM ANALYSIS

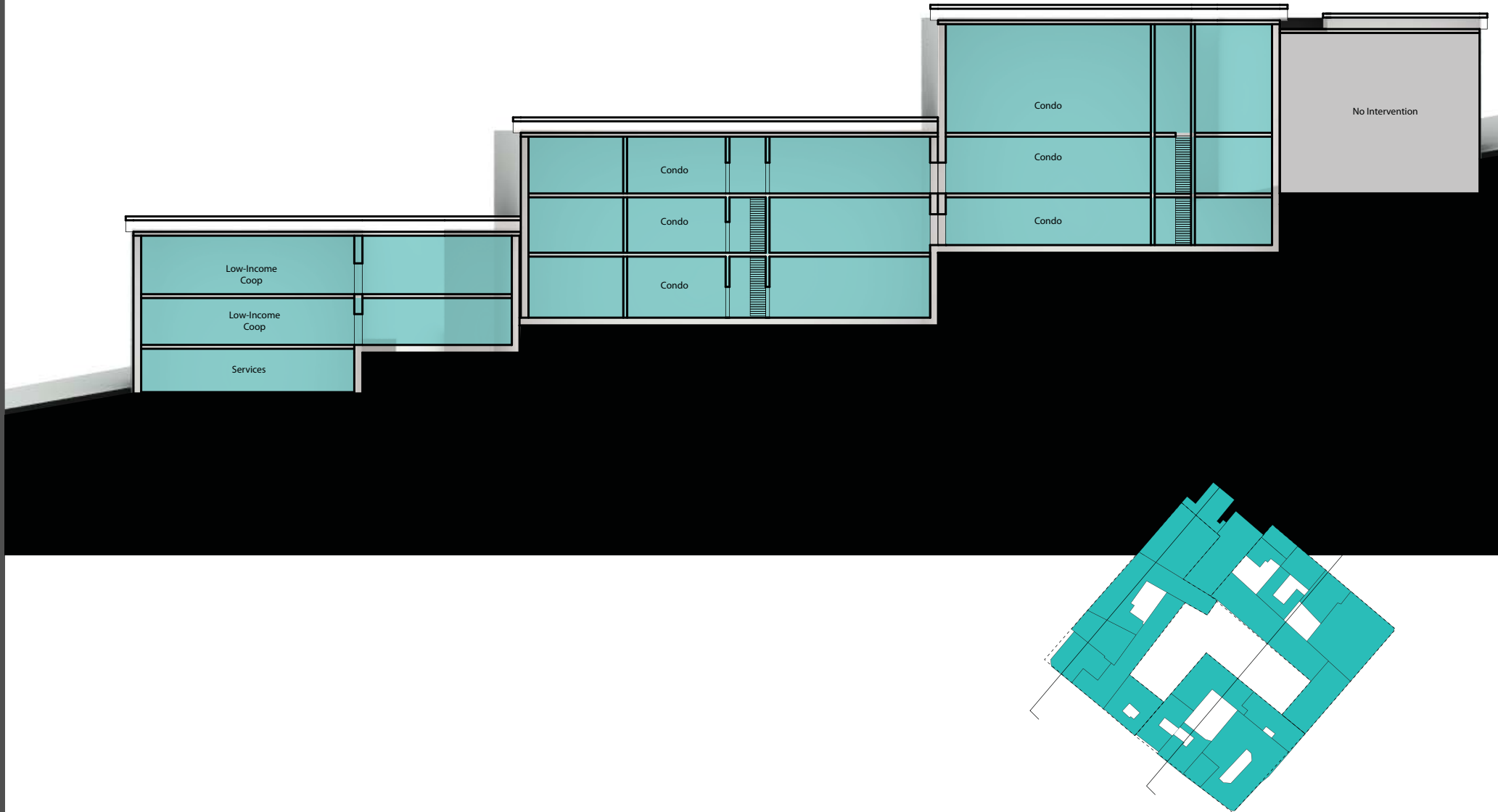


# HORIZONTAL INTEGRATION



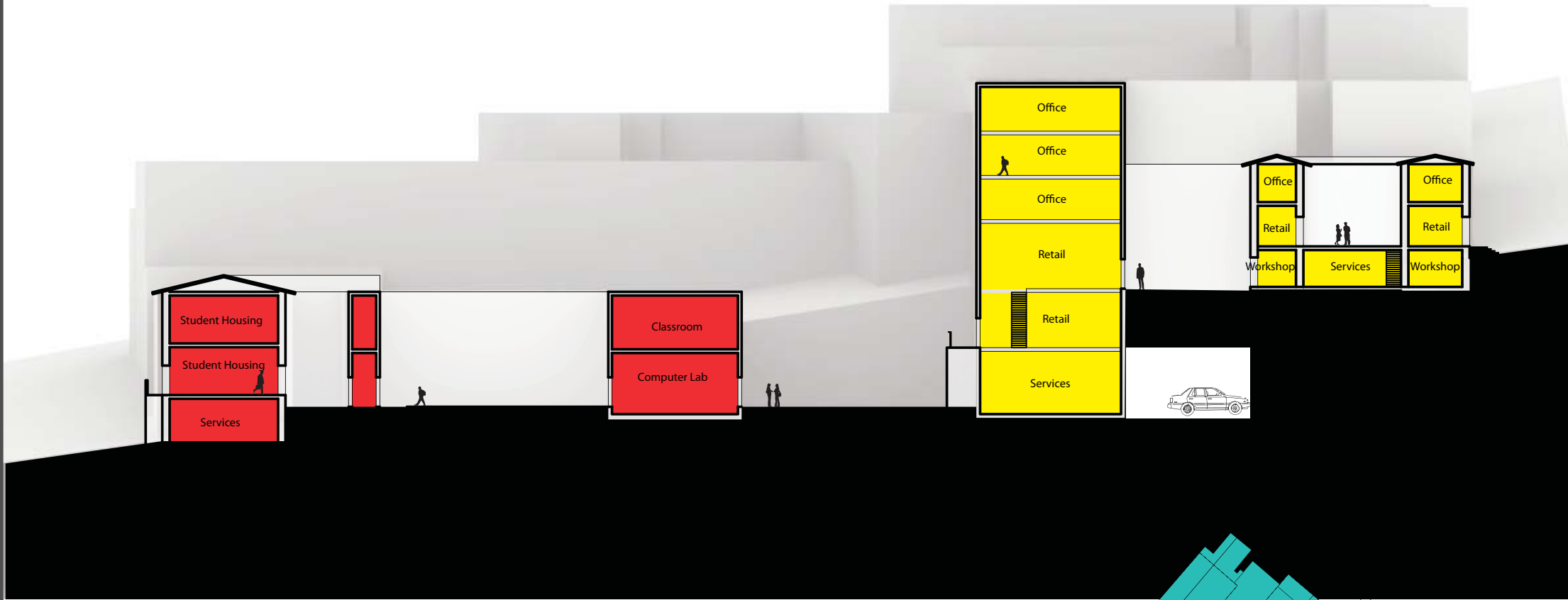
## Section

### Horizontal Organization of Residences



# Section

Education and Commercial Sectors





## TAKEAWAYS



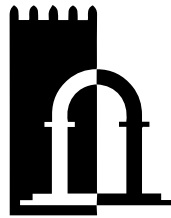
### **POLICY SYSTEM**

Opportunities for innovation in ownership structure, including housing co-ops.  
Consider policy catalysts to spur private sector urban redevelopment.



### **ZONING CODES**

Regulate and enforce codes that promote total-building occupancy.  
Make full use of mixed-use properties.



### **LOGIC OF FLEXIBILITY**

Historic buildings can adapt a wide range of uses; consider alternative models to  
demolition and ossification.





# APPENDIX A PRECEDENT STUDIES

10 CASES OF ADAPTIVE REHABILITATION WORLDWIDE

## PRECEDENT STUDIES

### SCALES OF FUNCTION

- Funf Hofe :: Munich, Germany
- Gasometer :: Vienna, Austria

### ATTRACTING THE CREATIVE CLASS

- 22@Barcelona :: Barcelona, Spain
- **Kendall Square** :: Cambridge, MA, US

### RESIDENTIAL DEVELOPMENT IN HISTORIC CENTERS

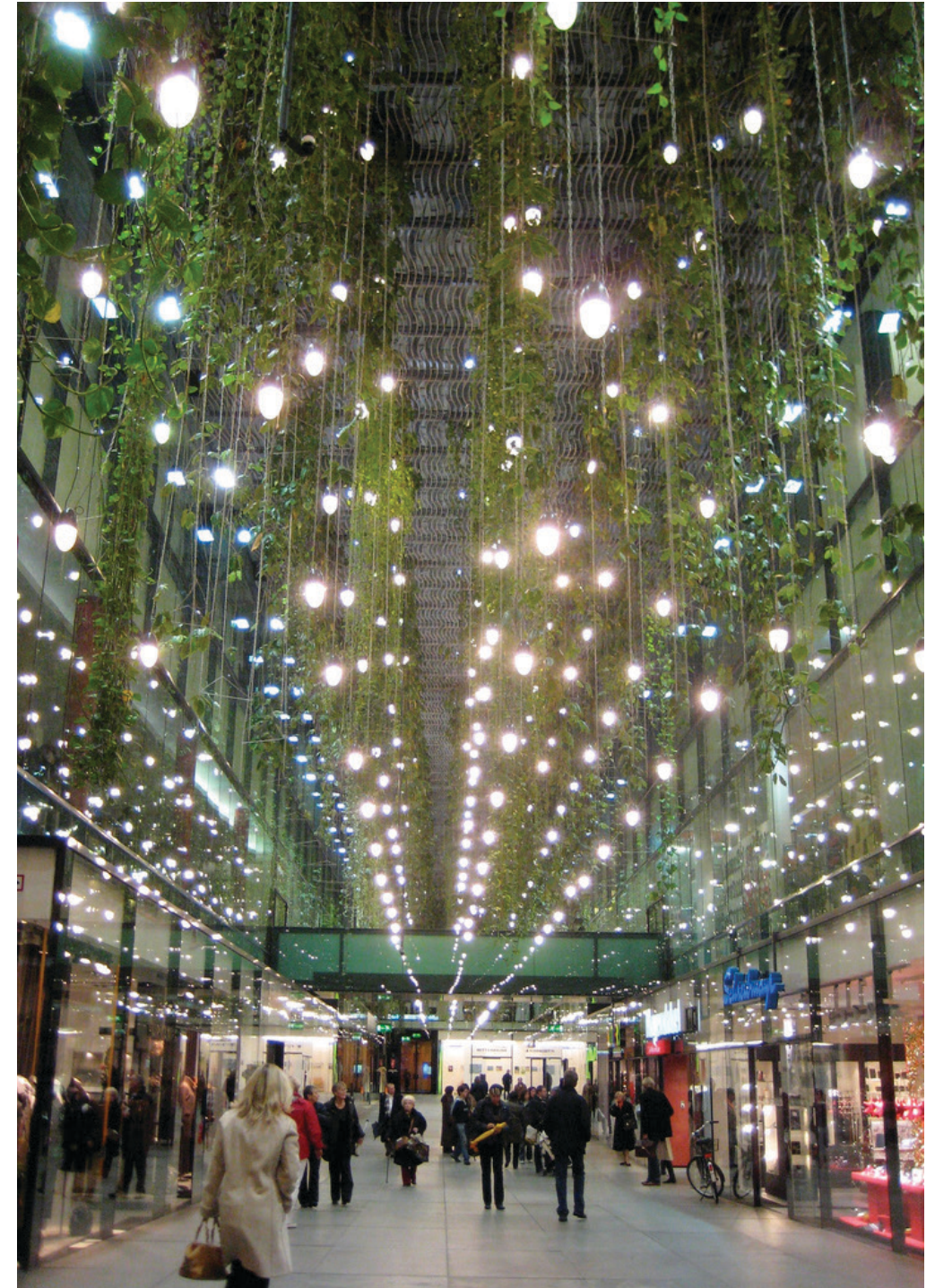
- HDDC :: Atlanta, GA, US
- Third Urban Development Project :: Tunisia

### SCATTERED SITES MANAGEMENT

- Philadelphia Housing Authority :: Philadelphia, PA, US
- Mitchell-Lama Program :: New York, NY, US

### DEGREES OF PRIVACY

- French Quarter :: New Orleans, LA, US
- Chiado :: Lisbon, Portugal



# PRECEDENT STUDIES

## SCALES OF FUNCTION

### FUNF HOFE

- Located within Munich’s historic core
- Creation and renovation of interior arcades and courtyards
- Juxtaposition of contemporary and historic architecture
- Integrates retail, housing, and offices

### GASOMETER

- Reuse of four former gas tanks as commercial and residential towers
- Commercial, retail, and entertainment spaces on lower floors with residences above
- Apartments and student dormitories
- All spaces face inward to central atrium
- Developed a “city within a city” community



Fünf Hofe Entrance :: MUNICH, Germany



Gasometer :: VIENNA, Austria

# PRECEDENT STUDIES

## ATTRACTING THE CREATIVE CLASS

### 22@BARCELONA

- Planning ordinance for the redevelopment of abandoned industrial area
- New zoning designation to initiate redevelopment
- Increase public and green spaces
- Subsidized housing
- Reuse of existing buildings for new technology and knowledge based industries



22@Barcelona District :: BARCELONA, Spain

### KENDALL SQUARE

- Existing center for biotechnology and knowledge based businesses
- Existing public transit infrastructure
- Goals: nurture innovation culture, promote sustainability, increase housing diversity
- Future development grounded in existing culture and community strengths



Kendall Square :: CAMBRIDGE, Massachusetts, United States

# PRECEDENT STUDIES

## RESIDENTIAL DEVELOPMENT IN HISTORIC CENTERS

### HISTORIC DISTRICT DEVELOPMENT CORPORATION

- Goals: prevent displacement of existing residents; preserve neighborhood’s historic character; create mixed-income housing communities.
- Planned Developments to control neighborhood growth and evolution
- Organization led by residents with a focus on the community as a whole
- Collaboration with other entities for guidance and support in new project types



Neighborhood Rehabilitation Proposal by HDDC :: ATLANTA, Georgia, United States

### THIRD URBAN DEVELOPMENT PROJECT - TUNISIA

- Goals: improved housing and services for low income residents; modify housing polices to reach more of low-income population; strengthen existing housing agencies to better function; implement a national approach to housing
- Rehabilitation of substandard settlements in four cities
- Housing credits for construction of dwellings in specified locations
- Technical assistance to involved institutions



Housing Rehabilitation :: HAFISA, Tunisia

## PRECEDENT STUDIES

### SCATTERED SITES MANAGEMENT

#### PHILADELPHIA HOUSING AUTHORITY

- Public housing integrated into city neighborhoods with private renters and homeowners
- Historic sites preserved according to PHC guidelines
- Opportunity to purchase homes with economic and personal support during and after purchasing process
- Initial opposition from community with decreased property values as main argument



Scattered Sites Development :: PHILADELPHIA, Pennsylvania, United States

#### MITCHEL-LAMA PROGRAM

- Affordable Cooperative Housing Program provides developers with construction loans and mortgages for development of affordable cooperatives
- Maximum of 25% of development at market price
- Currently 97 Cooperatives in New York City
- Resulted in economically and racially diverse developments
- Resulting stability has translated into increased property values of developments and surround area



Housing Cooperative :: NEW YORK, New York, United States

# PRECEDENT STUDIES

## DEGREES OF PRIVACY

### FRENCH QUARTER, NEW ORLEANS

- Oldest neighborhood in New Orleans
- First floor commercial or retail with residential above
- Multi-story buildings with iron galleries on upper levels
- Galleries provide shade and private outdoor spaces for the residences



French Quarter :: NEW ORLEANS, Louisiana, United States

### CHIADO

- Reconstruction of historic district after large-scale fire
- Reintroduction of residences into building structure
- First floor retail, second floor offices, third and fourth floors residential
- Units face both city streets and new public, pedestrian only courtyards



Chiado :: LISBON, Portugal

## PRECEDENT STUDIES

### TAKE-AWAYS

- Community involvement and support of redevelopment process promotes a more successful and sustainable project
- Multiple organizations, both public and private, working together on one project or goal
- Create a strengthened sense of community through maintaining existing residents and minimizing turn-over of future residents
- Build upon existing cultural groundwork of neighborhood
- Successful commingling of historic structures and new contemporary interventions



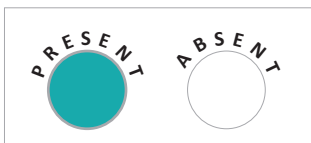


# APPENDIX B SCALE 1 FRAMEWORK

USE AND DEMAND ANALYSIS

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING				
PENSIONS / LOW-INCOME				
HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				

USE AND DEMAND  
 BREAKDOWN ANALYSIS

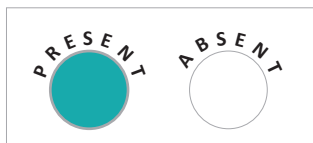
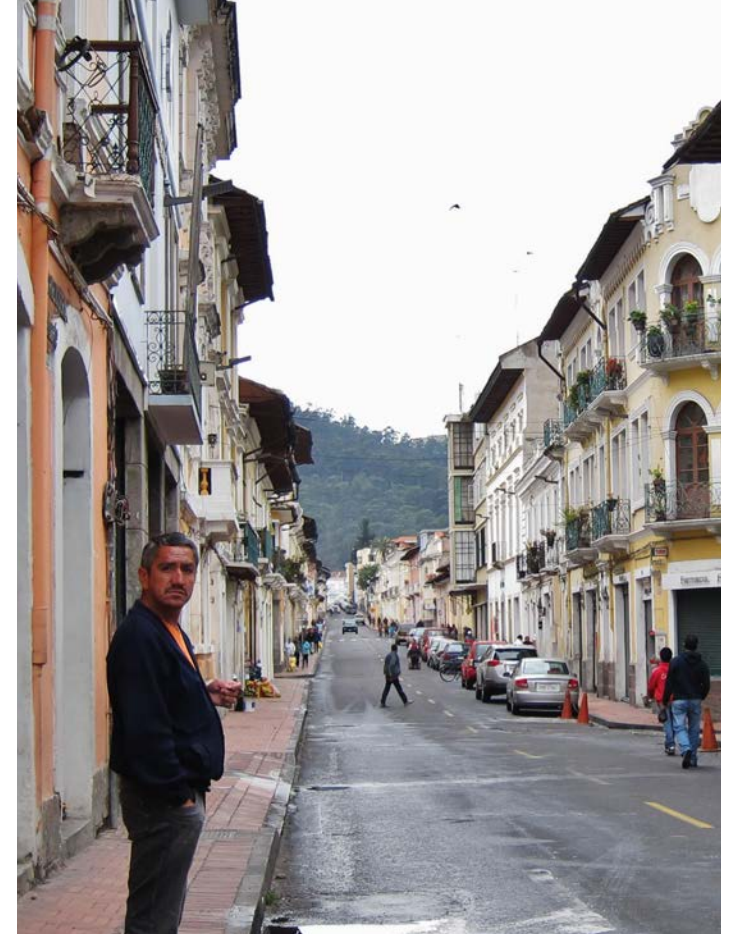


**USE ANALYSIS**

Assessment of the use potential for historic buildings based on the current conditions of the Historic City Center, assessment of demand, regulatory overlays, and carrying capacity potential.

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING				
PENSIONS / LOW-INCOME				
HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				

USE AND DEMAND  
BREAKDOWN ANALYSIS

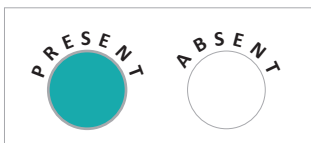


**USE ANALYSIS**

Assessment of the use potential for historic buildings based on the current conditions of the Historic City Center, assessment of demand, regulatory overlays, and carrying capacity potential.

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING				
PENSIONS / LOW-INCOME				
HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				

**USE AND DEMAND**  
 BREAKDOWN ANALYSIS

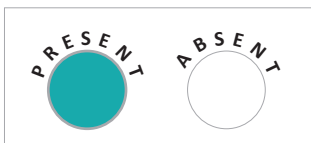
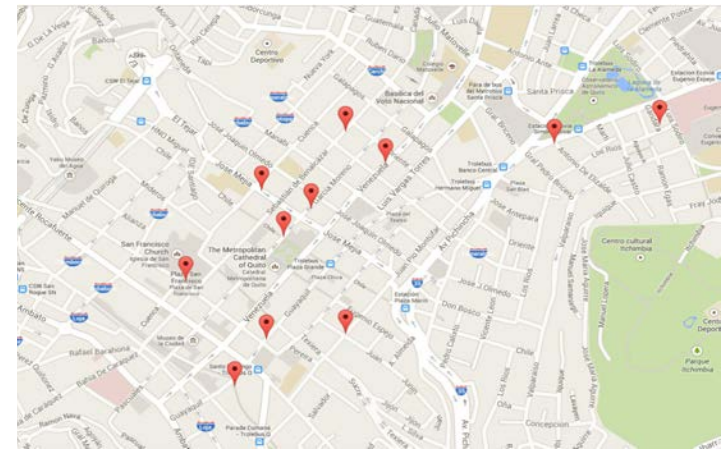


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WAREHOUSE / STORAGE OTHER				

USE AND DEMAND  
 BREAKDOWN ANALYSIS

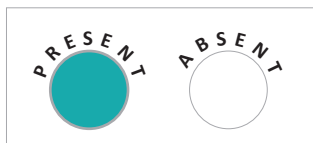


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HOUSING				
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HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				

USE AND DEMAND  
 BREAKDOWN ANALYSIS

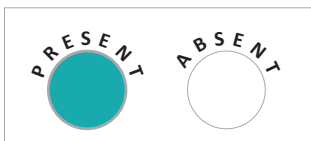


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USE AND DEMAND  
 BREAKDOWN ANALYSIS

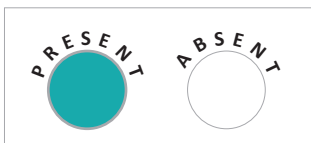
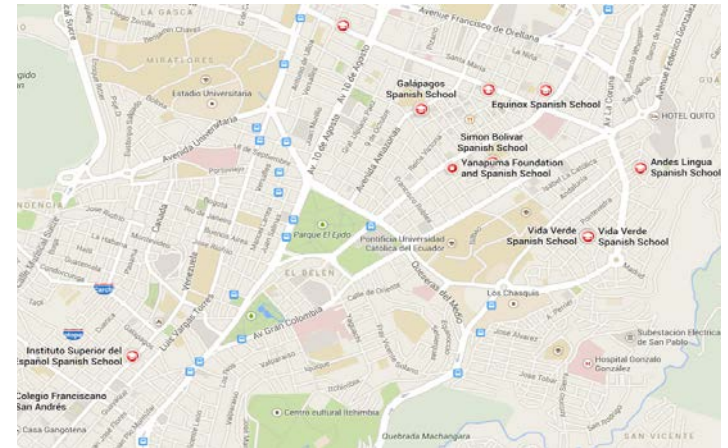


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PENSIONS / LOW-INCOME				
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OFFICE				
COMMERCIAL				
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WAREHOUSE / STORAGE OTHER				

USE AND DEMAND  
BREAKDOWN ANALYSIS



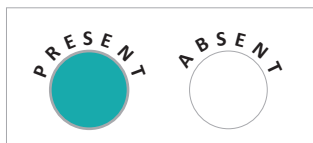
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**USE AND DEMAND**  
 BREAKDOWN ANALYSIS

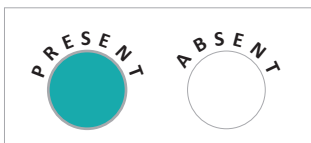


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PENSIONS / LOW-INCOME				
HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				

USE AND DEMAND  
 BREAKDOWN ANALYSIS






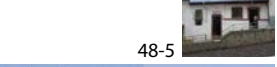













**USE ANALYSIS**

Assessment of the use potential for historic buildings based on the current conditions of the Historic City Center, assessment of demand, regulatory overlays, and carrying capacity potential.

# APPENDIX C SCALE 2 FRAMEWORK

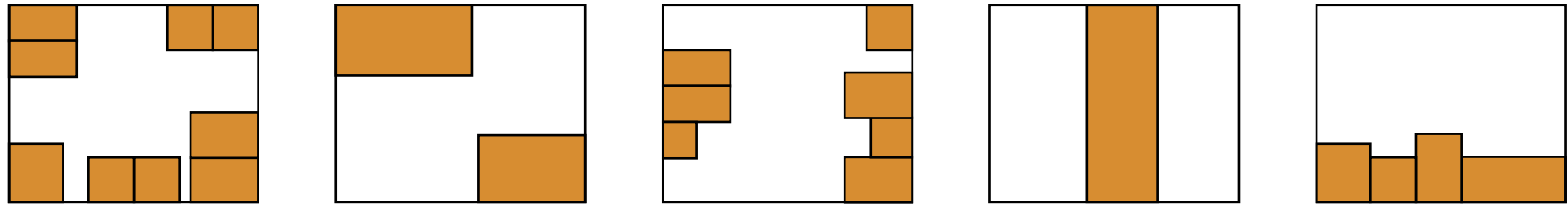
## USE AND DEMAND ANALYSIS

	CARRYING CAPACITY	PHYS.	PROTECTION	BUILDING REGULATION	RESIDENTIAL	Rehab (m2)	Remodel (m2)	N.D. (m2)
48-1		12.5	Contextual	Buffer - Traditional	4	407.84		59.86
48-2		12	Contextual	Buffer - non-Traditional	9		749.07	
48-3		14	Typological	Buffer - Traditional	9	992.10		
48-4		12	Typological	Buffer - Traditional	6	351.14		291.56
48-5		9.5	Contextual	Buffer - non-Traditional	4		304.23	75.73
48-6		12	Contextual	Buffer - Traditional	6	725.34		
48-7		17	Rigorous	Buffer - Traditional	21	2043.71		278.85
48-8		15.5	Typological	Buffer - Traditional	3	375.54		
48-9		14	Typological	Buffer - Traditional	11	1236.50		
48-10		10	Typological	Buffer - Traditional	2	88.77		70.84
48-11		12	Contextual	Buffer - Traditional	9	984.15		55.42
48-12		13	Contextual	Buffer - Traditional	7	334.34		384.02
48-13		13	Contextual	Buffer - Traditional	4	443.76		34.68
48-14		10.5	Contextual	Buffer - Traditional	10	1098.88		
48-15		14	Typological	Buffer - Traditional	3	344.89		
48-16		14	Typological	Buffer - Traditional	15	1303.12		281.74
48-17		12.5	Typological	Buffer - Traditional	19	974.83		

# STOREFRONT ANALYSIS

## STOREFRONTS in ADAPTIVE REUSE PROPERTIES

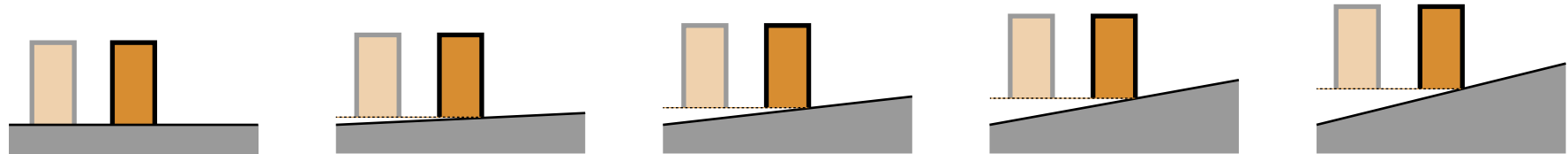
### BLOCK SCALE



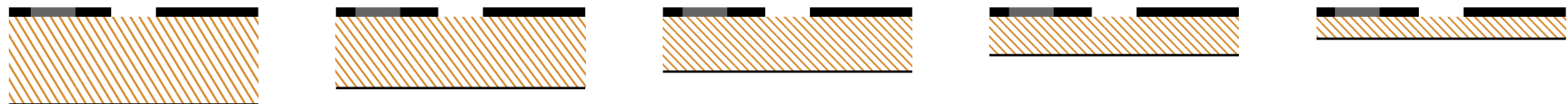
### TYPES OF STOREFRONTS



### TOPOGRAPHY

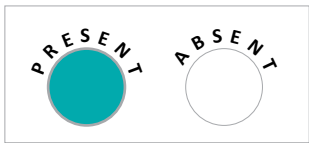


### INFRASTRUCTURAL REQUIREMENTS



**USE AND DEMAND**  
 BREAKDOWN ANALYSIS

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING	●	●	○	○
PENSIONS / LOW-INCOME	○	●	◐	○
HOTEL	◑	◒	◑	○
OFFICE	○	○	○	○
COMMERCIAL	●	○	◑	○
EDUCATIONAL / INSTITUTIONAL	●	●	◑	○
WAREHOUSE / STORAGE OTHER	◑	●	◑	◑



**USE ANALYSIS**

Assessment of the use potential for historic buildings based on the current conditions of the Historic City Center, assessment of demand, regulatory overlays, and carrying capacity potential.



Green Spaces

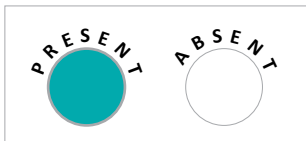
Plazas

CHQ

SITE

**USE AND DEMAND**  
 BREAKDOWN ANALYSIS

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING				
PENSIONS / LOW-INCOME				
HOTEL				
OFFICE				
COMMERCIAL				
EDUCATIONAL / INSTITUTIONAL				
WAREHOUSE / STORAGE OTHER				



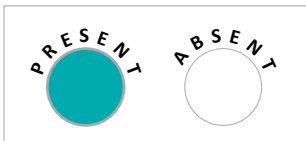
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 BREAKDOWN ANALYSIS

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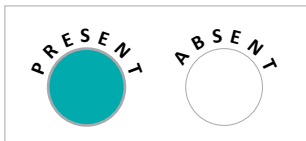


**USE AND DEMAND**  
 BREAKDOWN ANALYSIS

USE	DEMAND	ZONING CAPACITY	HERITAGE CONSERVATION	ADAPTIVE REHABILITATION
HOUSING				
PENSIONS / LOW-INCOME				
HOTEL				
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COMMERCIAL				
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New Construction

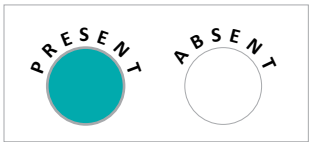


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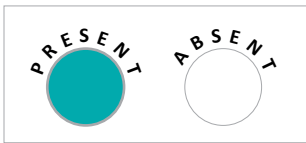


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 BREAKDOWN ANALYSIS**

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PENSIONS / LOW-INCOME				
COMMERCIAL				

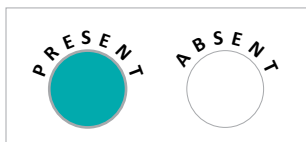
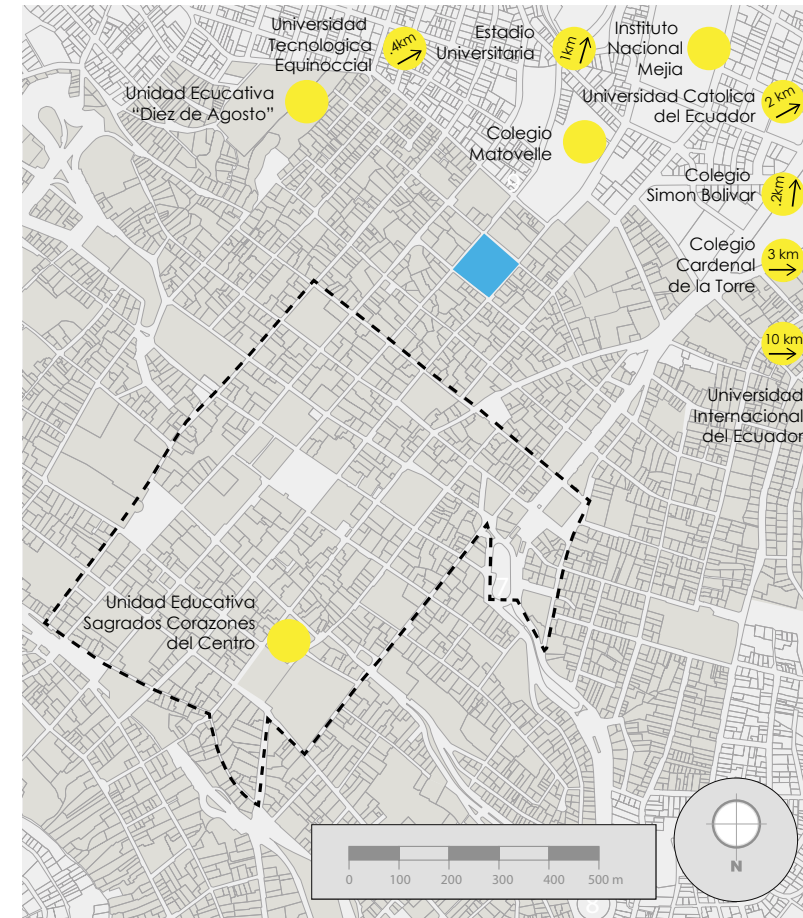


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 BREAKDOWN ANALYSIS



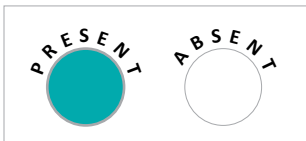
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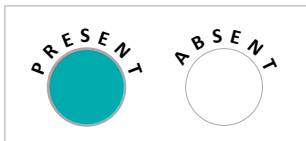


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# QUITO ACTIVATING HERITAGE ASSETS

ADAPTIVE REHABILITATION + HOUSING IN HISTORIC CITY CENTERS

05 :: 02 :: 14