

# DSD UVA [S<sub>d</sub>]





## Contacts

Martynas Marozas  
m.marozas@student.tudelft.nl or  
martynas.marozas@gmail.com  
Bosboom-Toussaintplein 250  
2624DP Delft, The Netherlands  
+31 6 344 03 126

## Mentors

### First [1]

Heidi Sohn  
heidi\_sohn@mac.com  
DSD

### External Committee member [G]

Alexander B. Sverdlov  
a.b.sverdlov@tudelft.nl  
DSD

### Second [2]

Diego Sepulvéda  
d.sepulveda@bk.tudelft.nl  
Urban Management and Urban Renewal

### Third [3]

Gerhard J.B. Bruyns  
g.bruyns@tudelft.nl  
DSD

### Fourth [4]

Miguel Robles Durán  
m@cohabitationstrategies.org  
DSD

## Introduction to Santiago case

Historical constraints and history of environmental degradation nowadays is clearly visible in fragmentation of certain urban areas and uneven distribution of wealth. Polarization is common throughout the entire city always because of economic rather than social emphasis of development. Pockets of wealth contrast with wastelands of uniformity, homogeneity, and mono-functionality, nevertheless infrastructure keeps hierarchical polycentric city structure intact, despite the fact that it mostly serves the central municipality of Santiago. New developments are mostly profit-driven and in most cases cause faster or slower gentrification, non-directly cornering the poorest to retrieve to less favorable areas. Neo-liberal economy where market deregulation, decentralization and privatization makes one of the driving concepts in the country, it distorts time and space compression map to disadvantage of the least fortunate, as 2 hour commutes become an everyday reality, and up to 30% monthly income expenditures on transportation. Uneven distribution is also evident analyzing facilities, connectivity, quality, accessibility etc., and socioeconomic segregation as an outcome of that. Quantity of

houses is sacrificed over quality and integration, as of cheap land on which they are developed; despite all the pitfalls it remains rather affordable. Inadequate and structurally unsound urban structures occupy vast areas of Santiago naturally sharing quite similar issues. Social, cultural, and naturally, economic poverty because of lacking basic facilities.

All in all, excellent connectivity, strategic position on metropolitan scale, lacking social cohesion and economic pressure of the surrounding projects (Bicentenary plan in the old airport, park Aguada) without a doubt are the most powerful factors leading to inevitable gentrification of the area. Even though this process brings better quality, it also causes local population to be displaced by higher income groups. Considering the history of displacement and current trends where least fortunate metropolitan dwellers relocate themselves towards the outskirts of the city – is not the goal to strive for. Improvement of the quality with a price of displacement does not solve the problem, but postpones/relocates it to somewhat different location. The project tries to envision an alternative solution that would enable the community to climb social steps hand in hand with rising pressures.

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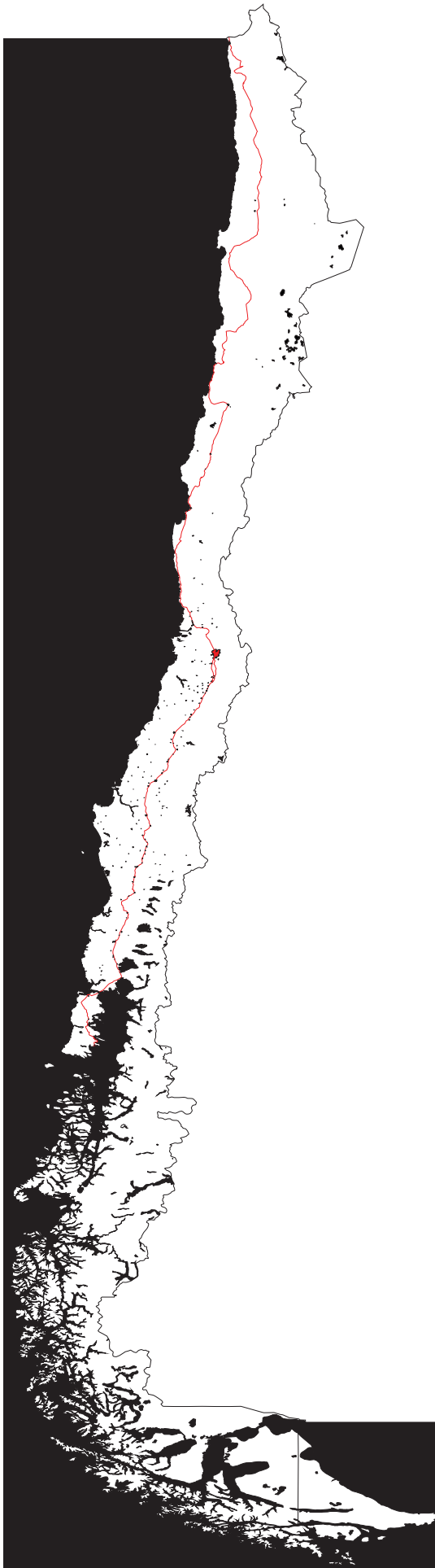
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# Introduction [1]



# Introduction

To counteract the tendency of segregation and homogenization of certain areas in the city, the Urban Asymmetries Studio proposes a strategy which explores poly-functionality, densification of open spaces, diversification of modes of production and urban facilities to reach a higher level of urban complexity in an exemplary neighborhood of Santiago.

The research and design process proposed by the Urban Asymmetries Studio has resulted in a collective strategy and design master plan for the area of La Victoria and its surroundings, a poor neighborhood located in the southwest of Santiago.

La Victoria (victory) was originally an informal settlement, formed in the fifties of the past century by a group of poor settlers around the riverbeds of the Zanjón de la Aquada, a depressed area in the centre of Santiago. The construction of the neighborhood was an enormous exercise in self-organization by the settlers, who had to join forces and invent resources, putting into play every bit of knowledge and all their skills. Based on an extensive community network the construction of the settlement was entirely self-organized self-built. The settlement received secure land tenure soon after by the socialist government of that period. Until today, the neighborhood is privately owned by its inhabitants. As such, La Victoria was able to resist several regimes in Chile, including the violent displacement policy of dictator Augusto Pinochet (1973-1990) who attempted to chase all poverty out of the city centre by displacing the entire population to peripheral places built by the state or the market. (La Victoria was at the time considered to be peripheral) This has contributed largely to the socio-spatial fragmentation within Santiago. The settlements history of squatting and resistance has led to a strong social cohesion amongst the inhabitants of La Victoria and this continues today. However, the resistant position has resulted in the social and spatial isolation of the neighborhood. La Victoria has a peri-urban location in the metropolitan area of Santiago: the city centre as well as sub centralities are reachable within 15 minutes.

However, private land ownership, speculation of land and the development of private infrastructure have enhanced the socio-spatial segregation within the metropolis. The municipality of Pedro Aguirre Cerda (PAC) where La Victoria is located, is one of the many poor and homogenous municipalities in the south of metropolitan Santiago.

Moreover, La Victoria is situated in between projects that are exemplary for the neoliberal-oriented urbanization processes currently happening in Santiago. Specifically the Parque Aguada and the Bicentenary Park developments – transformation projects that entail an extensive amount of program- increase pressure on the area, making it bound to be gentrified in the future. The Lo Valledor market is directly adjacent to La Victoria and will continue functioning probably at least the coming decade. But it surely is an area which is subject of speculation for developers that recognize the attractive central location. This will be of influence for the surrounding neighborhoods as well in terms of land value speculation.

This booklet presents the process and the products of a year of analysis and design in the city of Santiago. The project will be introduced with a historical and morphological analysis of the city of Santiago. This is followed by an analysis on the district scale (PAC), resulting in a spatial strategy for the area that has been developed by the collective studio.

The booklet will continue with the individual project that has been derived from the spatial strategy. A thorough analysis, spanning from metropolitan scale towards the scale of the street, provides the framework for a specific strategy, master plan and design interventions.

Theoretical position and ambition  
The projects of the UA studio will explore the possibilities of countering some of the negative aspects of the contemporary urban development via a critical analysis and by devising collaborative and collective urban and architectural strategies that can potentially improve current material relations.

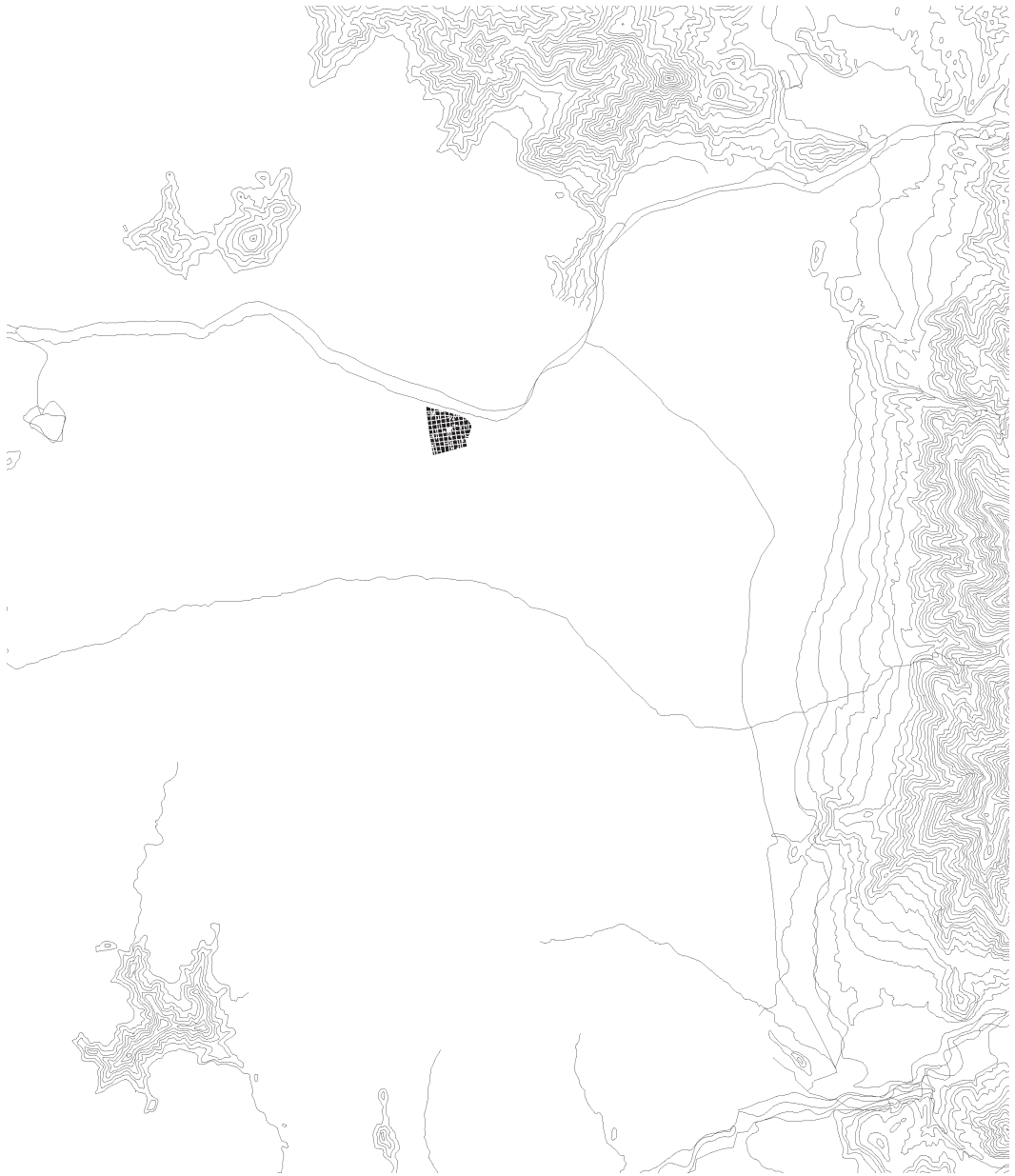
## Theoretical position and ambition

Santiago team presents a collective strategic plan for the area of La Victoria and PAC based on the following site analysis. The strategy consists of a set of four integrated and relational strategies, that have been identified as: connectivity, morphology and density, public space network and sustainable modes of production. Graduation projects analyze the material consequences of the advancement of neo-liberal policies and practices in Santiago de Chile.

The strategy proposes a counteraction against the dynamics of neo-liberal urbanization by posing an alternative model of urban redevelopment. This is meant to improve the spatial conditions in order to improve the quality of the people's life. Through spatial interventions, economic, social and political issues will be addressed.

Through spatial interventions, economic, social and political issues will be addressed.

# 1. Historical Morphological Analysis Santiago De Chile



## 1541 [Foundation]

The city was planned according to Royal Ordinances from Spain that was incorporated into the 'Laws of the Indies' in 1573. The strict grid of 100m by 100m blocks was an intrinsic part of these laws. Until the 19th century the grid structure was not permanent due to several destructive earthquakes and continuous attacks of the Mapuches: the indigenous population of Chile who for many centuries maintained their resistance against the Spanish occupancy. The rectangular plots were very strictly maintained but mostly occupied by farmers using the 100 by 100 meter grid for agricultural purpose. Thanks to the flexibility of the grid, the city centre until today remains the gravity point of the metropolitan city. As such Santiago is still functioning as a mono-centric city, despite the new centralities that have developed the last decades.

1 5 4 1  
FOUNDATION

The city has been founded by Pedro de Valdivia in 1541. The Spanish rulers had the idea of a grid system. The city was divided into 100 blocks and each block was 100m by 100m. The Spanish rulers had the idea of a grid system. The city was divided into 100 blocks and each block was 100m by 100m. The Spanish rulers had the idea of a grid system. The city was divided into 100 blocks and each block was 100m by 100m.





## 1541-1750 [Reconstruction]

### 1541-1750 Reconstruction

In order of this reconstruction by cartographer and the scholar of the mapmaker, the city was mostly a small settlement only, the only building erected in the center of the valley and the grid of streets had become more pronounced. The city then grew west to include the riverbank. The typical layout of 1541 was centered on the main square. The center of settlement was brought down to the river, the central part of the valley to the river bank, the city center was the river bank.



The Mestizo population became more and more important and a middle class was emerging. This was articulated in the development of the Alameda de las Delicias, which today still functions as an important economic axis through the city. With the exploitation of the mines and the building of railroads the first signs of industrialization became visible in the city. The unequal system of rural land division forced many peasants without prospects to migrate to the city. They built the first informal settlements (Rancherios) mostly along the less valuable and more polluted riverbanks to the west of the city. Later, during the neo liberal regime, the city centre and surroundings were cleared from poverty to gain room for (foreign) investment. This displacement policy resulted in socio-spatial fragmentation of Santiago.

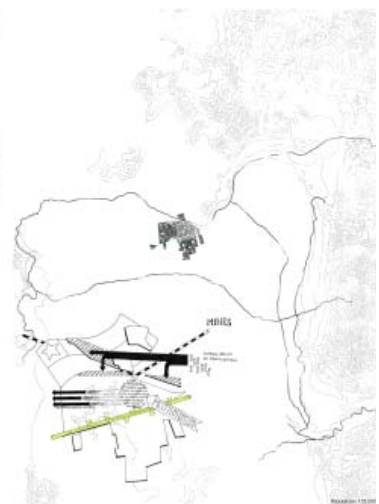


## 1750-1865 [Densification]

Santiago's governor Vicuña Mackenna wanted to give Santiago the grandeur of a European capital. The centenary celebrations were approaching and Mackenna introduced a plan characterised by Haussmanian-like restructuring. The more and more polluted environment in the inner city made the richer inhabitants of Santiago choose for better living conditions. This they found in the northwest of the city, up the hills. The city beautiful projects by Mackenna created the first segregation between the 'poor' city centre and the 'rich' suburb. This polarization process is still continuing and recognizable in the contemporary city. As a result of the hygiene problems in the inner city that began in the early 19th century, the housing law of 1906 was initiated. Chile was the first Latin-American country to introduce a housing law. However, the law was formalized only in the 1950's. The housing law determined a standard quality and meant a structural improvement for the living conditions in the city.

### 1750-1865 Densification

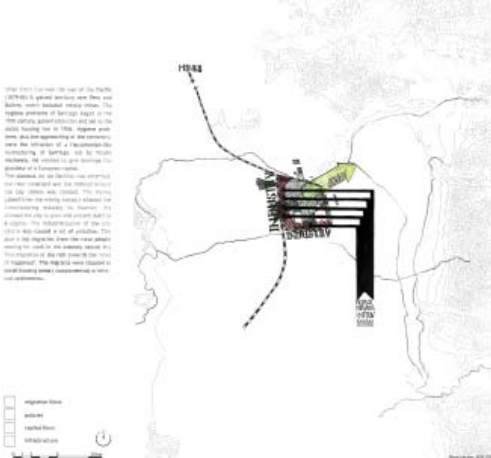
In 1810 the Republic of Chile became an independent nation. The Spanish colonial urban planning laws had been replaced and a concept of urban planning emerged that in the context of the 19th century was called the 'Plan'. This led to the first urban planning laws in the city. The first urban planning law was the Housing Law of 1906, which determined the minimum standards for the construction of buildings and the quality of the living environment.



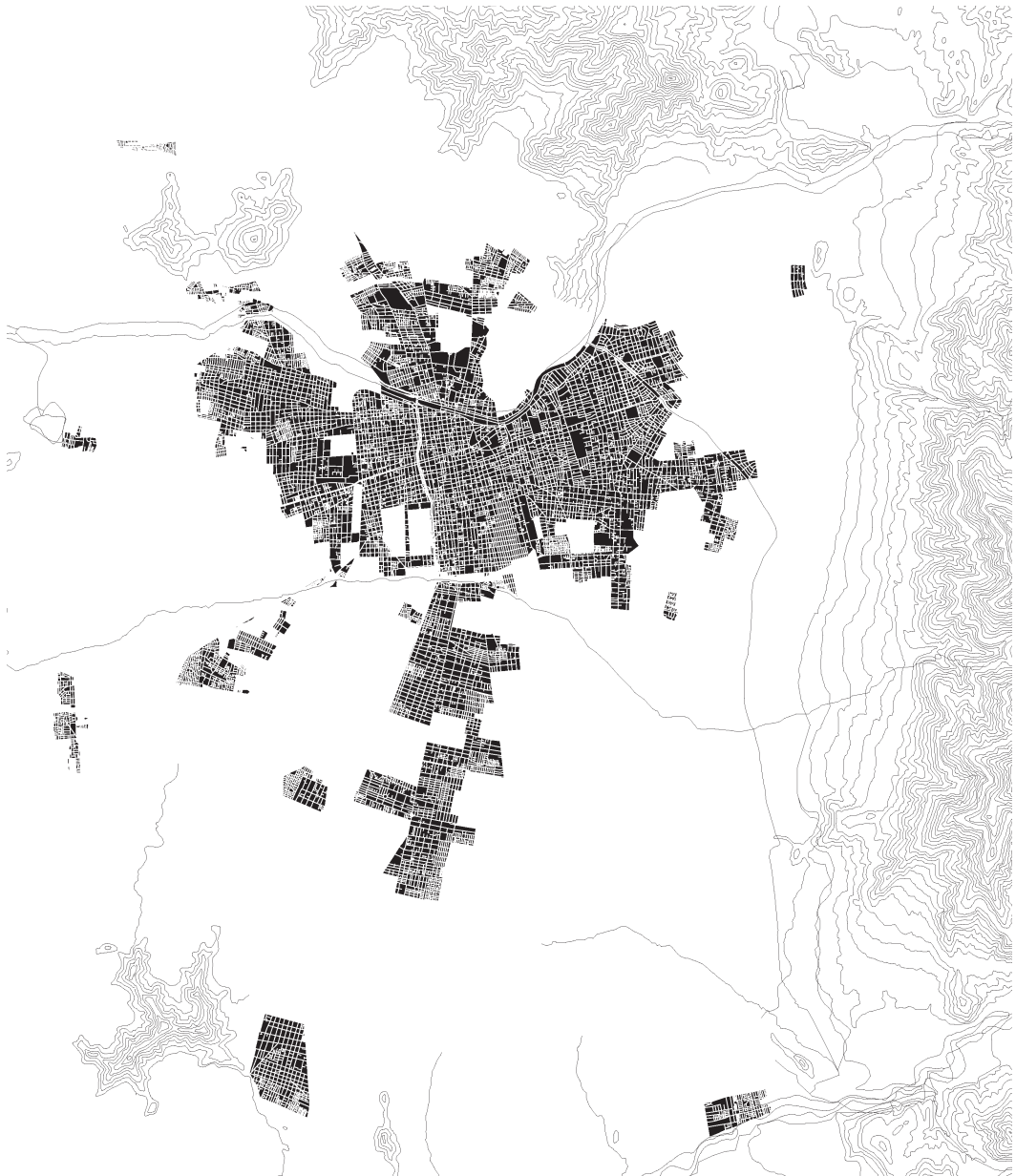


## 1865-1910 [Reformation]

### 1865-1910 Reformation



The extreme urban growth Santiago experienced after 1910 is a result of mainly two processes: Chile's Nitrate mining industry collapsed after the German invention of artificial nitrate at the end of World War I. The Global crisis that started in 1929 worsened the situation as the recession hit. This caused a huge migration flow of former mine workers to Santiago resulting in an explosive growth of the city. New migration waves attracted by the flourishing of domestic manufacturing. The development and increase of industry in the city also increased the problems of pollution. The process of polarization continued as the working class settled in the infertile agricultural areas in the South-West of Santiago and the affluent class relocated itself on the 'road to happiness': in the mountains, where the soil is more stable to withstand earthquake impacts and air is less polluted.



## 1910-1940 [Crisis]

Fueled by the investments of the 'Rural' elite, the landowners, Chile's economy accelerated the change from an agricultural into an industrial and urban economy. As a result of the fast transformation of agricultural lands into industrial areas, in the city today we see increased amounts of vacant speculative land that has led to new infrastructural investments. These highways have led to (a hierarchy of) new connectivities and are transforming the spatial morphology of the city in a less positive way. On the city district scale we thus see a pockets of disconnected and poorly integrated neighborhoods. During this period the centre oriented arrangement, the commuters, and the still prevalent industrial nature of some inner city areas polluted the city even further. Represented in this image are the commuter flows directed to the industrial centre. This mono-centric city model is still dominant in the current situation. Despite subcentralities, the largest job availability concentrates in Santiago's centre.

### 1910-1940 Crisis Situation

During the period of 1910-1940, the city of Santiago experienced a significant transformation. The economy shifted from agricultural to industrial and urban, leading to increased investment in infrastructure, particularly highways. This period is characterized by a crisis situation, marked by disconnected and poorly integrated neighborhoods. The city's spatial morphology was transformed, with a focus on a mono-centric model centered around the industrial center. Commuter flows were directed towards this center, and the largest job availability concentrated in Santiago's center. Despite the presence of subcentralities, the city's structure remained dominated by a single central hub.







## 1040-1973 [The Social Experiment]

### 1940-1973 The Social Experiment

1940-1973 was a period of rapid urbanization in Chile. The city of Santiago grew from a population of 1 million in 1940 to over 3 million by 1973. This period was characterized by a massive influx of people from rural areas and the construction of a large central business district (CBD) in the center of the city. The CBD was a key feature of the city's urban structure and was the site of many of the city's major commercial and financial activities. The CBD was also the site of many of the city's major public buildings and cultural institutions. The CBD was a key feature of the city's urban structure and was the site of many of the city's major commercial and financial activities. The CBD was also the site of many of the city's major public buildings and cultural institutions.



On September 11th 1973 General Pinochet committed a military coup. Under Pinochet's rule, the military junta took complete control of all public affairs and with the financial and intellectual help of the US – Economics Faculty at the University of Chicago- imposed a neo-liberal system in Chile. This neo-liberal country/city opened up to foreign capital, resulting in the emergence of a new business class and the Central Business District. State enterprises and public transport were privatized. Until the 1980's more than 60% of the land was in control of 14 families. After that liberalization of the market determined land value. Also Pinochet executed a radical displacement policy, fighting informality with an iron fist. The neo-liberal policies caused the relocation of inhabitants from the centre and the northern parts of the city to the periphery. Homogenous zones were created resulting in large daily commuter flows.



## 1973-1985 [The Neo-Liberal City]

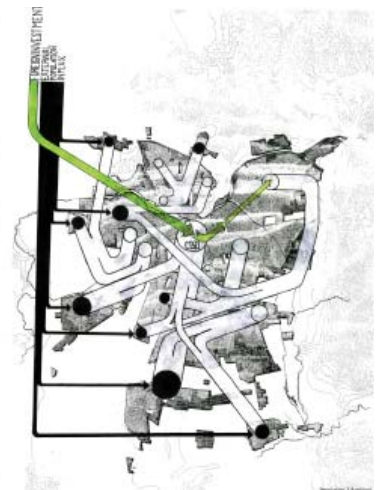
Until the 1980's more than 60% of the land was in control of 14 families. After that liberalization of the market determined land value. Globalisation and structural adjustments imposed by the World Bank were expressed in the dictatorial regime of Pinochet; the neo-liberal urban model resulted in increased social fragmentation. Santiago became Latin America's headquarter for large multinationals and regional financial center. The presence of multinationals and foreign investors, the development of the CBD and the emergence of regional and local subcentralities led to the development of a polycentric city. The periphery has acquired a new role: new centralities (the sub-centers) have been developed by private developers, municipalities and transport companies. Rental housing subsidies are discontinued and neo-liberal policies lead to the emergence of the private ownership model on cheap land allotments built by developers. Private entrepreneurs don't see business in the low-income sector: 57%

of the housing units are produced with heavy government leverages.

### 1973-1985 The Neo-liberal City

The 1970s and 1980s saw the emergence of the neo-liberal city model. This model is characterized by a high degree of fragmentation, with a central business district (CBD) and a network of sub-centers. The CBD is a dense, high-rise area, while the sub-centers are smaller, more dispersed areas. The neo-liberal city model is based on the idea of a 'global city', which is a city that is a major center for global finance and trade. The neo-liberal city model is based on the idea of a 'global city', which is a city that is a major center for global finance and trade.

Legend:  
 - Residential Area  
 - CBD  
 - Sub-center  
 - CBD  
 - CBD





## 1985-1995 [Megapolis]

Approximately two decades of uninterrupted economic growth have transformed Santiago into a modern metropolitan area. The importance of efficient infrastructure and the quality of living are addressed.

At present 2-hour commutes within the city are not uncommon. All infrastructure is still mainly serving the city centre and not evenly distributed along the metropolitan area. This maintains a certain level of hierarchy within the polycentric city intact.

### 1985-1995 Megapolis

The metropolitan region is the primary development, shaped by economic expansion and infrastructure investment. The city's growth is concentrated in the central urban area, with the surrounding metropolitan area being less densely populated. The city's infrastructure is primarily concentrated in the central urban area, with the surrounding metropolitan area being less densely populated. The city's infrastructure is primarily concentrated in the central urban area, with the surrounding metropolitan area being less densely populated.

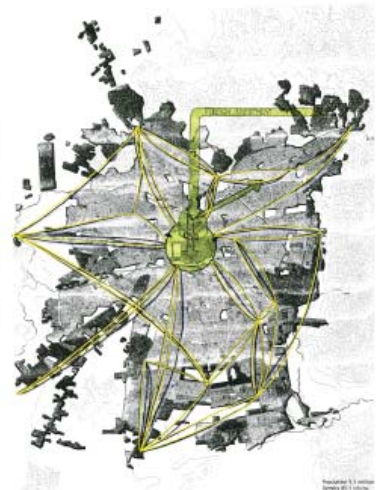




1995-2008 [Reintensification]

1995-  
Reintensification of the centre

The city's urban form has been transformed through a process of intensification. The central area of the city has been redeveloped, with a focus on high-density residential and commercial uses. This has led to a significant increase in the city's population and a corresponding increase in the demand for services and infrastructure. The city's urban form has been transformed through a process of intensification, with a focus on high-density residential and commercial uses. This has led to a significant increase in the city's population and a corresponding increase in the demand for services and infrastructure.



## 2. Research Conclusions

### 1. Socio-spatial fragmentation

**Land values:** Until the 1980's more than 60% of the land was in control of 14 families. After that liberalization of the market determined land value. Globalisation and structural adjustments imposed by the World Bank were expressed in the dictatorial regime of Pinochet; the neo-liberal urban model resulted in increased social fragmentation. On the city district scale we thus see homogenous/monofunctional urban expansions.

**Infrastructure:** The fast transformation of agricultural lands into industrial areas has created increased amounts of vacant speculative land that has led to new infrastructural investments. These highways have led to a hierarchy of new connectivities and are transforming the spatial morphology of the city in a less positive way. On the city district scale we thus see a pockets of disconnected and poorly integrated neighbourhoods.

**Urban model:** The above have resulted in a new organisation of the urban structure from a mono-centric urban model to a regional one. New centralities (the subcenters) have been developed by private developers, municipalities and transport companies. These subcenters largely service the macro-region. In terms of employment the lower and middle-class that live in the periphery are still oriented towards the mono-centric urban model.

### 2. Housing system

On the city district scale we see homogenous/monofunctional urban expansions. Private entrepreneurs don't see business in the low-income sector: 57% of the housing units are produced with heavy government leverages. However the lifecycle of these low-income

houses will be a major issue in the next years. This short-term vision has not only resulted in homogenous neighborhoods but also undifferentiated housing typologies. The aim should be to strive for socioeconomic adaptability, better quality houses and increased social mobility.

### 3. Infrastructure

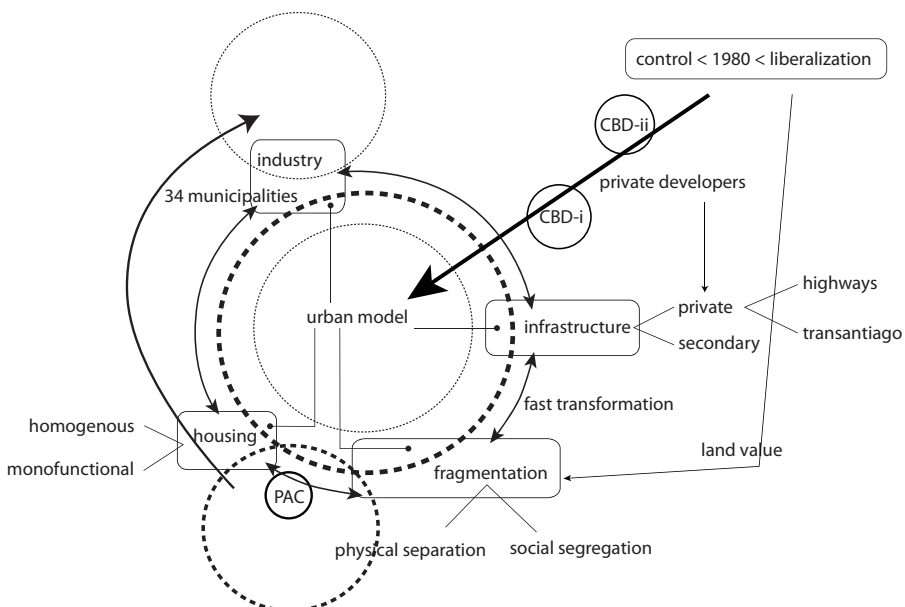
New infrastructural investments have led to a dual infrastructure and a hierarchy of connectivities; expressed in the development of the (private) highways related to purchasing power and the secondary road infrastructure. Infrastructural developments have created a new condition of 'gated communities'.

Car possession in Santiago reflects the socio-spatial segregation.

In the 1980's the TranSantiago, a new bus system, was introduced to replace the previously chaotic and environmentally unfriendly bus system. Unfortunately the implementation of this ambitious project failed which has resulted in an overloaded metro system, increased travel times and high transportation costs for the lower income groups who spend approximately 50% of their income on this service.

### 4. Industry

In favour of decentralization and the absence of a metropolitan authority for urban developments, the 34 municipalities have developed their own industrial policies and restrictions. Industrial re-conversion and/or the relation of the industries to the macro region (of Santiago and Valparaiso) has resulted in the relocation of industries from the city to designated zones outside the city. This has left large industrial plots in the city empty; a few brown fields can be found in our study area of PAC.



### 3. Field Research

















**Analysis Municipality PAC**

**[ 2 ]**



# 1. Theoretical position and ambition

The UA studio is an intensive theoretically and empirically driven research and design studio that aims at the understanding of the processes and conditions that produce uneven –or asymmetrical- development in contemporary urban environments. For our graduation projects we have analyzed the material consequences of the advancement of neo-liberal policies and practices in Santiago de Chile.

Projects explore the possibilities of countering some of the negative aspects of the contemporary urban development via a critical analysis and by devising collaborative and collective urban and architectural strategies that can potentially improve current material relations.

Santiago team presents a collective strategic plan for the area of La Victoria and PAC based

on a set of four integrated and relational strategies, that have been identified as: connectivity, morphology and density, public space network and sustainable modes of production. Graduation projects analyze the material consequences of the advancement of neo-liberal policies and practices in Santiago de Chile. Our projects explore the possibilities of countering some of the negative aspects of the contemporary urban development via a critical analysis and by devising collaborative and collective urban and architectural strategies that can potentially improve current material relations. This afternoon the Santiago team shall present a collective strategic plan for the area of La Victoria based on a set of four integrated and relational strategies based on the following site analysis.

## 2. Introduction PAC

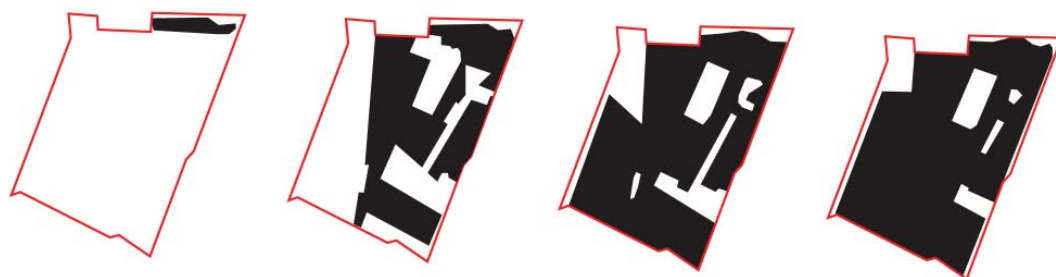
The city of Santiago is crossed by five main highways. Two of them are north-south orientated, two of them east-west and the last one is a ring road that surrounds the city's central districts. La Victoria lies within this ring, close to one of the north-south highways and one of the east-west highways. To get from La Victoria to one of the highways, you need to make only three turns from local to secondary road and then to the parallel road that connects to the highway. Because of this vicinity to the main infrastructures, La Victoria is well connected to the rest of the city if travelling by car.

The secondary and tertiary road system in and around PAC provide a network for inter-district transport. This network also serves the Transantiago and local buses that are used a lot by the residents of PAC. The Transantiago bus system is not very efficient in the sense that not many lines travel along the main roads of La Victoria, which means that inhabitants are mainly dependant on the local buses and on travelling on foot.

The infrastructural network for the Transan-

tiago buses requires too many turns to get to the main roads within the district and is therefore not sufficient.

It's location near the inner ring/ disconnected from low-land values/strong historical social cohesion/ plus following points: Lack of real connectivity of La Victoria with nearby centralities. Lack of spatial integration of La Victoria in PAC caused by morphological configuration. Abandoned/derelict areas of PAC (hospital, A.J. Park, turntables, slaughter house) represent opportunities for development but are also problematic because of their scale. Social and political isolation of La Victoria because of squatting and resistance against regime. Despite close proximity to the CBD the reputation of La Victoria and its surrounding areas as a no-go zone has resulted in low land-values. The household index of La Victoria is enormous; the over-crowded households and lack of social mobility are the issue! La Victoria is a private area with low-income groups.





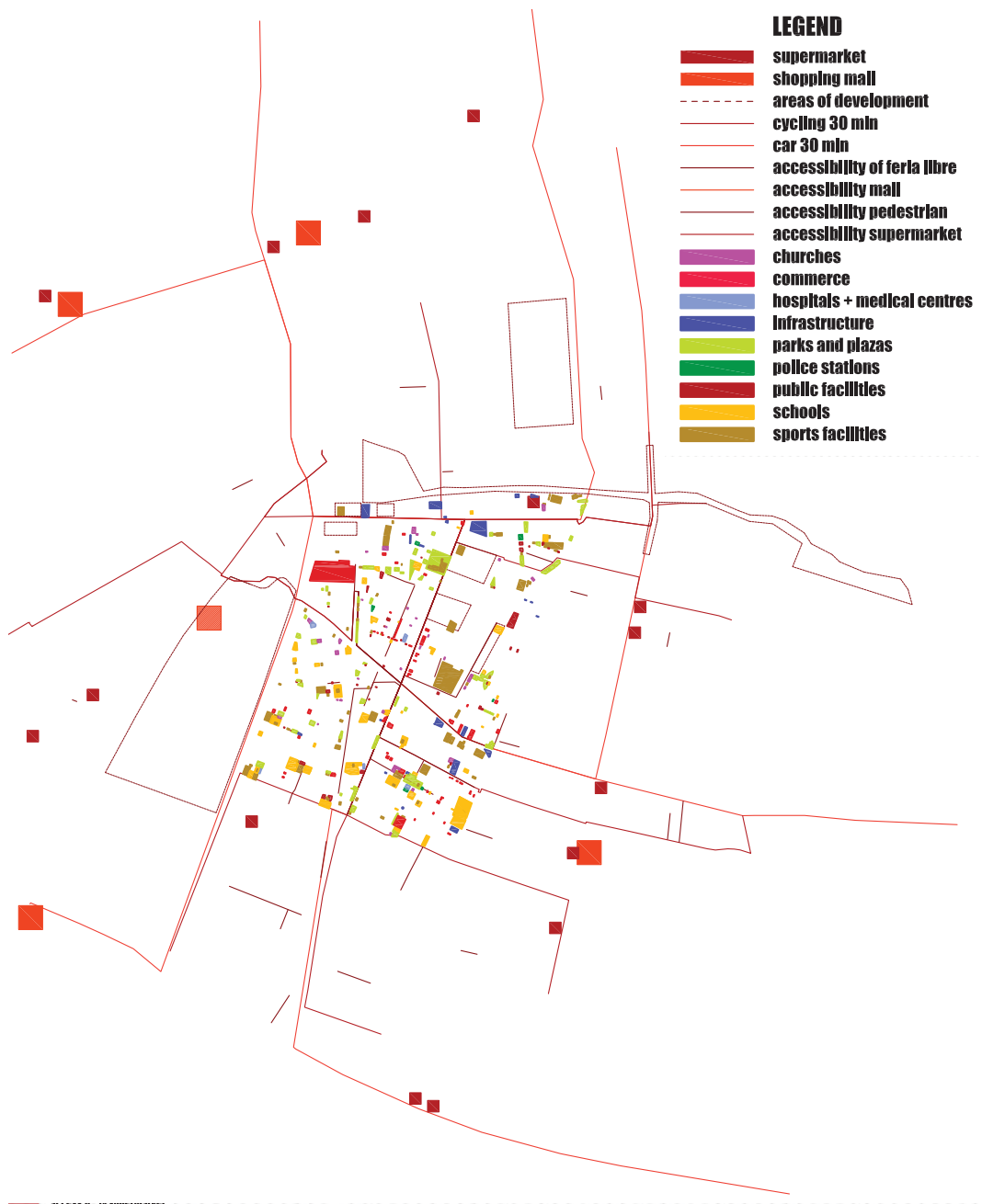
## Accessibility

This map shows the locations of certain functions (malls and supermarkets) on a larger scale likely to be used by residents of La Victoria. The distance which can be traveled in 30 minutes by car, bike or on foot is indicated by lines along travel paths. Car access is the brightest shade of red; walking the darkest shade of red. Areas which are planned to be developed are indicated with dotted lines.

By car, large parts of the city are accessible. However, not many inhabitants of La Victoria own a car, and therefore their range is much smaller and they are dependant on public transport to get around the city. We see that the railroad clearly defines the shape of range of accessibility.







## Accessibility of Urban Facilities

Here we see the combination of the facilities available to residents within La Victoria compared with the large-scale supermarkets and malls available outside La Victoria. The red dots within the facilities map indicate commercial functions.

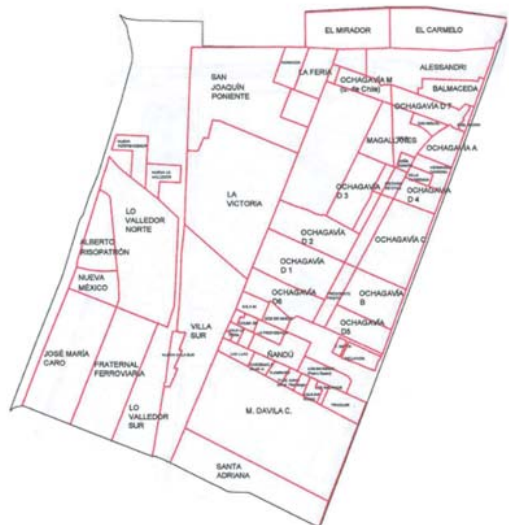
La Victoria is quite isolated from shopping malls and supermarkets, this is compensated by the size and number of street markets, feria libre. A new shopping mall (indicated with a striped hatch in the southwest of the map), which is planned in parque bicentenario, is quite close to La Victoria and will have influence on further development. There are many smaller buildings (small red

dots) within PAC which show the nature of commercial functions in this area: small-scale, built where there is available land or a willing entrepreneur, as insertions within a primarily residential typology. There is no “centre” of commercial activity and note that businesses do not coincide with main travel paths (as you can see by the red lines, which follow major streets rather than side streets). Therefore there is no build-up of a commercial centre nor strict separation from residential areas. This is in total opposition to the approach found in the planning of Santiago’s sub-centres, which are just as their name describes, centres for commercial activity and quite separated from the residential.



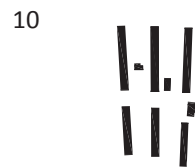
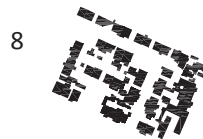
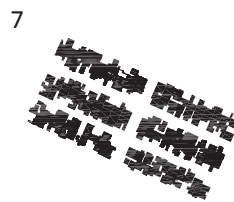
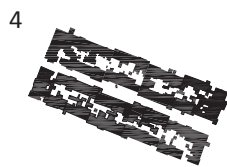
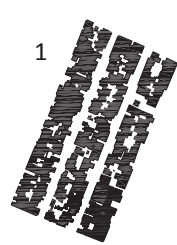
## Morphology

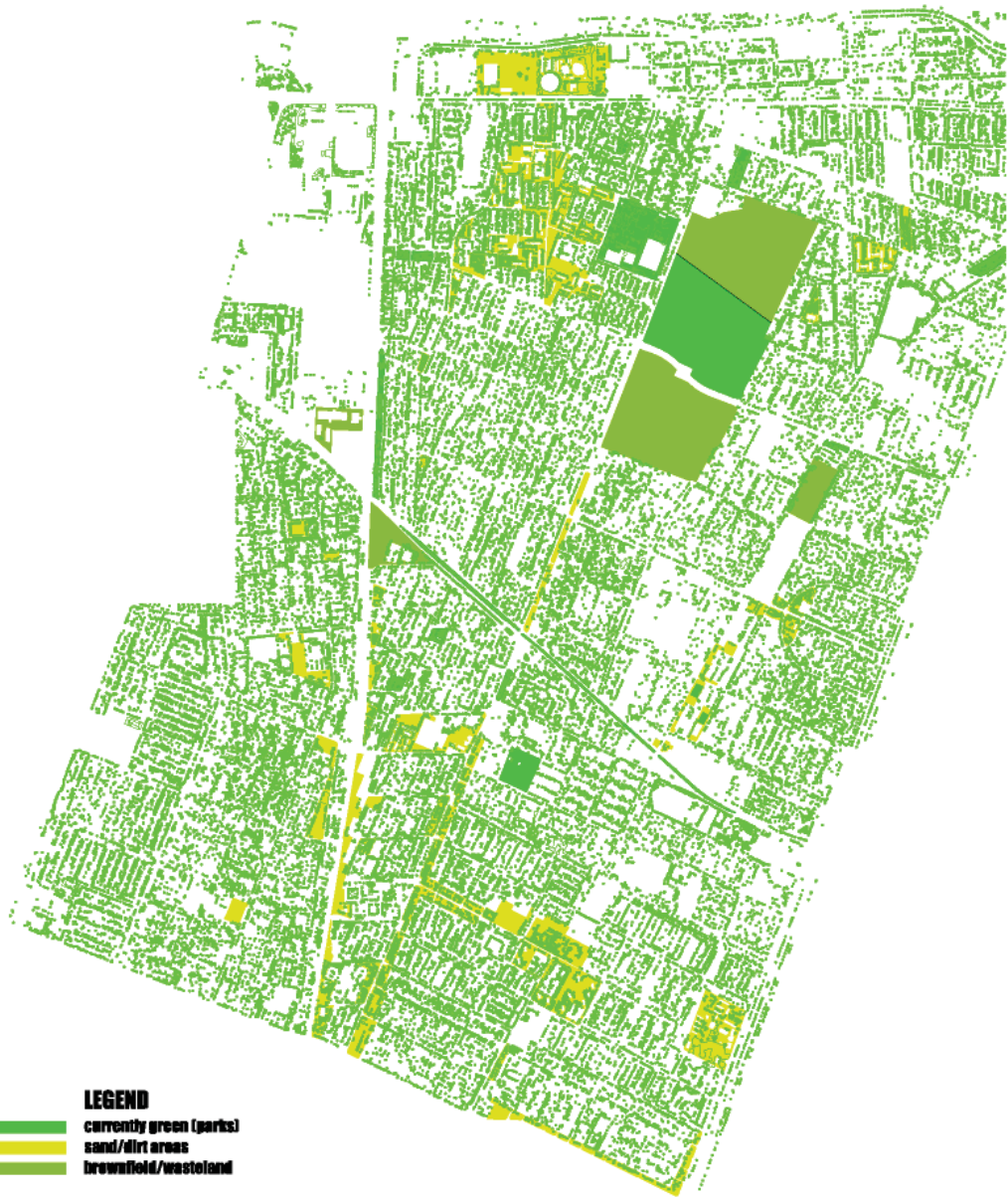
Areas of consistent morphologies within certain boundaries are apparent. These transitions between configurations of buildings occur where there are existing divisions: usually highways, sometimes park enclosures, sometimes where there is a shift in the grid indicating a new instance of planning. The built form character of each area starts to reveal itself via these morphological changes. The identified morphology types show variation of: formality: rigid external boundaries or flexible external boundaries with set-backs and push outs Configuration: tightly spaced, on a rigid grid, loosely spaced towers with free areas around, built form with a continuous facade, free-standing individual dwellings. It should be noted that the function of the vast majority of all typologies is housing.





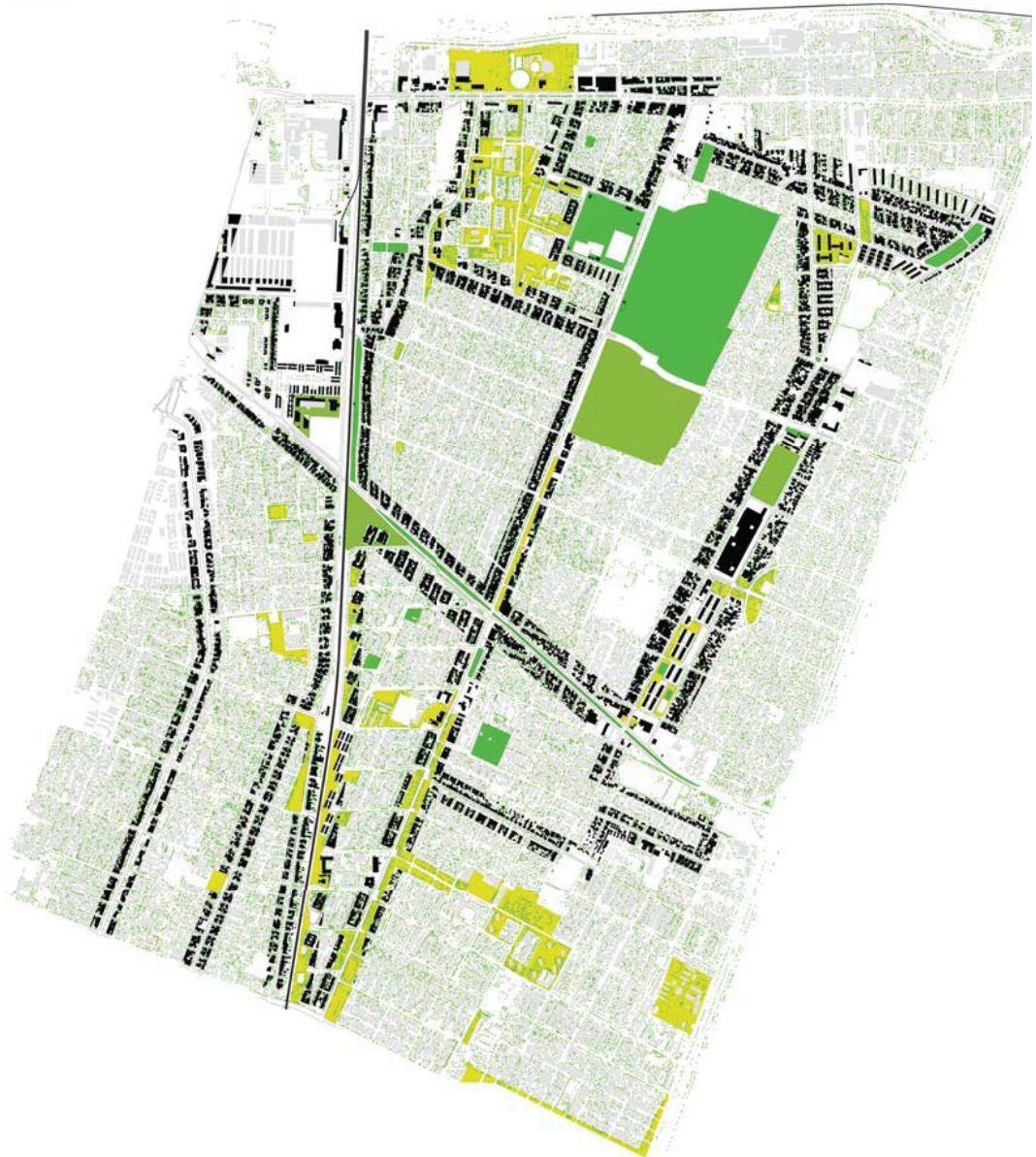
## Borders and Morphological Types





## Green Spaces

At first sight there is a clear difference visible in the density of green space in P.A.C. Green in categorization does not always mean “green” in reality. In general most ‘green’ spaces exist are not very well maintained dry sandy fields, and if the category were limited to only “bright green” (actually green) areas, there would be almost none at all. In the area of la Victoria in particular we find hardly any green spaces (one strip of land on its western edge, and some “dirt field” areas to the north), but plenty of trees, whereas more up north in San Joachim there are many. In the centre of P.A.C. we find an immense green area of which one-third has been transformed into a park: The Andre Jarlan Park.



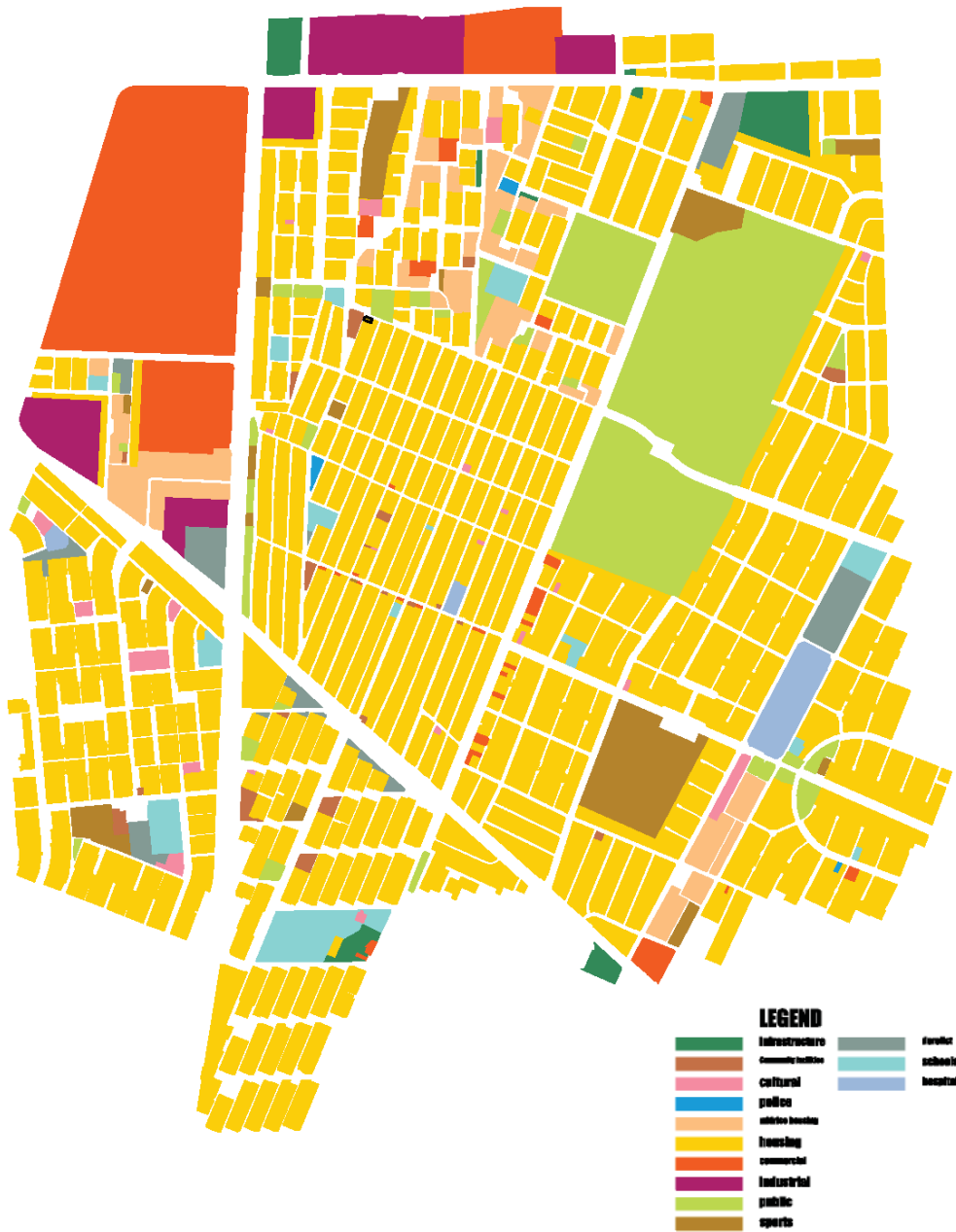
## Borders - Green Spaces

We assume that there is a direct relation between the housing morphologies and the amount of green space situated around it:

La Victoria shows a high density in low-rise housing with front and back patio. Thus there is just little amount of open space. The need for green space could also be less urgent as most people are in possession of patios that in some cases are facing the streets. The sense of green is also visible because of the amount of trees in the perpendicular streets.

In the case of San Joaquin we find the social housing blocks within the direct surroundings many open (green) spaces which have not been maintained. Any odd-shaped piece of land tends to end up as "open unpaved space" which, in real-life experience, has the quality of a dirt field often without actual function.

This could be the result of a lack of social responsibility as it is not clear who possesses these (green) spaces; thus nobody feels responsible to intervene.



## Land Use

Mapping the built footprint of urban facilities accessible to residents of PAC(excluding housing): Churches, commerce, hospitals+medical centres, infrastructure, parks+plazas, police stations public buildings, schools, sports facilities.

The difference between the last two layers is the following: Land use describes what all land area is used for but does not account for building dimensions, locations, or all functions on a zoned piece of land. Urban facilities shows the buildings and services which will be used by residents, showing what is available to them, size of the facility and where it is located.



Morphology & Land Use Analysis



## Urban Facilities



Mapping the built footprint of urban facilities accessible to residents of PAC(excluding housing): Churches, commerce, hospitals+medical centres, infrastructure, parks+plazas, police stations public buildings, schools, sports facilities.

The difference between the last two layers is the following: Land use describes what all land area is used for but does not account for building dimensions, locations, or all functions on a zoned piece of land. Urban facilities shows the buildings and services which will be used by residents, showing what is available to them, size of the facility and where it is located.



## Continuity E-W

This analysis observes the street patterns as they appear on a map, detached from the program they contain and without a hierarchy. It is made to analyze the continuity (or flow) of the district PAC and to reveal points or zones of discontinuity. All streets are simplified to lines and split up in the flow from North to South and from East to West. The points where lines are not continuous are marked with one of the three categories of discontinuity points: Death ends, T-joints and semi-continuing streets.



Morphology & Continuity E-W Analysis





## Continuity N-S



This analysis observes the street patterns as they appear on a map, detached from the program they contain and without a hierarchy. It is made to analyze the continuity (or flow) of the district PAC and to reveal points or zones of discontinuity. All streets are simplified to lines and split up in the flow from North to South and from East to West. The points where lines are not continuous are marked with one of the three categories of discontinuity points: Death ends, T-joints and semi-continuing streets.



## Continuity Analysis Conclusions

There are hardly any discontinuities inside of the area of La Victoria. This makes it in its interior a very fluid area, especially compared to the other zones of PAC. This continuity stops at the edges of the La Victoria where almost every street forms a point of discontinuity. This is a result of the different grid patterns of all the neighborhoods that clearly do not correspond. These slight jumps between the street patterns do not really cause a big connectivity problem in the sense of access, but rather one in the sense visual flow. The discontinuity clearly marks the borders of the area. On the scale of the district of PAC (the 'comuna') it is clear that there are very few points of continuity that connect the area with its larger neighboring districts. In the East-West direction the district is situated between two big highways with few passages. In the North South direction

the same happens on the North of PAC. So also on the scale of the district the borders are clearly defined by discontinuity.

An important conclusion that becomes visible when one overlays the analysis of the North-South flows and the East-West flows, is that the roads that are hardly broken up by points of discontinuity in one direction – in other words, the fluid roads – are correlating in almost all cases with the zones of discontinuity in the other direction. This means that the most fluid roads are at the same time in the other direction the most problematic in terms of continuity. These roads are often located on the borders of the neighborhoods since this is where the grid patterns change. Note here that this often means a change of build typology as well, which emphasizes even



## Urban Fragments

more the discontinuity and the difference between the neighborhoods.

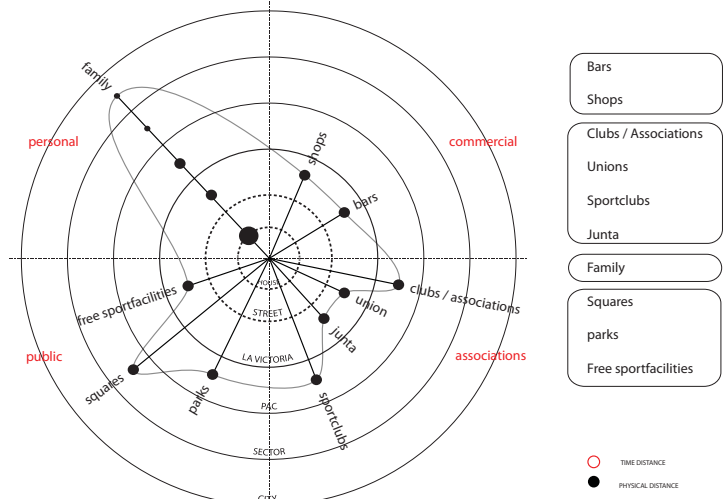
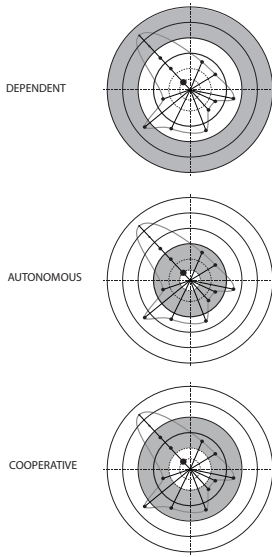
### Recommendations:

Since the discontinuities, both on the scale of the neighborhood as on the scale of the district, are caused by respectively the street patterns and large infrastructure, there is little that can be done to change the origin of the discontinuity. But in order to give the district a more fluid feeling, the places to intervene are exactly those defined strips of discontinuity where the grid changes. These strips can be designed in a way that can absorb the differences in grid structure in a better way. By emphasizing the other direction, using the open spaces along the strip, the difference between the two sides will be less pres-

ent. According to the analysis this strip is often a 'fluid' road – and because of that an important road in a certain way – which makes it even more worth to invest in these places.

# Dependency

CITY SCALE BASED DEPENDANCY STATUS



## SOCIAL RELATIONS

- social relations internally are strong in relation to the surrounding neighborhoods. The internal structure community structure.
- internal social structures in la Victoria are strong
- the community structure (divided into sub-communities) defines partly the internal social structures.
- social relations to outside la Victoria are limited (work related, family related).

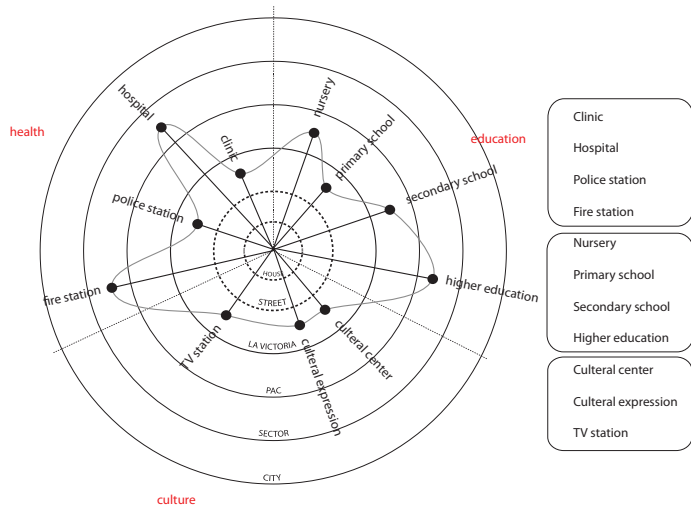
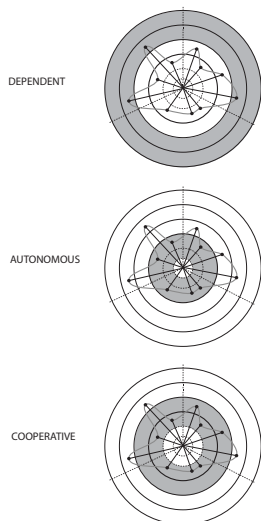
Advise: as a designer you should be conscious of the social relationship, and try to use it as an advantage, for example by enhancing the relationship between the different neighborhoods (or enhancing the social structure within the other neighborhoods) like it exists with la Victoria

## INFRASTRUCTURE

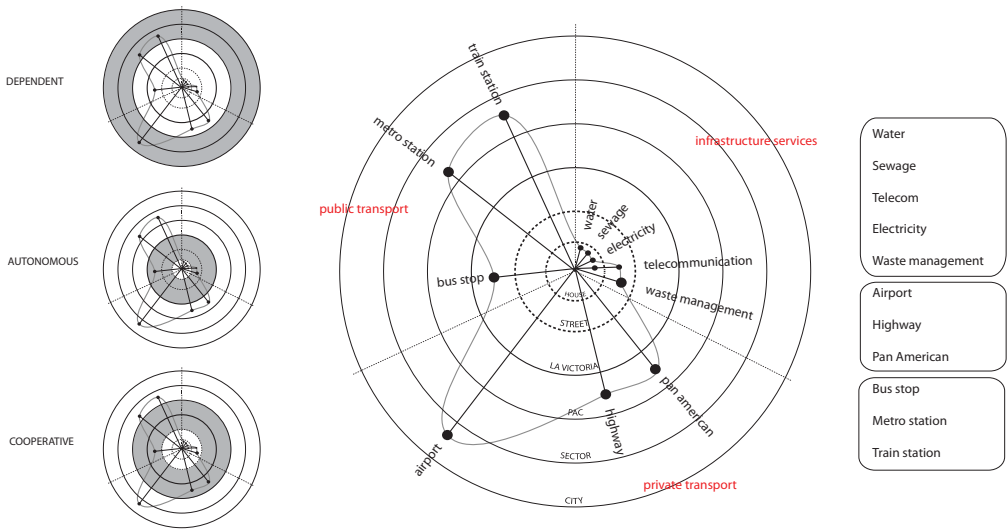
- transport is mainly by foot in the neighborhood and surrounding area.
- even though the central position of la Victoria in the city, access to public transport could be improved.
- there are opportunities for water & waste management however it should be low tech for unskilled labor

Advise: as a designer u can enhance the connectivity by providing better access to public transport and creating more options for improving connectivity?  
Shorter commute times can for example result in more time spend with the family or working hours.

CITY SCALE BASED DEPENDANCY STATUS



CITY SCALE BASED  
DEPENDANCY STATUS



FORMS OF PRODUCTION

The points and corresponding figure is spanned on different scales and classified in the primary, secondary and tertiary economic sectors.

- Primary – involving the extraction and production of raw material
- Secondary - Involves the transformation of raw or intermediate materials into goods
- Tertiary - Involves the provision of services to consumers and businesses

- working class (general staff)
- La Victoria inhabitants work over all scales of the city
- the position of la Victoria is well situated in the city

Advise: Facilitation of working at home and new opportunities for localizing jobs/work could be encouraged

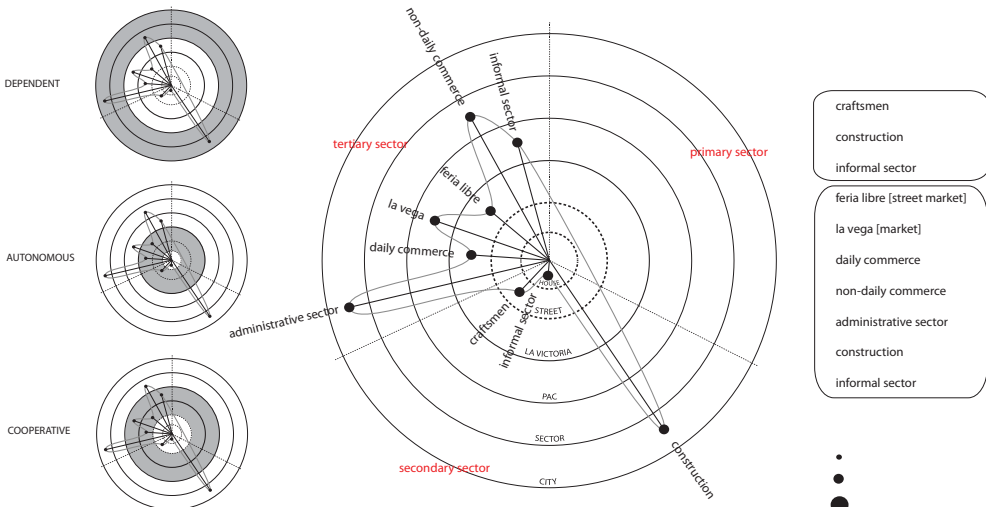
QUALITY OF LIFE

- little leisure time (long commute times + lot of work hours)
  - basic functions are in close proximity of la Victoria
  - high school needed
- Advise: providing public facilities (program) which could improve their daily life according to their lifestyle (not functions/program which they don't use).

The notions; mental perception of the world and the relation to nature, have also been taken into consideration.

In conclusion their mental perception of the world is limited to their neighborhood vs. the world. And their relation to nature is primarily defined by their spare time which is nonexistent. For example shorter commutes would already be an improvement.

CITY SCALE BASED  
DEPENDANCY STATUS  
ON INFRASTRUCTURE



### 3. Socioeconomic profile of PAC

29 % Households headed by women means these women are probably working. This means child care is either covered by family or kindergarten. Children are less controlled and go on the street. More than half of the population is between 19 and 59, meaning middle age working people. Though, the workforce is only 40,75 %.

11,59% unemployment: 7500 inhabitants of PAC are unemployed. High employment rate. This means that the unemployed people might be working in the informal/illegal sector. Probably the percentage for La Victoria alone is higher. Most people are employed in tertiary economic

sector, meaning service. Service infrastructure is very well organized: almost every household is connected to water, sewage and electricity.

Amount of green space per person is very limited! 1,1 m per capita, compared to the Dutch situation: 30 m<sup>2</sup> Most people have primary and secondary education.

87% of the inhabitants of PAC follows secondary education; 13 % does not: 1800 children between 12-18 have no access to high school due to a lack of schools and the travel distance.

DEMOGRAPHICS (2002)		ECONOMICS		FACILITIES		EDUCATION	
Inhabitants	114.211	Financial dependence on gov	55,07 %	Green area per capita	1,1 m2	Primary school	98 %
Households	30.461	Unemployment rate	11,59 %	Drinking water	99,59 %	Secondary school	87 %
Average household size	3,7	Labour force	40,75 %	Sewage system	97,09 %	Technical education	5,63 %
Households headed by women	29,42 %	Home ownership	73,55 %	Electricity	100 %	University	6,09 %
Expected growth till 2010	- 0,76 %	People employed in primary economic sector	0,89 %	Internet	7,73 % (2002)		
Ethnic population	97,09 %	People employed in secondary economic sector	25,69 %	Fixed Telephone	72,12 % (2002)		
Non-ethnic population	2,91 %	People employed in tertiary economic sector	63,54 %	Hospital	> 5 km		
Population age 0-5	8,01 %	People employed in trade and hospitality sector	27,85 %	Car possession	0,145 cars/inh		
Population age 6-11	9,74 %	People employed in construction sector	7,88 %				
Population age 12-18	11,72 %	People employed in trade and education sector	5,13 %				
Population age 19-59	55,17 %	People employed in health sector	4,12 %				
Population age 60+	15,33 %	People employed in transportation sector	9,16 %				
Average household size	3,7						

Source: Ministerio de Vivienda y Urbanismo. Observatorio Urbano

### Community Needs & Problems

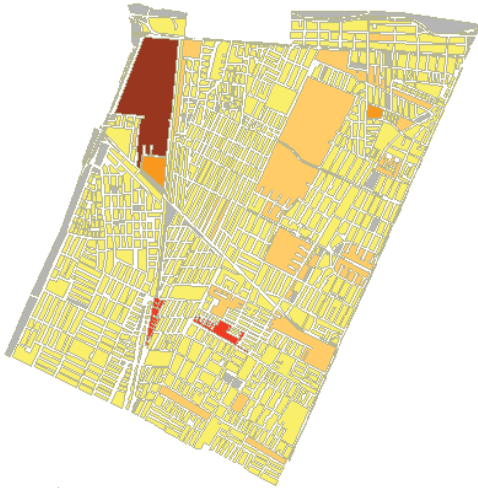
#### Needs:

- . Improvement of connectivity and mobility on city district scale
- . Improvement of public space network
- . Increased educational facilities (high school)
- . Increased entertainment and leisure facilities for the youth
- . Improved public safety
- . Preservation and revitalization of townscape
- . Preservation of social cohesion
- . Support self-organizational capacities of community

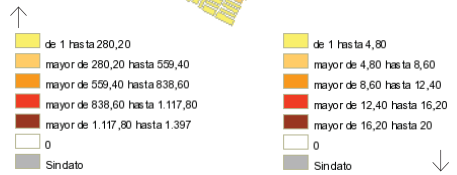
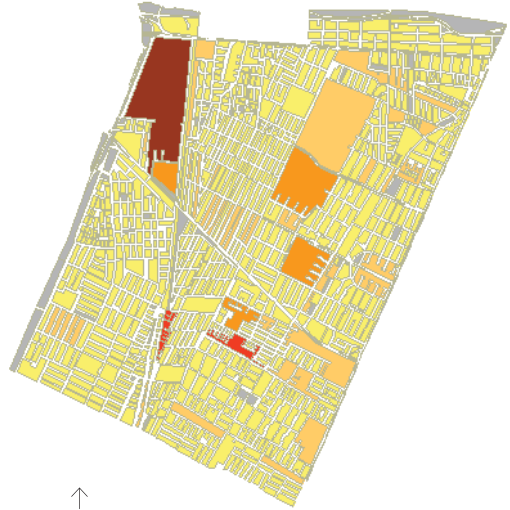
#### Problems:

- . Functions: under equipped suburban developments
- . Physical disconnection: transport, infrastructural barriers
- . Social cohesion but isolation with neighboring areas
- . Old building stock
- . Household index extremely high
- . Low land value in La Victoria because of reputation as no-go zone, effecting also neighboring areas
- . Due to morphological configuration La Victoria is less connected to primary roads, thus to centralities (CBD, sub centers)
- . No local modes of production

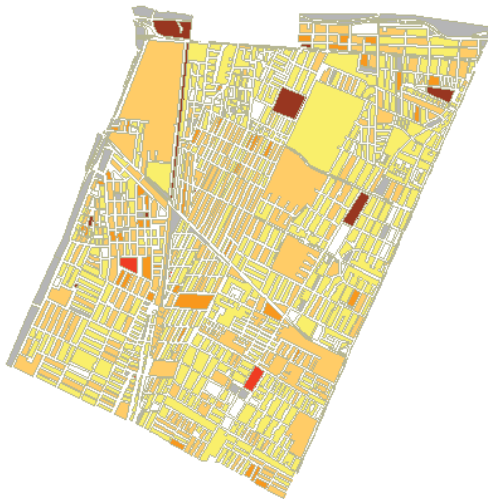
Amount of houses per block



Amount of households per block



% Overcrowded households per block



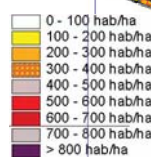
% of dangerous households per block



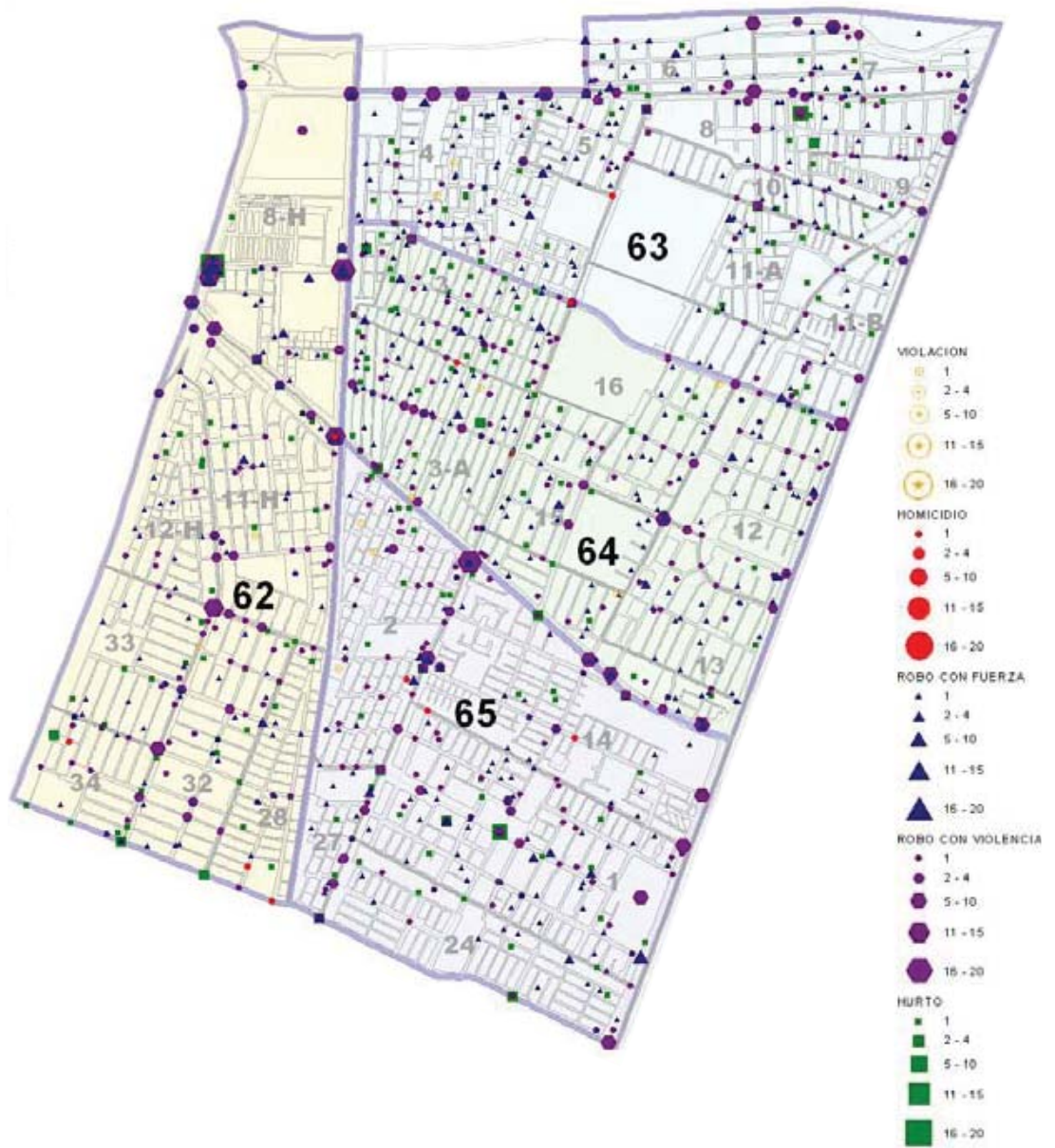
% Collective housing per block



Populations Density in the blocks



Criminal Assaults in Municipality of PAC by Type and Number Of Occurrences



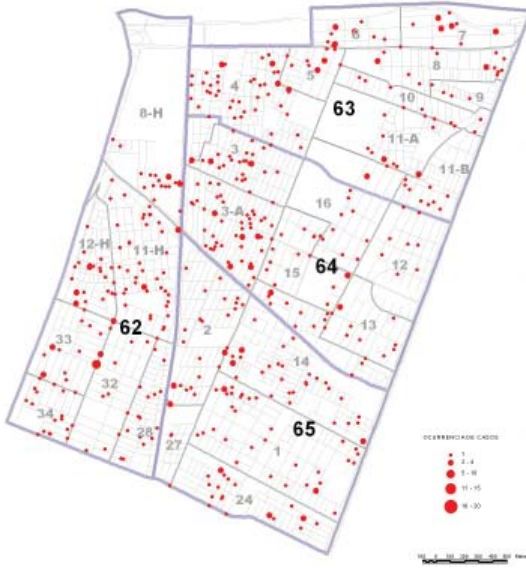
Robberies Using Force

Robberies With Acts of Violence

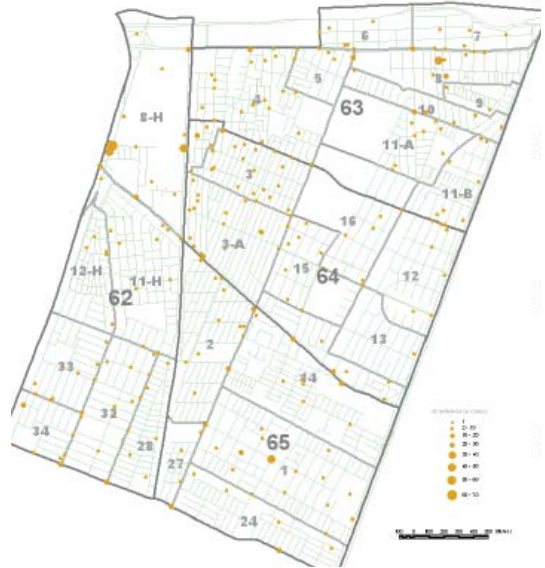




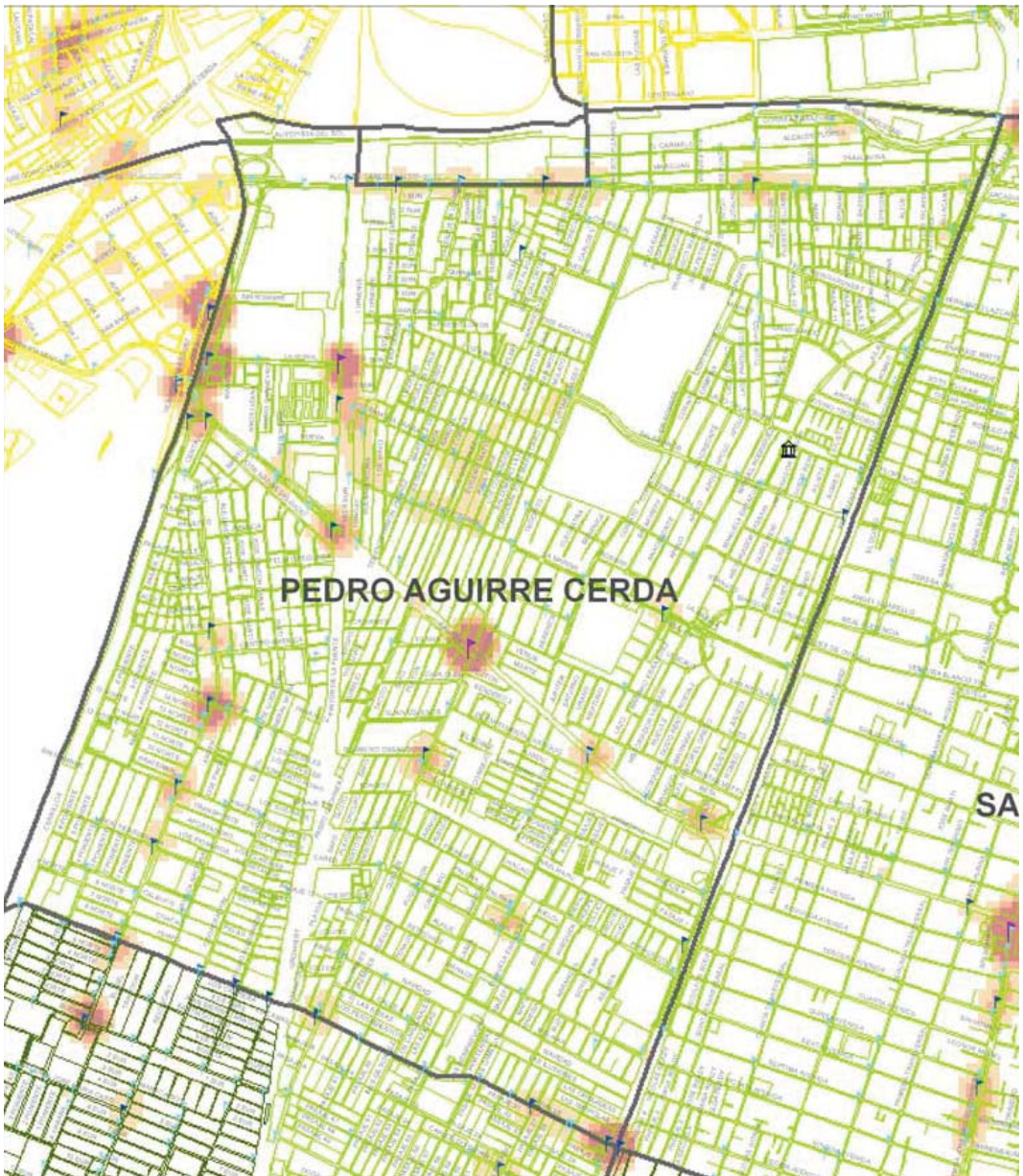
Domestic violence



Theft Complaints



Areas With the Highest Probability of Criminal Onslaught





**PAC General Relational Strategies**

**[3]**

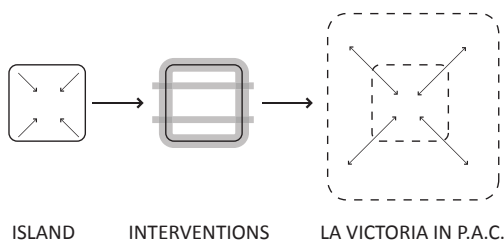


## Problem Statement

1. Due to morphological configuration La Victoria is less connected to primary roads, thus to centralities (CBD, sub centers)
2. Physical disconnection: transport, infra-structural barriers
3. Land value in La Victoria is low because of reputation as no-go zone, also effecting neighboring areas
4. Functions: under equipped suburban developments
5. Social cohesion but isolation with neighboring areas
6. Old building stock
7. Household index extremely high
8. Lack of local modes of production

## Concept

Improve spatial, social and economic integration of La Victoria in PAC and the city of Santiago by programmatic interventions, improving public space network, restoring connections on mainly the borders and main arteries of La Victoria.



## Actions

### Urbanism:

1. Integration of morphology at La Victoria's borders
2. Programmatic diversification on La Victoria's borders
3. Development of public transport routes and stops
4. Improvement of public space network
5. Improve and introduce infrastructure
6. Sustainable waste system

### Architecture:

1. Intensify land use on La Victoria's borders
2. Improving building stock
3. Revitalise industrial heritage
4. Introducing new typologies that facilitate mixed functions
5. Improved quality of the public space and its furniture

### Community empowerment :

1. Capacity building regarding construction techniques
2. Introducing new waste management program in the community centres.

## Development Goals

Spatial and economic integration of La Victoria in PAC and the nearby centralities of Santiago.  
Recognize centrality and surrounding nodal points.  
Social integration through careful implementation of the strategy via community participation.  
Overall goal:  
Strong economic, social and spatial position of La Victoria in PAC and nearby centralities.

## Impacts & Risks

### Impacts:

1. Sustainable development of La Victoria's townscape
2. Improved knowledge and skills
3. Improved employment rates
4. Improved living conditions
5. Improved social and economic exchange
6. Increased modes of production

### Risks:

1. Top down approach: resistance or no acceptance of community
2. La Victoria is stigmatised by its history: could be an obstacle for investment
3. Social integration between La Victoria and PAC might not be desired
4. Spatial interventions must accompany economic and social strategies

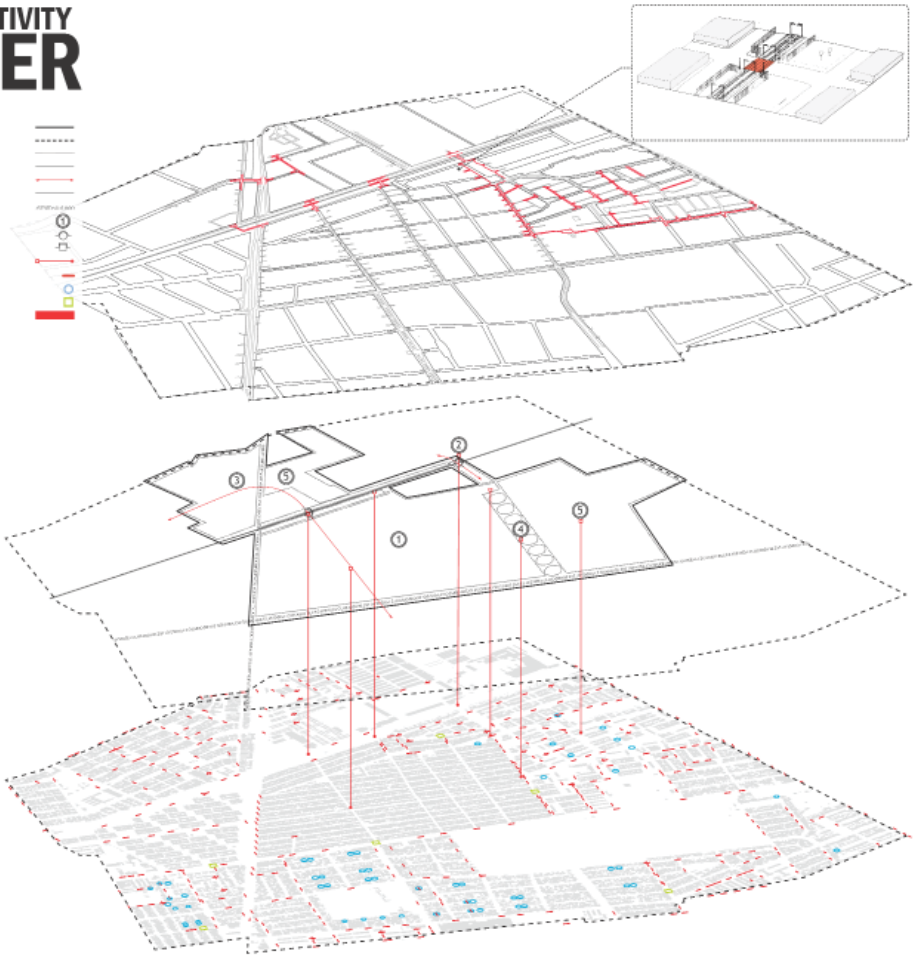
## Ambitions on Urban Scale

The general strategy is based on the inter relation of the following 4 intervention strategies: Connectivity, modes of production, density and public space network.

The following slides will present every strategy in 3 layers. The analysis map on the specific topic forms the basis behind the intervention. The second layer represents the strategy and the third layer indicates where specific interventions might take place as an outcome of implementation of the strategy.

# CONNECTIVITY LAYER

- LEGEND
- District Central Axis
  - - - - - Municipal Boundary
  - - - - - Existing Central Axis
  - Railway
  - - - - - District Boundary
  - - - - - Neighborhood Boundary
  - - - - - Major Street
  - - - - - Connectivity Strategy
  - - - - - Railway Crossing
  - - - - - Pedestrian Railway Crossing
  - - - - - Street Light
  - - - - - Dead End Street
  - - - - - Junction
  - - - - - Intersection



## 1. Connectivity

### ANALYSIS

There are hardly any discontinuities inside of the area of La Victoria. This makes it in its interior a very fluid area. This continuity stops at the edges of the La Victoria where almost every street forms a point of discontinuity. This is a result of the different grid patterns of all the neighborhoods that clearly do not correspond. The discontinuity clearly marks the borders of the area which emphasizes the exceptional (and stigmatized) status of La Victoria.

Discontinuities are often located on the borders of the neighborhoods since this is where the grid patterns change. This often means a change of build typology as well, which emphasizes even more the discontinuity and the difference between the neighborhoods.

### STRATEGY

Infrastructural and morphological connections will improve La Victoria's economic and social exchange, and its spatial integration with neighboring areas. Crossings of the railroad and large roads create a permeation of barriers. Improvements of internal road structure connects neighborhoods.

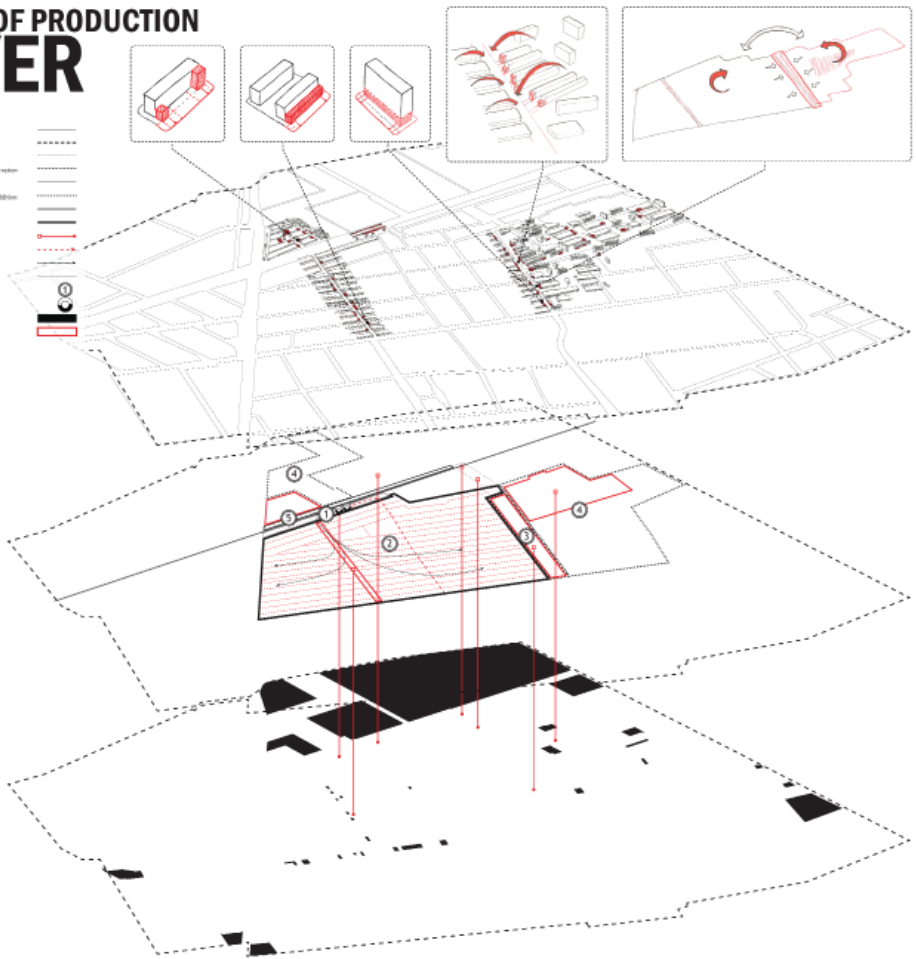
### INTERVENTIONS

Improvements on connectivity are gained by subtle interventions in the morphological structure of La Victoria and San Joaquin. The railroad is a physical barrier between Lo Valledor (and further) and La Victoria. In order to improve connections between these two, we propose an additional crossing in the continuation of Avenida 30 Octubre, thus physically connecting the Lo Valledor social housing area and La Victoria.

# MODES OF PRODUCTION LAYER

## LEGEND

- Neighborhood boundaries
- Municipal boundaries
- No modes of Production
- Roads (Roads open for Commercial use)
- Buildings
- Commercialization, Rehabilitation, Addition
- Commercialization
- Schools/Colleges
- Center Underpinning
- Open Water Collection Areas
- San Supply
- Tight Commercialization
- Strong Reference
- Gas Production
- High Commercialization
- Impervious



## 2. Modes of Production

### STRATEGY

Improved spatial conditions, via new physical connections and morphological transformations, facilitate and enhance the development of local modes of production. Small-scale interventions are placed along the borders and main arteries of La Victoria. New self-sustainable programs will build upon its strong social cohesion of the community and improve its economic position.

### INTERVENTIONS

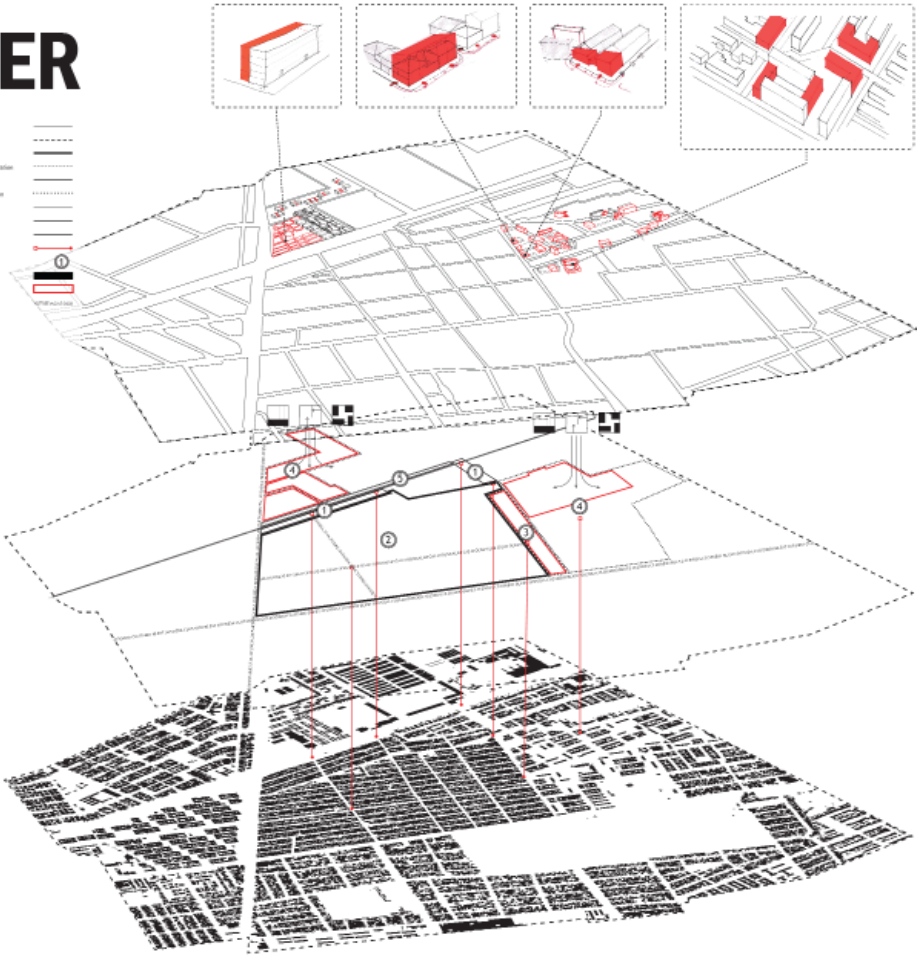
3 axes are forming a U-shape in and on the border of La Victoria. All three axes will have a different character. On the Avenida 2 de Abril we introduce new building typologies that combine both living and working. Those typologies will fit in the existing morphological structure of the street. Continuous commercial plinth on both sides along the railroad

the street profile allows commercial activity and room for public space. This 'axis' transforms from a barrier into a lively urban zone. New small scale commercial activities and accommodation related to the Lo Valledor market are planned on the market side of the railroad, forming an urban edge. The residential east side of the railroad will have a rather soft edge with public facilities. Strategies will be developed to legalize and enhance commercial activities on the corners of Avenida 30 Octubre. The three axes facilitate urban activities, offering room for local modes of production and give La Victoria the opportunity to take advantage of central location in the city. The economic position of La Victoria is strengthened. The availability of urban facilities in PAC itself releases the dependence on other centralities in the city and therefore reduces travel time and transportation costs.

# DENSITY LAYER

LEGEND

- Subdivision Boundary
- Neighborhood Boundary
- Maintenance of Existing, Discontinuation
- Master Redevelopment for Commercial District
- Construction
- Addition, Reconstruction, Conversion
- Maintenance, Existing
- Railway
- Public Space Maintenance
- Context Landings
- Strategy Rollbacks
- Building Footprints
- Streetscapes
- Water Streets



## 3. Density

### ANALYSIS MAP

In La Victoria and the surroundings areas Lo Valledor and San Joachim, the density per plot is extremely high. Families of average seven persons are living together in one house of maximum two floors, often causing internal struggles and tensions. In La Victoria it might be difficult to propose large interventions because of the strong relation residents have with the neighborhood, but many interventions on the small scale may as well improve the public space, building stock and eventually, the quality of life. In San Joaquin the particular morphology causes low density per hectare, however, the density per plot is high like La Victoria.

### STRATEGY

Mix of functions and a change in density that improves the household index. Transforming morphology redefines public space. Strategies are depending on the specific situation, allowing either implementation of new built structures, addition, transformation or renovation of existing ones.

### INTERVENTIONS

On the axis of 2 de Abril there will be interventions on the morphology adding build structure and changing direction of the existing buildings in order to improve the coherence of the street profile.

Some of the non used open spaces in San Joaquin will be filled with new low-rise housing. This aims towards a balance in the distribution of housing, it could take up some of the overpopulation of plots in La Victoria and San Joaquin.

In La Victoria, an education program for low-tech sustainable auto-construction of housing will be started which provides knowledge for future house improvements.

In Lo Valledor, for the short term, low cost interventions will give the inhabitants the possibilities to extend or improve their houses themselves.

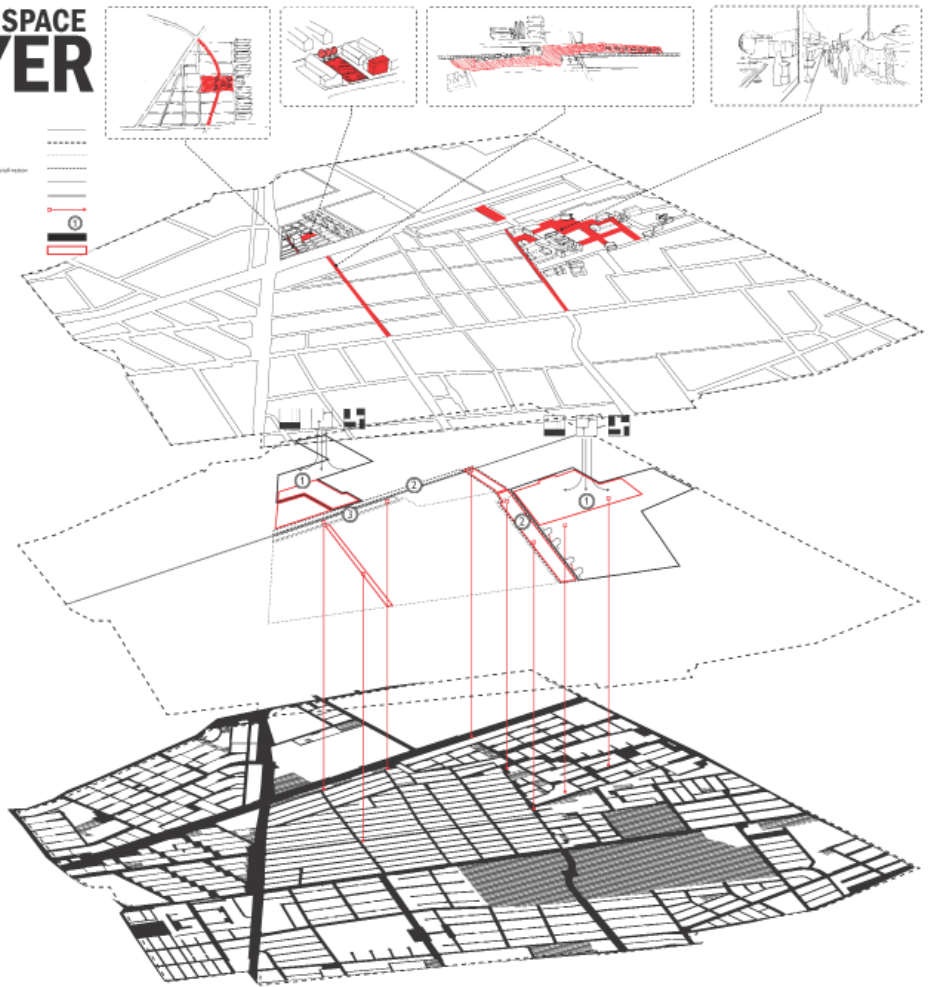
On longer term there will be alterations to the morphological structure.



# PUBLIC SPACE LAYER

## LEGEND

- Neighborhood boundaries
- Municipal boundary
- Maintenance of Parking
- Roads/Redesigns for Commercial use
- Railway
- Public Space Subdivisions
- Concept Underpinning
- Strategic Facilities
- Public Space
- Intervention



## 4. Public Space

### ANALYSIS MAP

La Victoria is relatively short of public space. However, the available space is intensively used, especially the street which hosts all kinds of parties, gatherings and fairs. The borders of La Victoria on the other hand contain relatively more public space but are not well used or maintained. By adding public facilities and commerce these spaces can be intensified, mainly in the park along the railroad and in San Joaquin where the morphological structure creates a lot of non-spaces.

### STRATEGY

Transformation of morphology and density creates conditions for better definition of public space. Presence of public and commercial facilities improves the use and quality of the public space. Existing open space offers opportunities for changes in morphology and density. Strategies like privatization, concentration and building up of open space reorganize the public space network.

### INTERVENTIONS

The definition of the street profile of 2 de Abril will be improved and adapted to developments in modes of production like the street market and small commercial activities. Additions on existing buildings will define a clear street façade. On the West side a square will be created to enhance public collective facilities.

Between the rail track and the school there will be a pedestrian and children play zone.

Along the railway track the open space will be intensified by adding small scale public facilities. Maintenance interventions will take place on the street 30 Ottobre.



**Theoretical Framework**

**[4]**

# 1. Description of the problem

Historical constrains and history of environmental degradation nowadays is clearly visible in fragmentation of certain urban areas and uneven distribution of wealth. Polarization is common throughout the entire city always because of economic rather than social emphasis of development . Pockets of wealth contrast with wastelands of uniformity, homogeneity, and mono-functionality, nevertheless infrastructure keeps hierarchical poly centric city structure intact, despite the fact that it mostly serves the central municipality of Santiago. New developments are mostly profit-driven and in most cases cause faster or slower gentrification, non-directly cornering the poorest to retrieve to less favorable areas.

*“Relations of power are not in themselves forms of repression. But what happens is that, in society, in most societies, organizations are created to freeze the relations of power, hold those relations in a state of asymmetry, so that a certain number of persons get an advantage, socially, economically, politically, institutionally, etc. And this totally freezes the situation. That’s what one calls power in the strict sense of the term: it’s a specific type of power relation that has been institutionalized, frozen, immobilized, to the profit of some and to the detriment of others.” (Foucault 1988)*

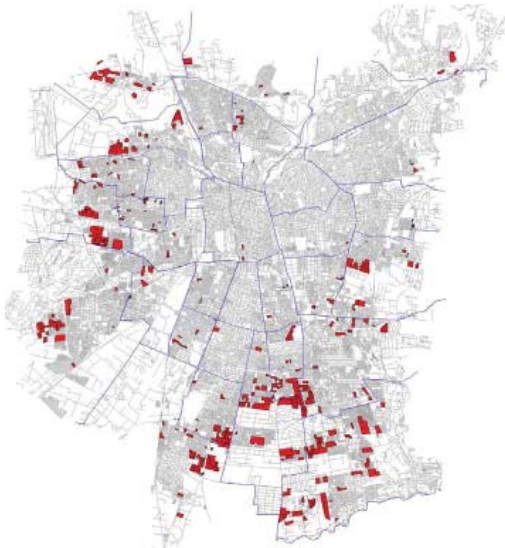
Neoliberal economy where market deregulation, decentralization and privatization makes on of the driving concepts in the country, it distorts time and space compression map to disadvantage of the least fortunate, as 2 hour commutes become an everyday reality, and up to 30% monthly income expenditures on transportation. Uneven distribution is also evident analyzing facilities, connectivity, quality, accessibility etc., and socio-economic segregation as an outcome of that. Quantity of houses is sacrificed over quality and integration, as of cheap land on which they are

developed; despite all the pitfalls it remains rather affordable. Inadequate and structurally unsound urban structures occupy vast areas of Santiago naturally sharing quite similar issues. Social, cultural, and naturally, economic poverty because of lacking basic facilities. Physical deterioration of architectural and urban environment as of under investment, non-functioning social relation model, and lack of social cohesion. Lo Valledor among numerous other housing areas is a perfect example of a typical neighborhood that failed architecturally, socially and from urban planning perspective, furthermore its inhabitants still carry a stigma of eviction during the time of dictatorship.

## La Victoria, Lo Valledor and PAC

Lo Valledor housing area case aforementioned also applies, but differently from most cases it is in a vicinity of a city centre near large infrastructure and is extremely well connected to metropolitan scale.

The community of La Victoria is much like an enclave. By its own design but certainly by its treatment as an enclave by the ‘surrounding’ city of Santiago. This identity is captured in a process that is self sustaining. In order to tackle the overall complexity, a concept of ‘subversion’ could very much illustrate the existing socio-economic state of the area. La Victoria is an exemplar of ‘Subversion’ , in a sense that it employs simple means to retain unity, individuality and self control. It opposes the eradication process of ‘others’ by the forces of market economy (the neoliberal in the case of Santiago). In it’s isolation it forms a unified block against all influences from the outside, the government, the corporate. In order to strengthen La Victoria’s position eco-



Social Housing Areas in Santiago



Time Space Compression Santiago

nomically, socially and politically La Victoria needs a strategy it can deal with and which it already knows.

The Lo Valledor area, on contrary to La Victoria, cannot be proud of social cohesion, community sense and self-organization, furthermore it has high criminality rate poor housing stock and deteriorating public space. At the nucleus of all those issues lies a problem common in most of the uniform and monotonous environments in the world- the lack of community sense. Outcomes are rather similar worldwide and spatial conditions are universal and therefore easy to predict and compare. Degradation of public space is just one of the outcomes and as Richard Sennet once pointed out is cannot be separated from the condition when masses of people *“are concerned with their single life-histories and particular emotions as never before; this concern has proved to be a trap rather than a liberation.”* (Sennet 2002) at the end he concluded that *“On the most physical level, the environment prompts people to think of the public domain as meaningless”* (Sennet 2002). Even though it is not accurate to state that there are no facilities in the area of Lo Valledor settlement, \a serious issue is quality of the most amenities in the area. Poor mainte-

nance and underinvestment, lack of governance and abandonment have left its mark on the area. A myriad unauthorized small scale adaptations land appropriations, additions and adjustments prove another typical outcome widely spread in similar uniform environments, but in this type of housing [areas] these are more than common.

‘Humanity is permanently threatened by two dangers: order and disorder’ (Paul Valéry)  
If we are to speculate about the future it is not likely that situation will worsen, as government of metropolitan Santiago and municipality of PAC is slowly but steadily improving the city, despite the fact of planning miscommunication and autonomy between municipalities. Considering all the developments that are taking place around or within PAC (park Aguada, Bicentenary plan etc.) will eventually cause a rise in land value and therefore might be a subject for gentrification. Gentrification meaning that communities inability to self organize results in their displacement by richer income groups after renovation of the area. It goes without saying that PAC is situated extremely well and therefore it would not take much time for developers to realize that, furthermore poor construction quality and life span of the structures also steadily increases the pressure and serves as a powerful argument for redevelopment/reconstruction.

## 2. Aims of the Project

### Economic pressure

Because of surrounding developments and increase of land values, the pressure on area will increase, hereby causing faster or slower gentrification. Social housing estates that do not show great social cohesion might be the first subject to change. Especially San Joaquin (North from La Victoria) where Aquada park

serves as a buffer zone between two river banks. Bicentenary park no doubt will also add to the pressure. No matter when or how these developments are implemented – gentrification is an inevitable process that sooner or later La Victoria and surroundings will have to face. Urban strategy here should ensure that increasing land prices would rise slower than peoples steps on social stairs, hereby avoiding people displacement.



Time Space Compression compared to land prices

### Needs of the community

Based on a field research and workshops pursued on site, we formulated the following needs that shall be addressed in the design proposal. Firstly, the improvement of public space quality and the amenities for leisure and entertainment both, for youth and elderly. Second, issue to be tackled is safety and criminality. Third need is related to improvement of physical condition of the housing stock. All the aforementioned have to be initiated without diminishing existing social cohesion and its enhancement where it is weak.

### Strategy for an area: collective basis

The displacement of lower income families is not at all a desired outcome of the final design

proposal. Although it would 'port' the location of La Victoria and Lo Valledor to a more acceptable level (in the neoliberal sense) of integration within the 'model' of Santiago, it would not be concerned with the present inhabitants. It 'bypasses' the betterment of the people of La Victoria and Lo Valledor. This 'gentrification' process is limited to 'inserting' foreign stakeholders and foreign agenda's which are intrinsically unconcerned with the people and only engage the location [of], the item, [and] the product. Scale and pace of this "gentrification process" (next to neglect and indifference), usually deployed over similar areas are incompatible with the idea of emancipating area's and the people that live there. [Furthermore excellent connectivity but poor integration, deteriorating housing stock, lacking social cohesion ,and as a result - community self-organization, at the end results in high criminality and decaying public amenities constituting to a 'no-go area' status among surroundings. Quite the opposite processes are happening on the eastern side of the railway where community is 'Staying small to accomplish big things' Although this reads as a contradiction it is what comes naturally to La Victoria inhabitants. Subversion is working on the whole by small 'versioning' changes that will, over time, keep La Victoria alive. Similar social cohesion and self-organization is a desired also in selected are for intervention.

The strategy is addressing four levels on which the problems that La Victoria and Lo Valledor are facing are best addressed. The interventions in La Victoria are in essence spatial, but in Lo Valledor housing area the current state of community has to be reassessed beforehand.

Therefore issues of, social economic and political inequality are addressed through realisation, through the process, the process of achieving goals. From a spatial perspective – establishment of coherent spatial structure is an ultimate goal, that should be addressed through building tighter social relations that will enable possibility for implementation of the spatial needs of the community through their spatial, physical and cultural integration.

#### Public space

Currently public space is a fundamental problem within PAC, but analyzing specific sites- it has an ambiguous nature. In La Victotria the amount of available free space is a major issue, especially when analyzing the possibility of creating new space for recreation, therefore the main type of public space available in close distance is a street. In Lo Valledor housing area and areas surrounding La Victoria, the problem is different. Major problem lies in its poor quality and maintenance which is basically caused by absence of strong

social cohesion and land-ownership model, where residents of one house own the land collectively. When the space is everyone's, it means that it is also no one's at the same time, herewith creating a situation when nobody is willing to maintain and sustain it.

Importance and definition of Social capital; its criterion

There are different perceptions of what social capital is and what are its variables, but the most common descriptions are:

Bourdieu: 'Social capital is the 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition' (Bourdieu 1983: 249).

Coleman: 'Social capital is defined by its function. It is not a single entity, but a variety of different entities, having two characteristics in common: they all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure' (Coleman 1994: 302).

Putnam: 'Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense social capital is closely related to what some have called "civic virtue." The difference is that "social capital" calls attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital' Putnam 2000: 19).

The World Bank: 'Social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions... Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together' (The World Bank 1999).

One of the most powerful features of social capital is that it becomes much easier for individuals to solve their problems, partially because individuals are much better off if they cooperate and shrinks their responsibility by doing their own share. It is best served when in the mechanism which enforces the individuals to comply with the collectively defined and therefore desired way of behavior. Social norms and the network are exactly what provides such mechanism.

Trust is the second precious asset brought by social capital that smoothens the advance-

ment and makes the transactions within networks much cheaper.

And lastly social capital improves our awareness of the many links that exist in between fates of multiple individuals. It is a fact that people who engage themselves into trustworthy connections with, firstly family members and then friends and the rest of the “players”- develop or maintain good features that is good for the rest of the society also. In the end, members tend to become less cynical and much more tolerant, understanding and empathetic towards the problems of others. Woolcock explains: “When people lack connection to others, they are unable to test the veracity of their own views, whether in the give or take of casual conversation or in more formal deliberation. Without such an opportunity, people are more likely to be swayed by their worse impulses. The networks that constitute social capital also serve as conduits for the flow of helpful information that facilitates

achieving our goals.... Social capital also operates through psychological and biological processes to improve individual’s lives. Mounting evidence suggests that people whose lives are rich in social capital cope better with traumas and fight illness more effectively. Community connectedness is not just about warm fuzzy tales of civic triumph. In measurable and well-documented ways, social capital makes an enormous difference to our lives.

Some authors have applied various indicators of social capital in different contexts. Examples include: trust (Cox and Caldwell 2000; Falk and Guenther 1999; Glaeser et al. 2000; Guenther and Falk 1999; Kolankiewicz 1996); membership (Baum and Ziersch 2003; O’Connell 2003; Price 2002; Warde et al. 2003; Wollebaek and Selle 2003); membership and trust (Lappe et al. 1997; Lochner et al. 2003; Veenstra 2002); membership, trust and norms of reciprocity (Isham et al. 2002; Skrabski et al. 2003; Staveren 2003); and network resources (Zhao 2002). Grootaert

(2001) identified the indicators as having all been used in empirical studies to measure the development of social capital, they are described in a table and are as follows:

Not all of the indicators are applicable to certain urban environments, but it can be linked when analyzing formal and informal networks, which are central to the concept of social capital. They are defined as the personal relationships which are accumulated when people interact with each other in families, workplaces, neighbourhoods, local associations and a range of informal and formal meeting places. Different types of social capital can be described in terms of different types of networks:

- Bonding social capital – describes closer connections between people and is characterised by strong bonds e.g. among family members or among members of the same ethnic group;

<i>Horizontal associations</i>	
Number and type of associations or local institutions Extent of membership in local associations Extent of participatory decision making Extent of kin homogeneity within the association Extent of income and occupation homogeneity within the association Extent of trust in village members and households Extent of trust in government	Extent of trust in trade unions Perception of extent of community organization Reliance on networks of support Percentage of household income from remittances Percentage of household expenditure for gifts and transfers
<i>Civil and political society</i>	
Index of civil liberties Percentage of population facing political discrimination Index of intensity of political discrimination Percentage of population facing economic discrimination Index of intensity of economic discrimination Percentage of population involved in separatist movement Gastil's index of political rights Freedom House index of political freedoms	Index of democracy Index of corruption Index of government inefficiency Strength of democratic institutions Measure of 'human liberty' Measure of political stability Degree of decentralization of government Voter turnout Political assassinations Constitutional government changes Coups
<i>Social integration</i>	
Indicator of social mobility Measure of strength of 'social tensions' Ethnolinguistic fragmentation Riots and protest demonstrations Strikes Homicide rates Suicide rates	Other crime rates Prisoners per 100,000 people Illegitimacy rates Percentage of single-parent homes Divorce rate Youth unemployment rate
<i>Legal and governance aspects</i>	
Quality of bureaucracy Independence of court system Expropriation and nationalization risk	Repudiation of contracts by government Contract enforceability Contract-intensive money

it is good for 'getting by' in life. - Bridging social capital – describes more distant connections between people and is characterized by weaker, but more cross-cutting ties e.g. with business associates, acquaintances, friends from different ethnic groups, friends of friends, etc; it is good for 'getting ahead' in life. - Linking social capital – describes connections with people in positions of power and is characterized by relations between those within a hierarchy where there are differing levels of power; it is good for accessing support from formal institutions. It is different from bonding and bridging in that it is concerned with relations between people who are not on an equal footing. An example would be a social services agency dealing with an individual e.g. job search-

ing at the Benefits Agency. Social capital describes the pattern and intensity of networks among people and the shared values which arise from those networks. Greater interaction between people generates a greater sense of community spirit. Definitions of social capital vary, but the main aspects include citizenship, 'neighborliness', social networks and civic participation. The definition used by ONS, taken from the Office for Economic Cooperation and Development (OECD), is "networks together with shared norms, values and understandings that facilitate cooperation within or among groups"

### 3. Local Problem Statement

Social networks in Lo Valledor are weak, which results in low initiative to maintain collectively owned assets (public space, amenities, facilities). Poor integration with the surroundings, due to physical borders (railway, highway) and high criminality makes it a no-go zone. This also makes it much harder to establish local means of production. Lack of investment, results in lack and poor quality of the existing facilities, hereby creating some major inconveniences to community, stagnating the improvement of living conditions. The area does not make use of the easy access to infrastructure (highway), which also indicates unused potentialities. In general main indicators of social capital, namely: trust, membership, norms of reciprocity and networks, are weak, poor, or

nearly non-existing. As a result, the aforementioned indicators lie at a very basis of the problematique that area of Lo Valledor faces. Every other issue either is a result of aforementioned or complementing factor, increasing the stagnation of current state.

### 4. Hypothesis

Integration of social capital assets in the area can reverse physical decay of the urban environment and minimize the negative factors of inevitable gentrification process. Strengthening the networks inside the local context will give the possibility to develop a stronger position on metropolitan level.

More specifically, the progress can be achieved through the following:

Increasing social cohesion as trigger to start a spatial and economic regeneration.

Change of the current land ownership scheme in the area with no doubt can serve as a powerful stimulus to strengthen the community and increase the sense of personal responsibility for maintenance and sustainability of the public assets. Improving spatial integration will provide higher consumer flows that are crucial to enable local

modes of production.



## 5. Research Questions

Economic:

Which of the factors-at-work causes the most threats for a success of design?  
What funding sources can be applied in the selected context?

Spatial:

How to prevent decay of public space?  
What spatial construction means are applicable for the specific urbanity?  
What criteria and its parameters are essential to prevent the model from failure?  
What are possible strategies to reverse physical deterioration of housing estates?

Social:

What are the positive and negative characteristics of community in the area (in a sense of ability and willingness to integrate, and up unto what sacrifices they could go for common good)?  
What aspects of planning tradition are limiting and what new aspects are apt to be farfetched from different contexts?

## 6. Societal and Scientific Relevance

Societal relevance

The Lo Valledor area is only one among other sites in Santiago sharing rather similar problematique. Social capital is one of the main criterions to test the success or failure of the project, but it is a quite general. On the other hand, developing a universal strategy for building up social capital could be universally applied in the areas with the problematique having same origins. The strategy also involves numerous societal parameters that are a subject for improvement, and are extremely relevant for the entire project.

Scientific relevance

Environmental degradation of public space is a widely discussed issue, not only in Latin America. Creation of strategy to battle the problems in these environments can be farfetched to different contexts.

## 7. Methodology

1 Constructing the criteria (Hypothesis) Problem statement, Research questions

2 Exploring spatial contradictions/nodes in all scales

3 Acknowledging potential spatial functional links

4 Constructing a network in between potentialities and nodes

5 Analyzing the most extensive link in network

6 Exploring particular needs of particular communities on the link separately from entire structure

7 Fine-tuning particular needs and spatial demands in context of the surrounding elements and entire backbone and larger context

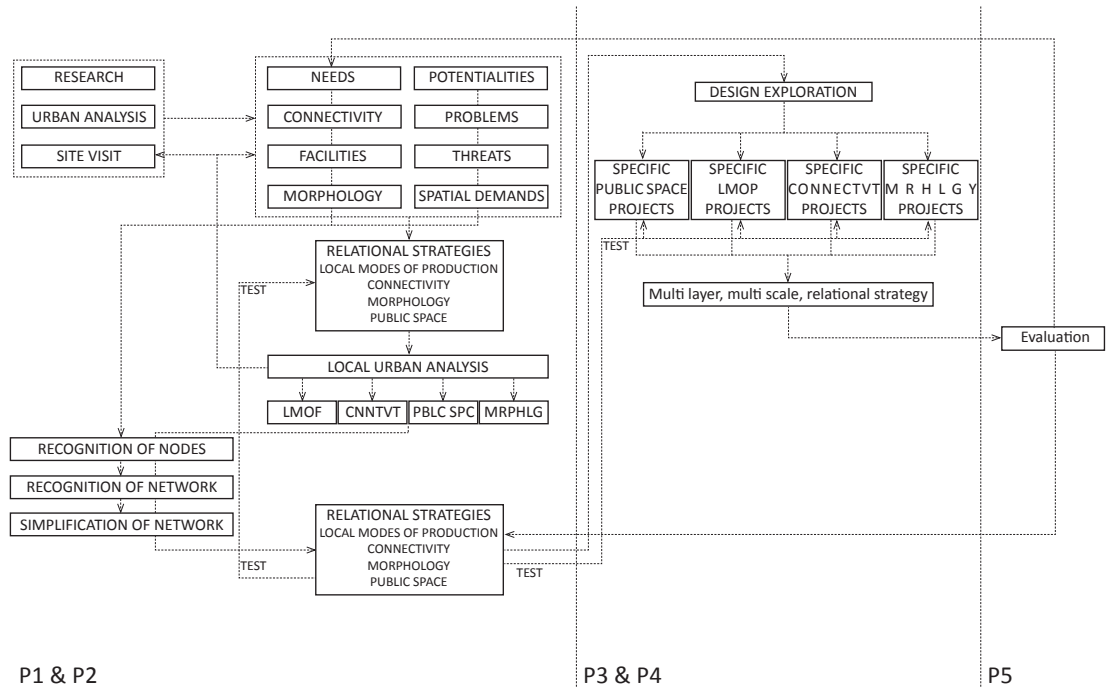
8 Adjusting the backbone according to spatial demands or particular community needs based on criteria

8 Testing particular spatial features in between localities and backbone in order to ensure the coherence of the entire mechanism on all layers and scales (maximizing benefits for the specific parts).

9 Spatializing the strategies through design exploration in different layers and scales

10 Analyzing the strategic interventions in space and time.

11 Evaluation of the design exploration through theoretical framework, hypothesis and research questions





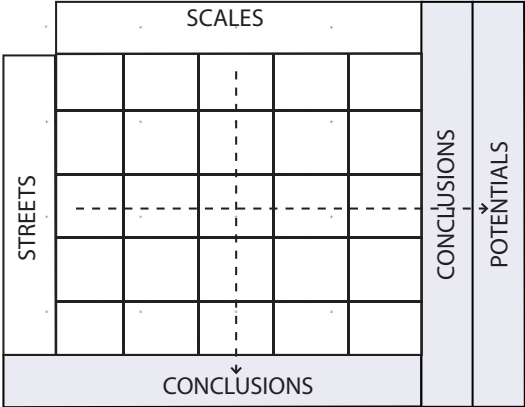


# **Towards a Relational Development Model [5]**



# 1. Analysis Method

The analysis method aims at creating solid argument towards a relational development strategy. It analyzes all relevant street in all scales and all layers, this way it becomes possible to notice certain occurrences and draw conclusions. Analysis provides both vertical and horizontal ones, where vertical conclusions are per scale of certain layer and horizontal ones talk about the street. In the end it provides enough information to draw potentialities, that derive from combination of both vertical and horizontal conclusions.



Calle Nueva



Antonio Dacamara



Anita Lizana





La Rural



30 Octubre



Dos de Abril



Avenida Maipu



La Feria



Avenida Departamental





Areal View Lo Valledor



Areal View to Matadero & Pan-American Highway



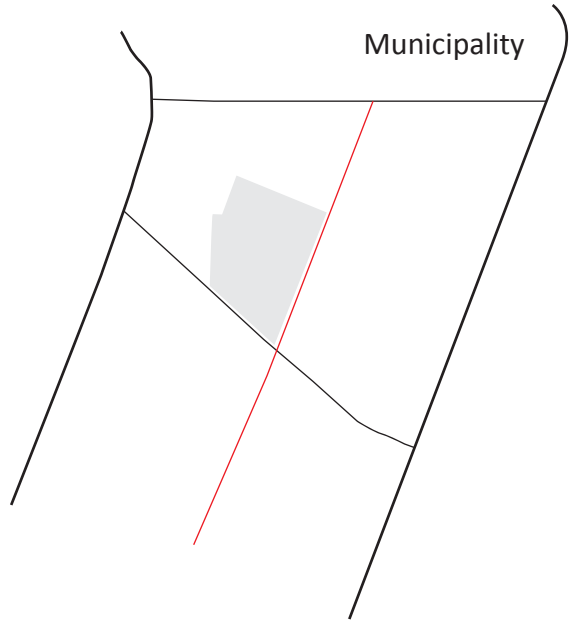
Areal View to Lo Valledor

## 2. Connectivity

La Feria



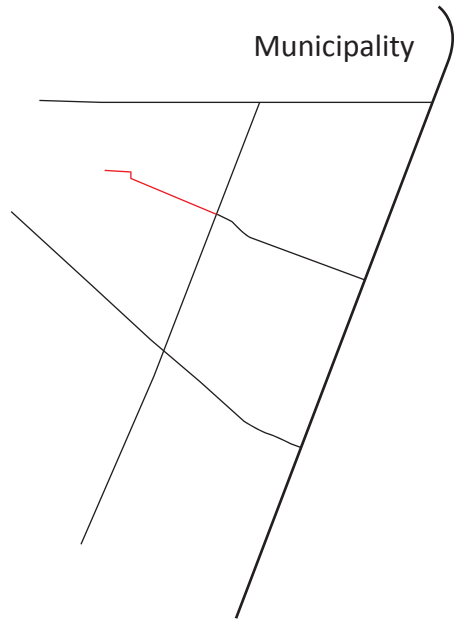
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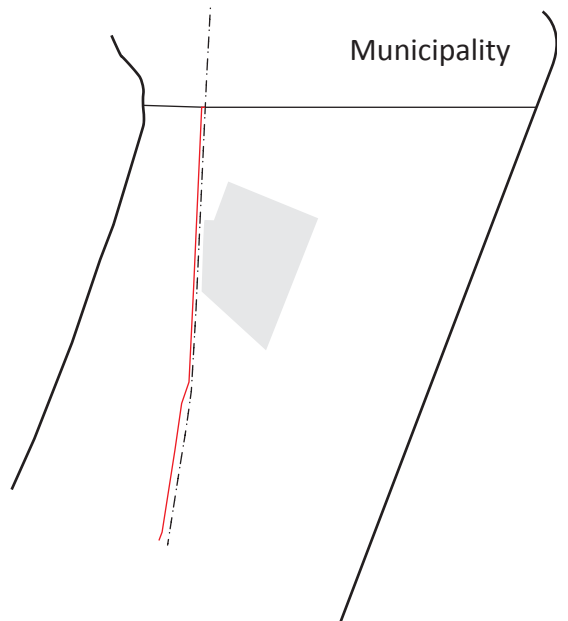
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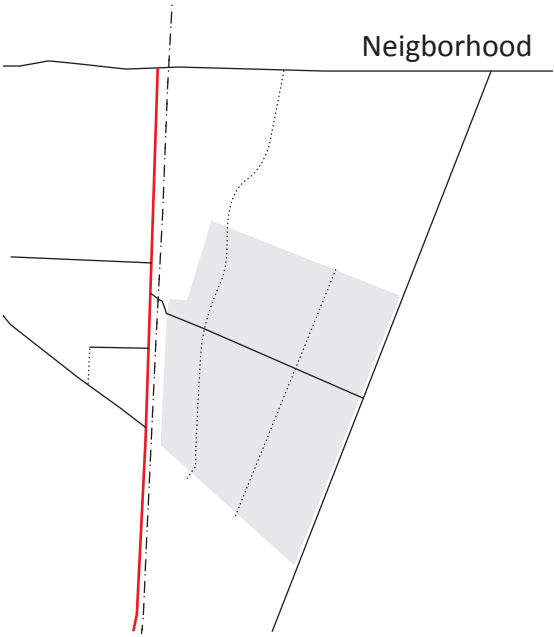
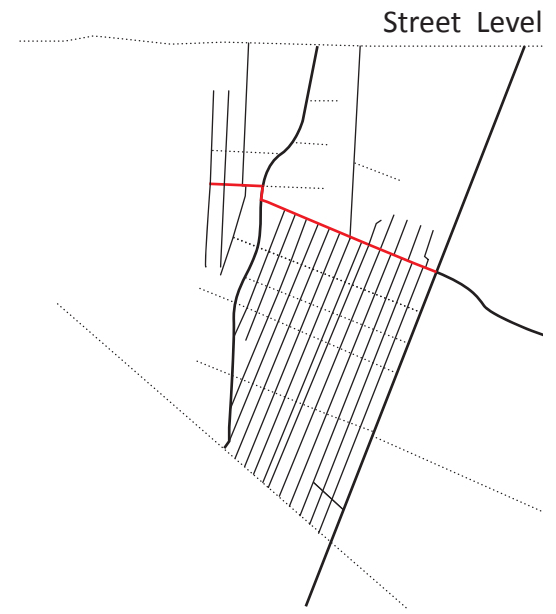
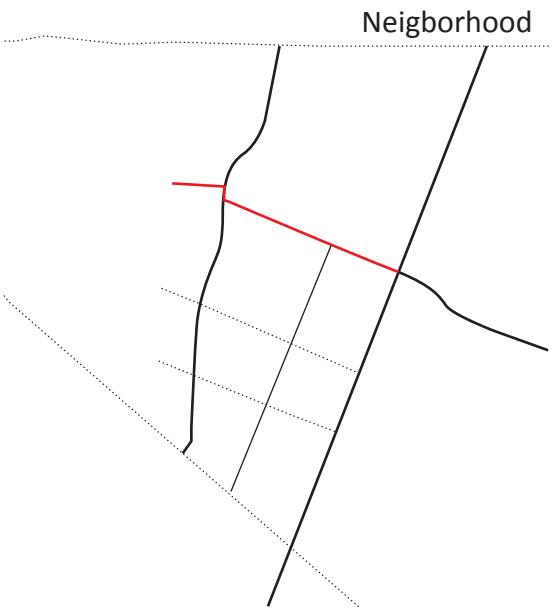
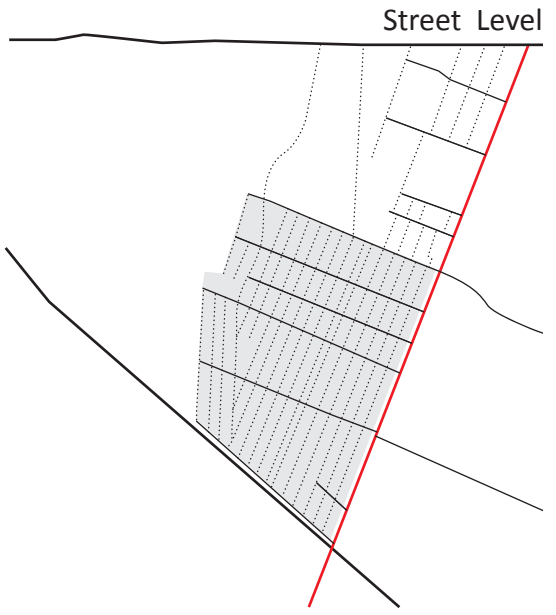


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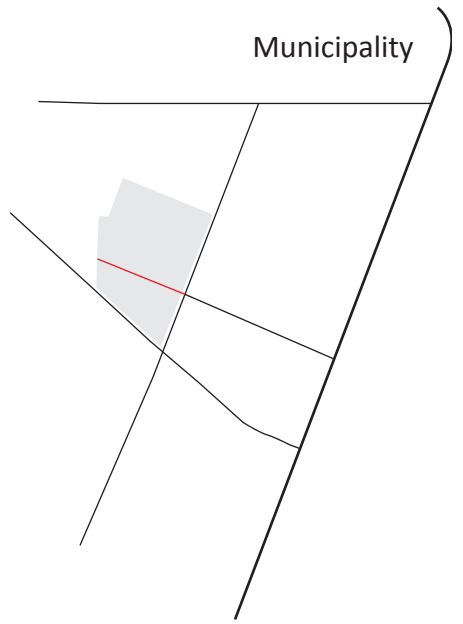




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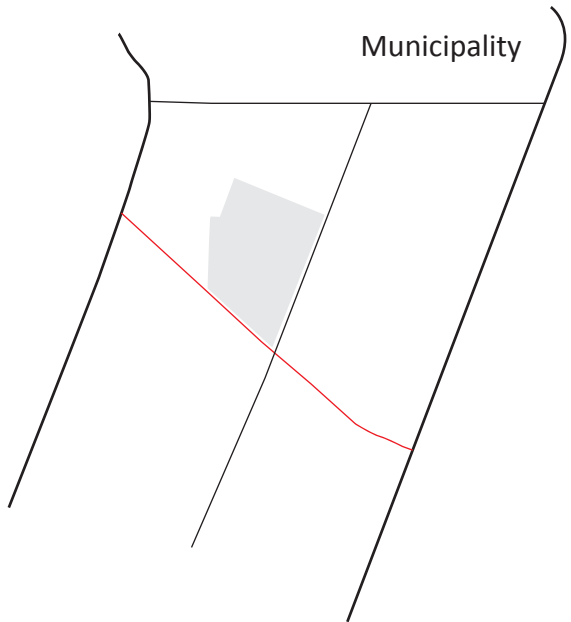
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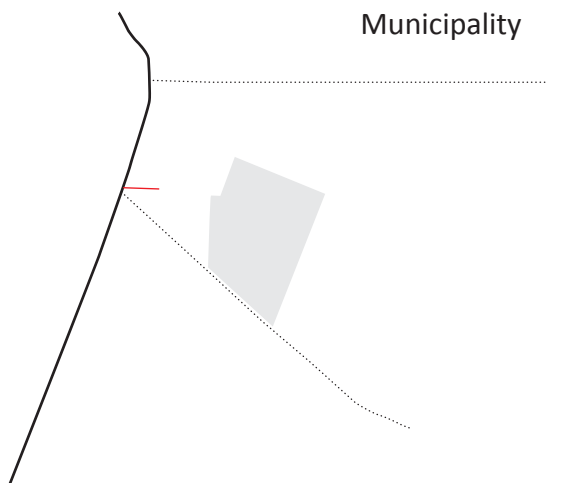
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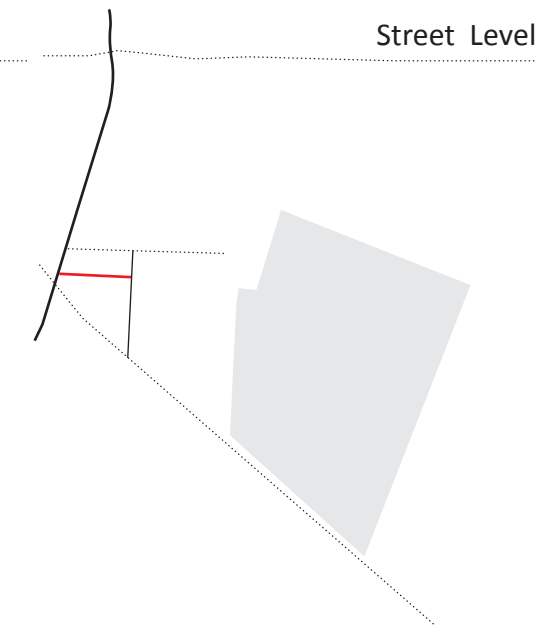
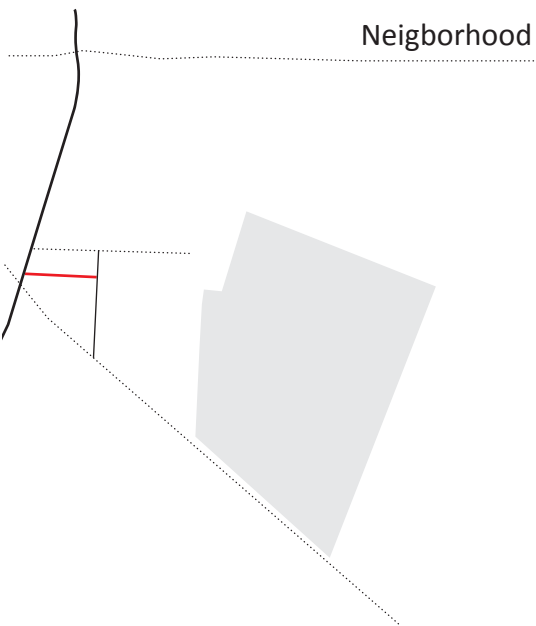
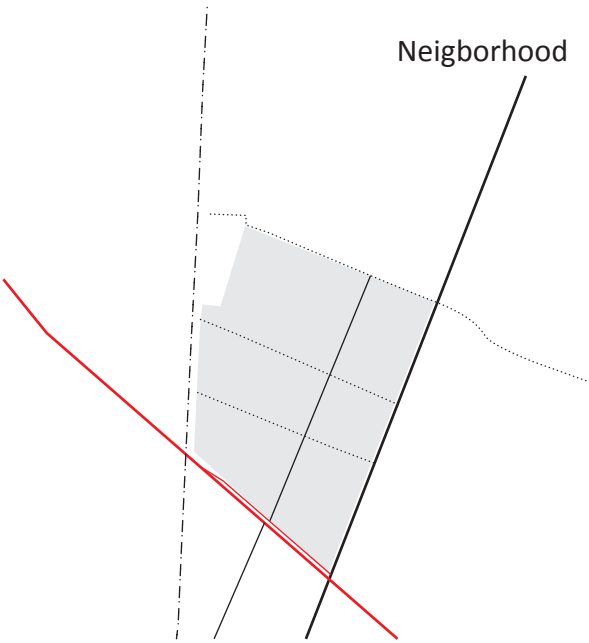
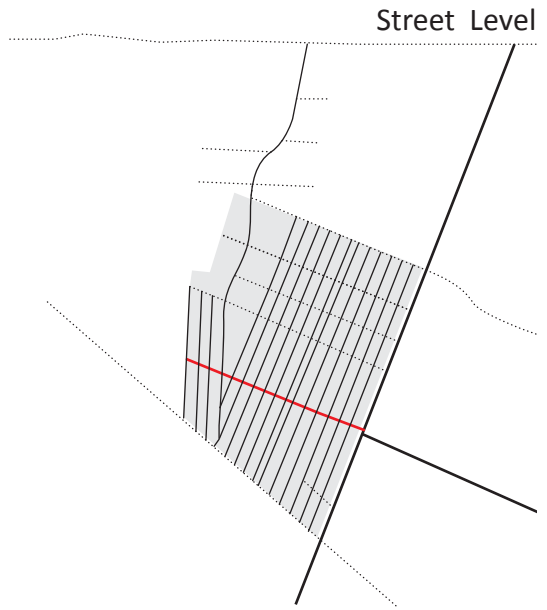


Antonio Dacamara

Metropolitan

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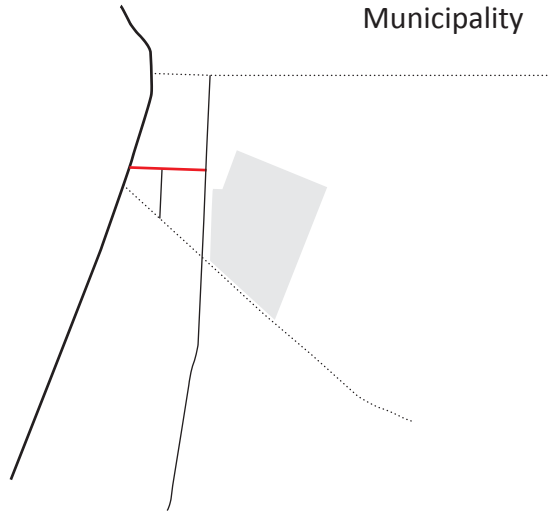




La Rural



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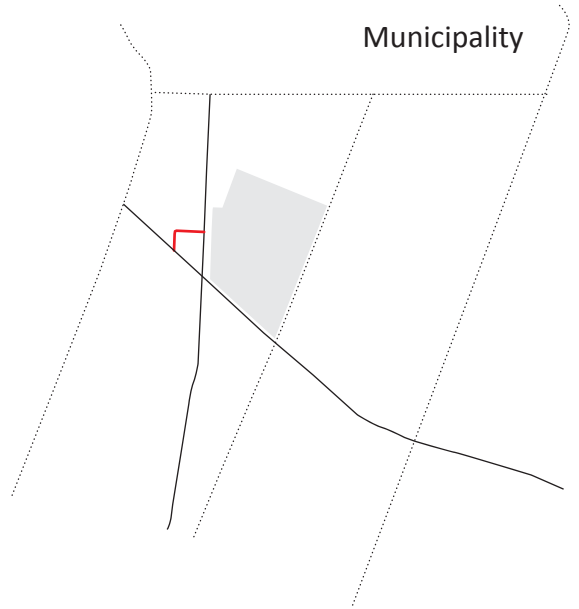


Municipality

Calle Nueva



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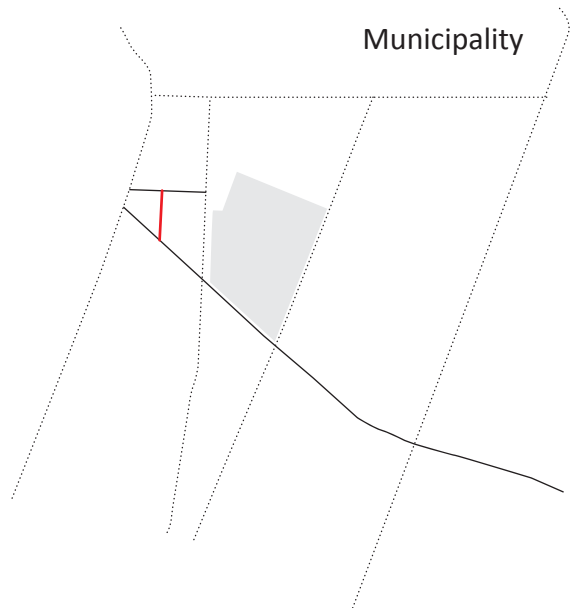


Municipality

Anita Lizana

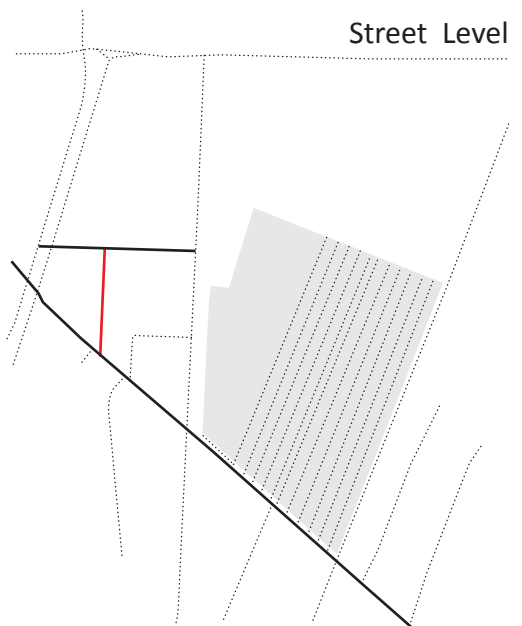
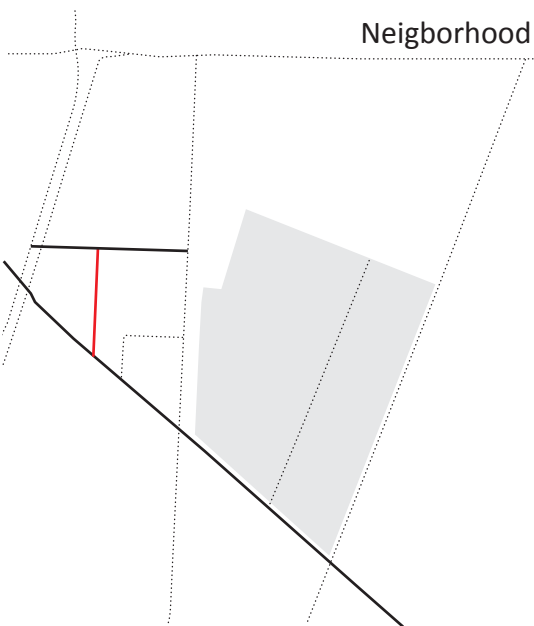
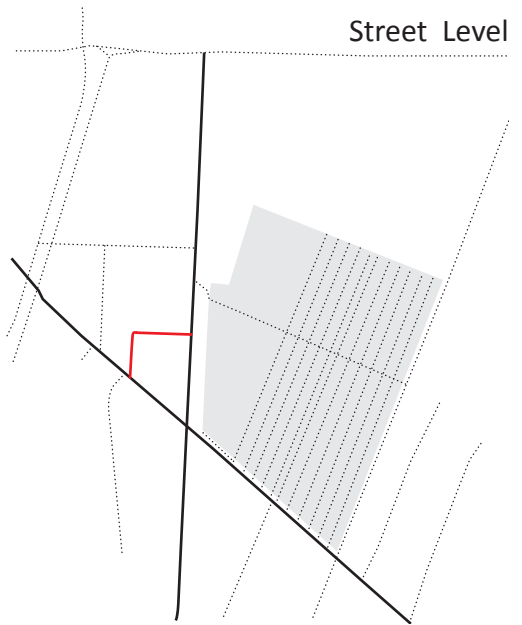
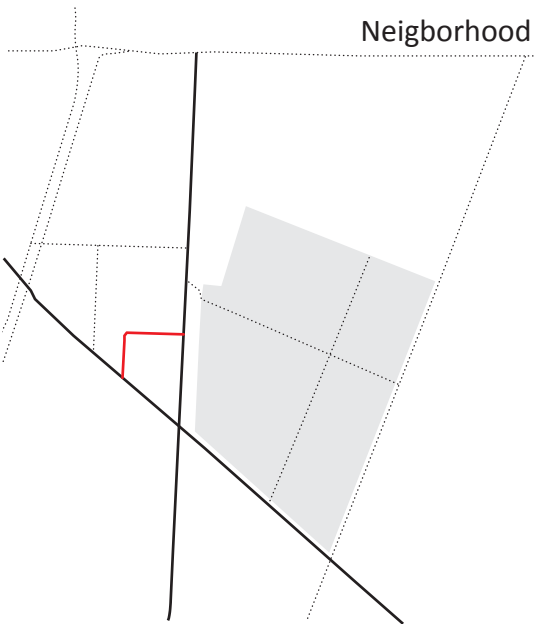
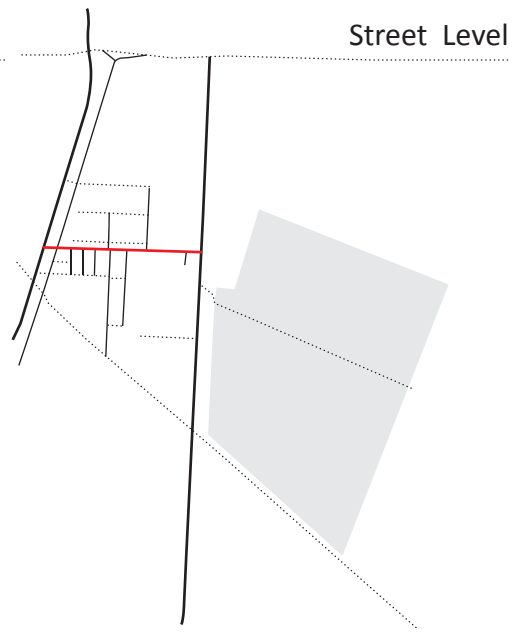
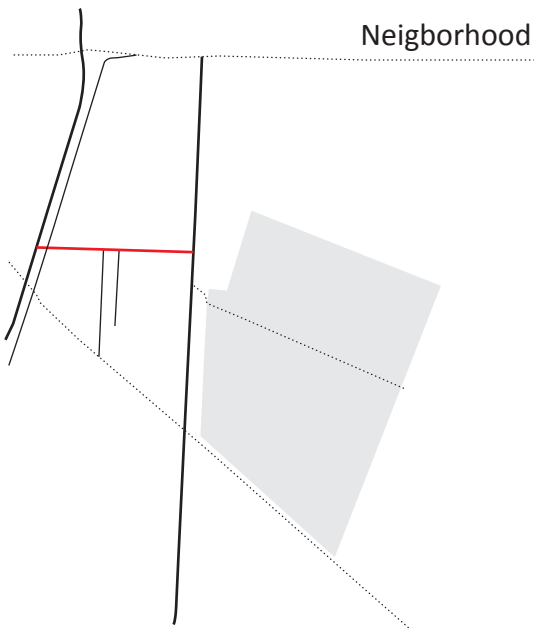


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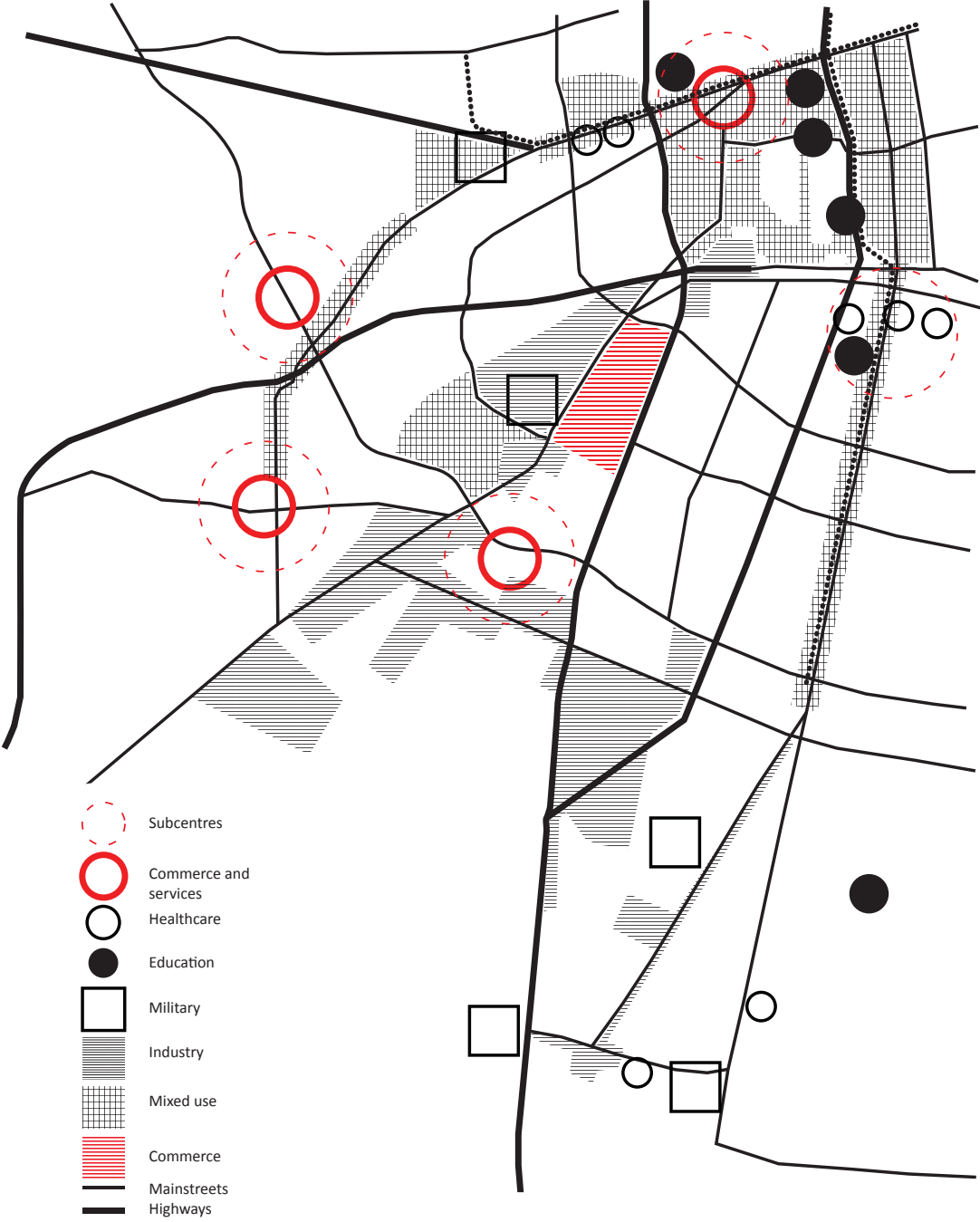


### 3. Modes of Production

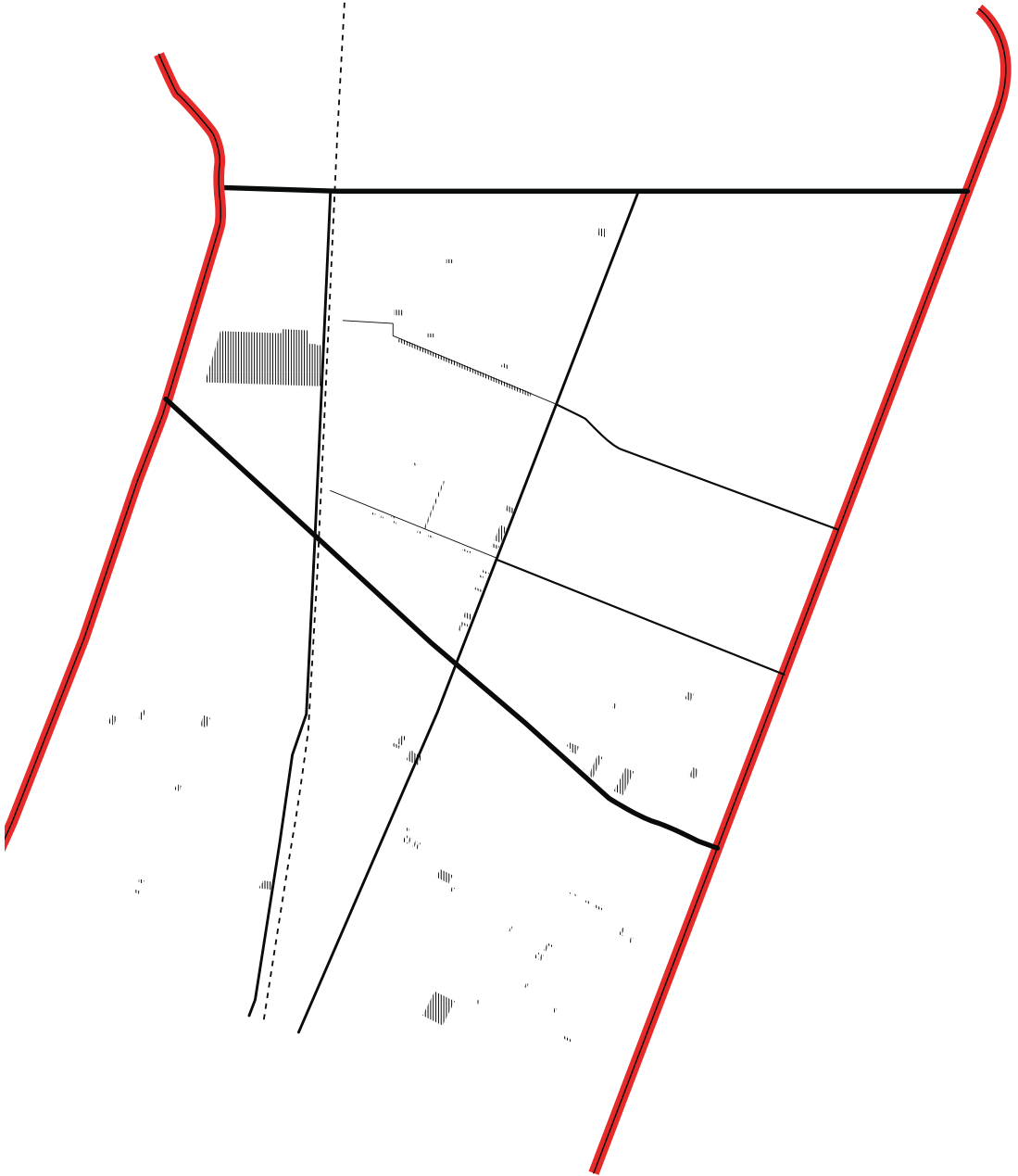
Metropolitan Scale



Municipality Scale

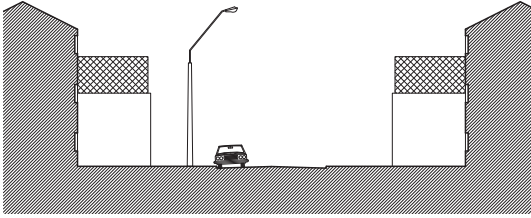


# Neighborhood Scale

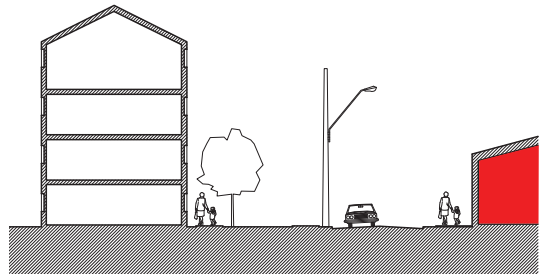


Street Scale

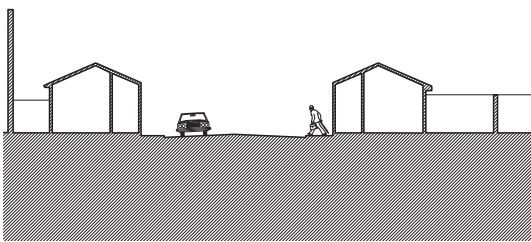
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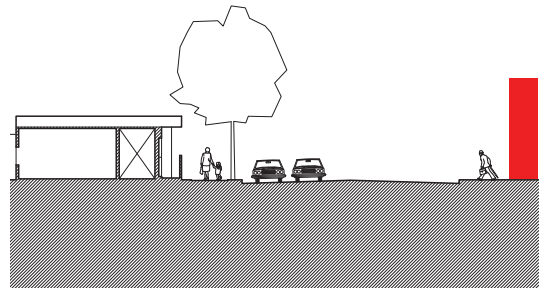
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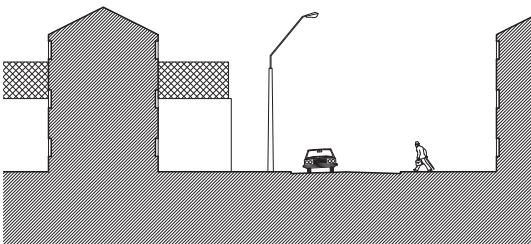
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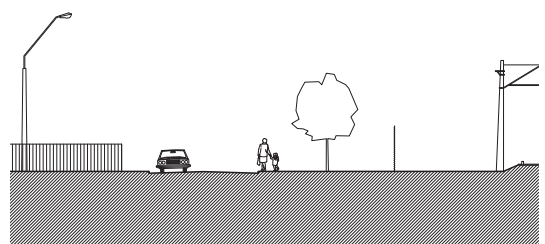
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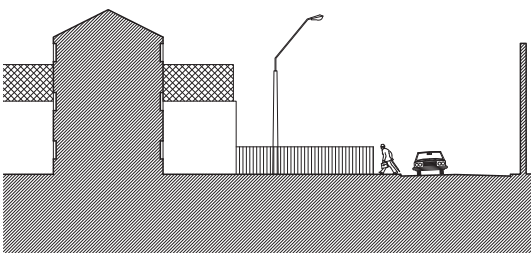
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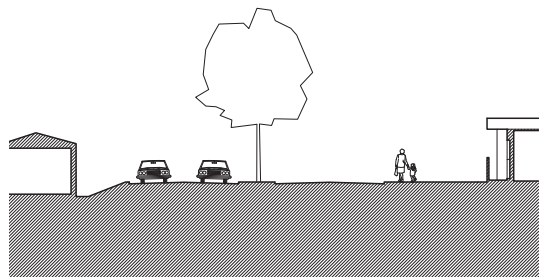
Avenida Maipu



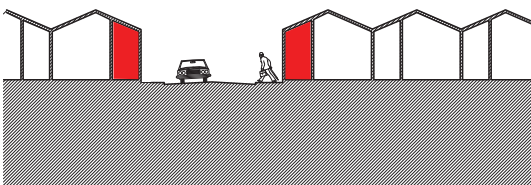
La Rural



Avenida Departamental



30 Octubre



# 4. Morphology

Metropolitan Scale



Municipality Scale



Neighborhood Scale



Neighborhood Scale



Calle Nueva

Dos de Abril



Antonio Dacamara

La Feria



Anita Lizana

Avenida Maipu



La Rural

Avenida Departamental

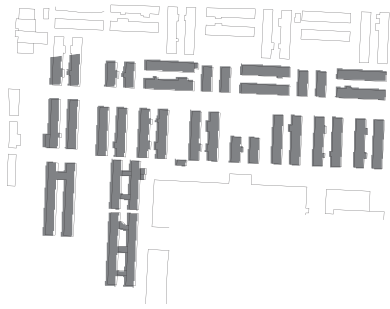


30 Octubre

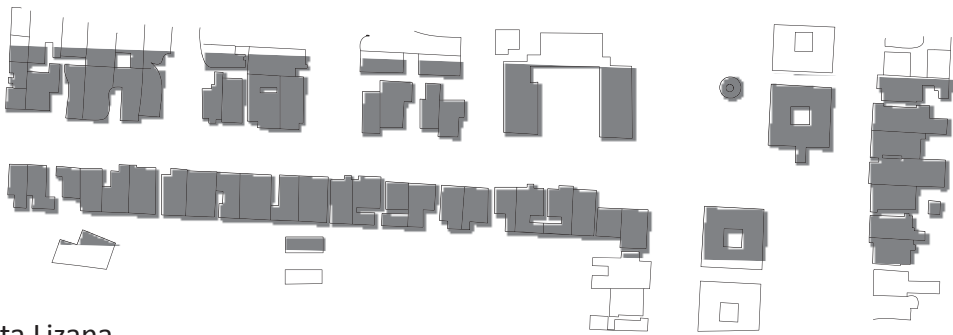


## Neighborhood Scale

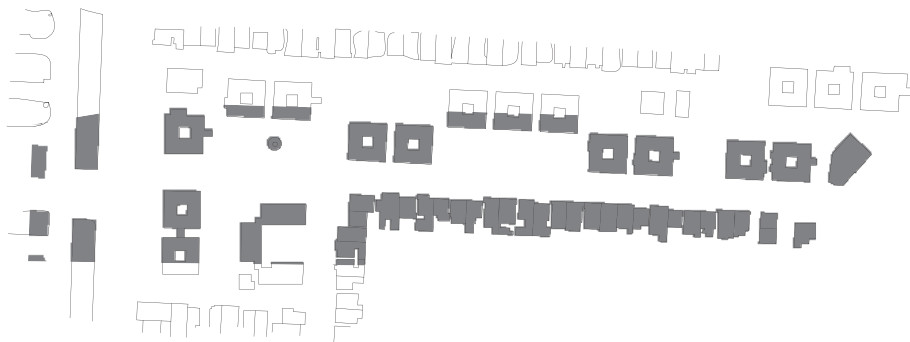
### Calle Nueva



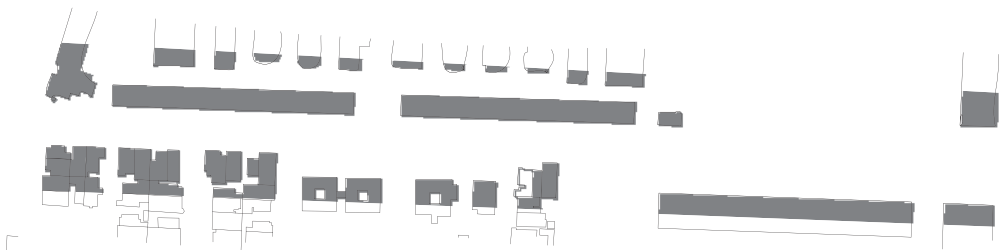
### Antonio Dacamara



### Anita Lizana



### La Rural

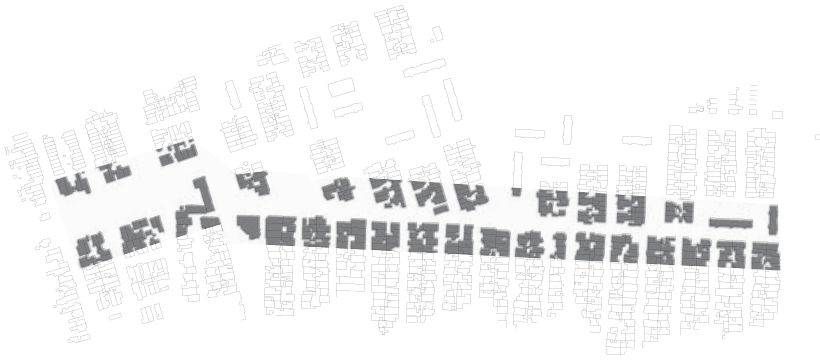


### 30 Octubre

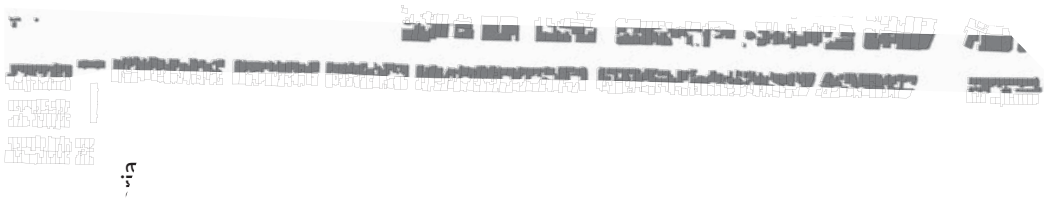




Dos de Abril



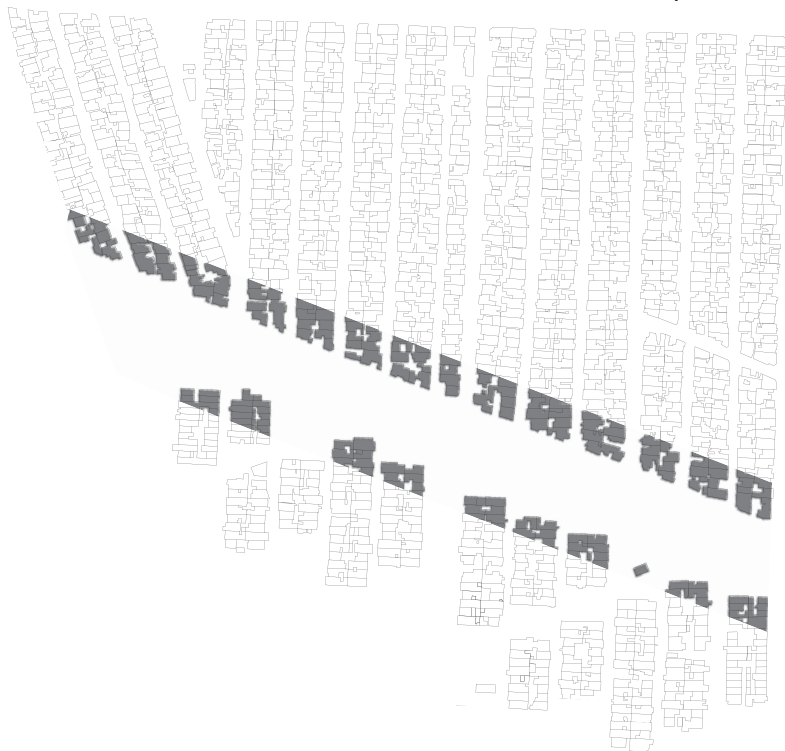
La Feria



Avenida Maipu



Avenida Departamental

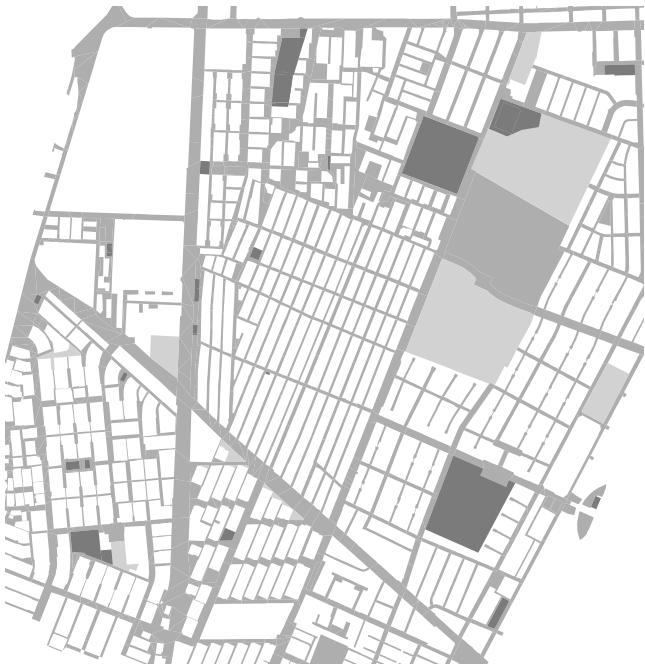


# 4. Public Space

Metropolitan open space



Municipality Level Open Space



Metropolitan Public Space

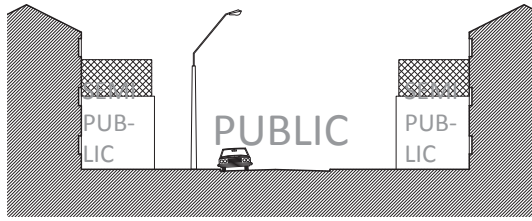


Municipality Level Public Space

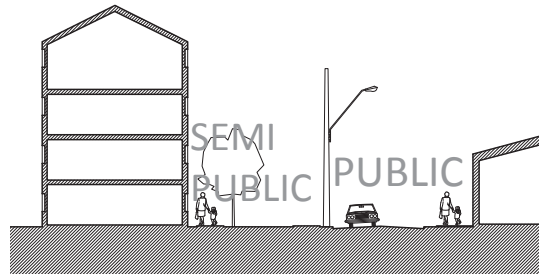


Street Scale

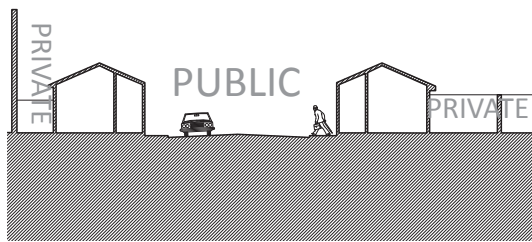
Calle Nueva



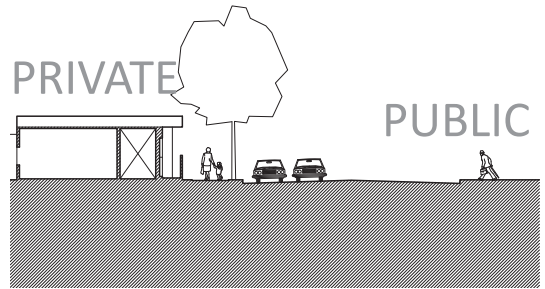
Dos de Abril



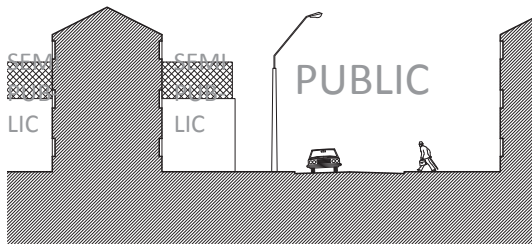
Antonio Dacamara



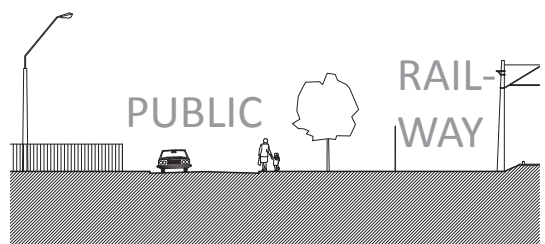
La Feria



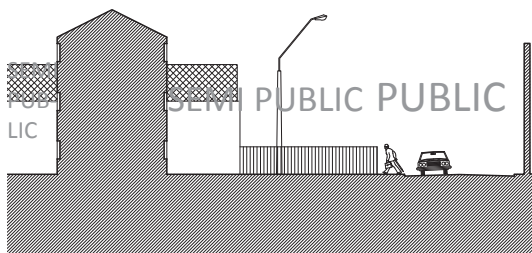
Anita Lizana



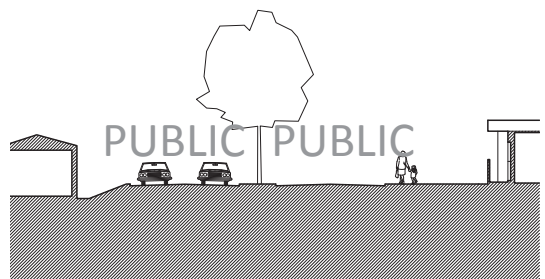
Avenida Maipu



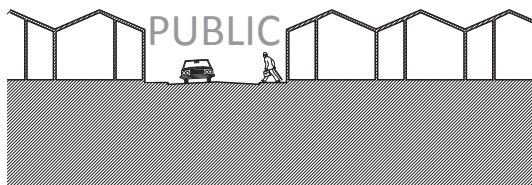
La Rural



Avenida Departamental



30 Octubre



## 5. Conclusions Per Street

### Calle Nueva

#### PROGRAM

- New crossing on railway line connecting Lo Valledor housing area to Av. 30 Octubre.
- Adaptation strategy for the existing buildings (orientation of buildings towards Avenida Maipu and opening up of the plinth for commercial functions) allows for an improvement and diversification of the existing residential building stock
- blocks into new collective private or semi-public gardens.



### Antonio Dacamara

#### PROGRAM

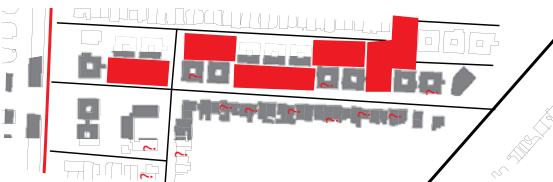
- Densification through additions on existing dwellings (and southern orientation= shade side) allows for new typologies of living and working: e.g. studio/atelier spaces.



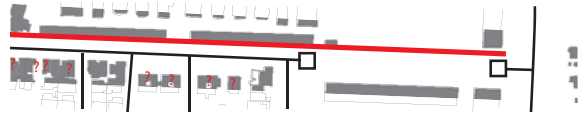
### Anita Lizana

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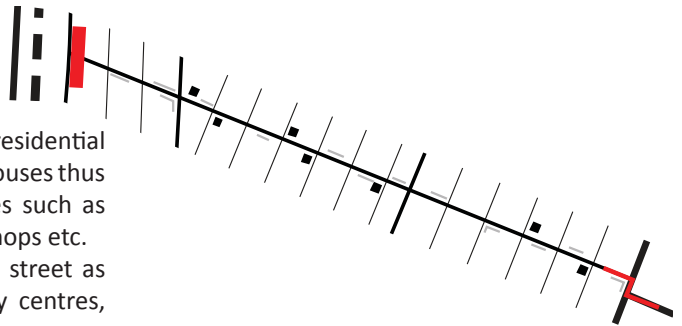
## La Rural



### PROGRAM

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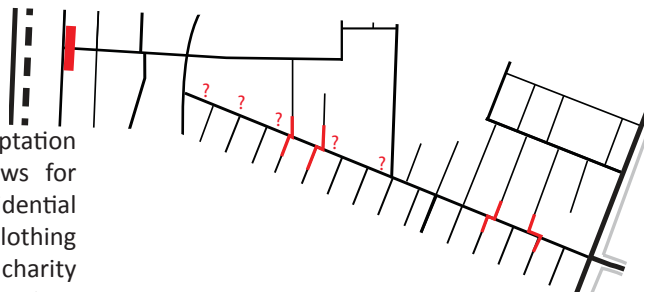
## 30 Octubre



### PROGRAM

Through land-use changes some of the residential dwellings can be converted into shop-houses thus intensifying current economic activities such as grocery stores, vegetable and bakery shops etc. Preserve and intensify function of the street as a community axis: murals, community centres, kindergarden and mothercare centre etc.

## Dos de Abril



### PROGRAM

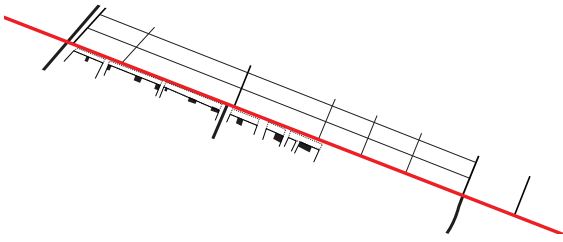
Densification of urban voids and an adaptation strategy for the existing buildings allows for a diversification of the existing residential building stock, workshop spaces for clothing and shoe (repair) shops, laundry shops, charity and consignment shops, a soup kitchen (cocinas populares), kindergarden and mothercare centres, a medical post, empanada and tabachhi shops.

On San Joaquin side new building typologies facilitate new community gardens, on the La Victoria side the merging of internal courtyards and gardens also create new collective private gardens.

## La Feria

### PROGRAM

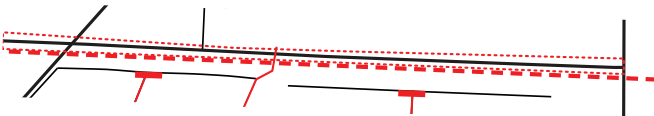
Densification through additions on existing dwellings allows for new typologies of shop-houses: e.g. construction workshops, hardware shops, furniture consignment shops.



## Avenida Maipu

### PROGRAM

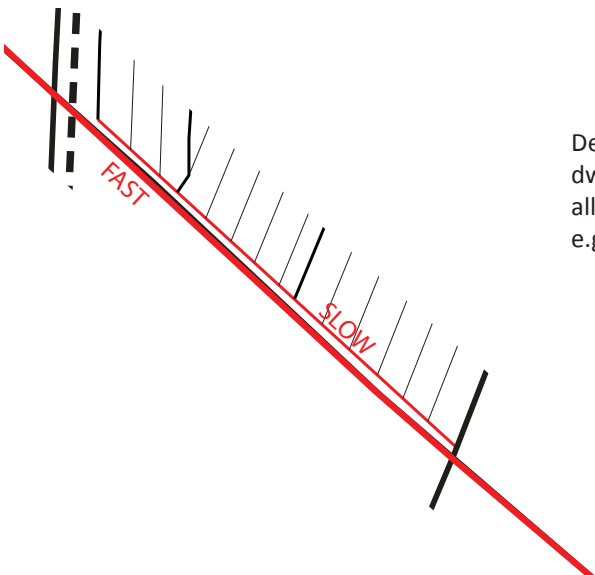
An adaptation strategy of the social housing residential housing blocks (orientation of buildings towards Avenida Maipu and opening up of the plinth for commercial functions) allows for workshop spaces for production/exchange e.g. car/truck repair, electronic repair, (cooking) gas shops, hardware shops etc.



## Avenida Departamental

### PROGRAM

Densification through additions on existing dwellings (and southern orientation= shade side) allows for new typologies of living and working: e.g. studio/atelier spaces.



## 6. Conclusions Per Scale

### Connectivity

#### Metropolitan Scale

- La Victoria is well located in metropolitan infrastructure network.
- External streets all connect in 2 steps to two Autopistas.
- Internal streets do not connect to two Autopistas in 2 steps.
- Avenida Departamental has best (direct) connectivity to metropolitan infrastructure

#### Municipality Scale

- On the east side the railway line functions as a barrier for integration of La Victoria's streets into metropolitan scale
- On the west side two of La Victoria's three main streets connect to the district network in 2 steps: good connectivity to 4 surrounding communes of PAC.

#### Neighborhood Scale

- Most analyzed streets are well integrated in main street network of the neighborhoods (Av. Departamental however is connected only through its parallel road)
- Continuity of internal streets is less good than that of the external streets.
- Connectivity between Lo Valledor housing area and La Victoria is extremely poor (railway forms a barrier).
- Due to shifting grids the main streets of San Joaquin and La Victoria do not correspond.

#### Street Scale

- The dense grid structure of La Victoria allows for connectivity on the entire neighborhood scale for all streets: continuous lines.
- San Joaquin and Lo Valledor streets are not continuous (many dead ends): less integrated internal street network.

### Modes of Production

#### Metropolitan Scale

- Metropolitan centralities ('sub centres') located close to PAC but are of poor socioeconomic importance for La Victoria,
- New large urban projects such as the Bicentenary Park and Park Aquada on the 2nd intercity ring,
- Lo Valledor market serves 80% of the metropolitan region: source of few jobs for La Victoria,
- Job availability in PAC low: high unemployment rates and commuter flows towards the metropolitan centre.

#### Municipality Scale

- No supermarkets and malls in PAC,
- Supermarkets and malls are reachable within 30 minutes of cycling or car drive,
- Railroad limits accessibility of facilities,
- PAC municipality is situated in between new large urban projects: Parque Aguada and Bicentenary Park might increase gentrification pressures and isolation of La Victoria and Lo Valledor settlement.

#### Neighborhood Scale

- Daily shopping in Lo Valledor market or Feria Libre on Galo Gonzales and Av. 2 de Abril,
- Lack of local modes of production (little commerce, few workshop and production spaces)
- Commercial activity located on the borders and incidentally inside the neighborhood.

#### Street Scale

- Commercial spaces occur in spite of morphology rather than being accommodated by morphology,
- Informal shop houses mainly along Av. 30 Octubre and Av. 2 de Abril,
- Shops and bars use the streets as an extension of the interior (terras) and for purposes of advertisement.



## Public Space

### Metropolitan Scale

- Metropolitan centralities ('subcentres') located close to PAC but are of poor socio-economic importance for La Victoria,
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## Public Space

### Metropolitan Scale

- Combination of varying morphologies and large infrastructure barriers results in loose, disconnected urban fragments,
- Increased island effect for La Victoria, San Joaquin and Lo Valledor.

### Municipality Scale

- Combination of varying morphologies and large infrastructure barriers results in loose, disconnected urban fragments,
- Increased island effect for La Victoria, San Joaquin and Lo Valledor.

### Neighborhood Scale

- Shifting morphologies cause discontinuities of the grid (between La Victoria and San Joaquin)
- The streets that divide two neighborhoods show different morphologies (and thus an asymmetrical street profile).

### Street Scale

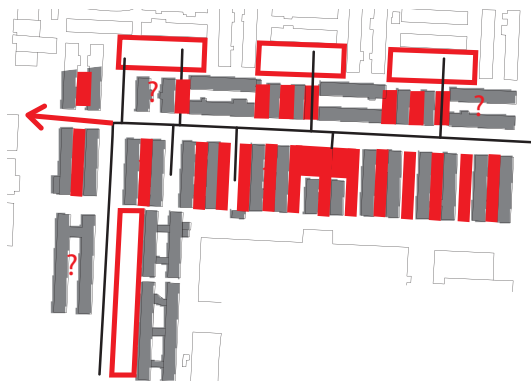
- Building height of dwellings along external streets does not correspond to the width of the profile
- Typology and morphology in San Joaquin and Lo Valledor do not define or interact with the public space:
- Backsides turned to the street; undefined left-over space between buildings

## 7. Potentialities

### Calle Nueva

#### DESIGN EXPLORATIONS

- Increase building heights and transform the facades to mark the border of La Victoria.
- Improve building typologies to make suitable for studio/atelier spaces.
- Improve street profile.



### Antonio Dacamara

#### DESIGN EXPLORATIONS

- Increase building heights and transform the arcades to mark the border of La Victoria.
- Improve building typologies to make suitable for studio/atelier spaces.
- Improve street profile.
- blocks into new collective private or semi-public gardens.
- Intensify use of the derelict, undefined open spaces in general.



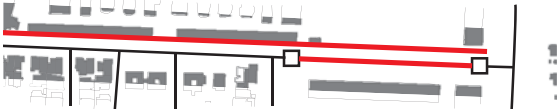
### Anita Lizana

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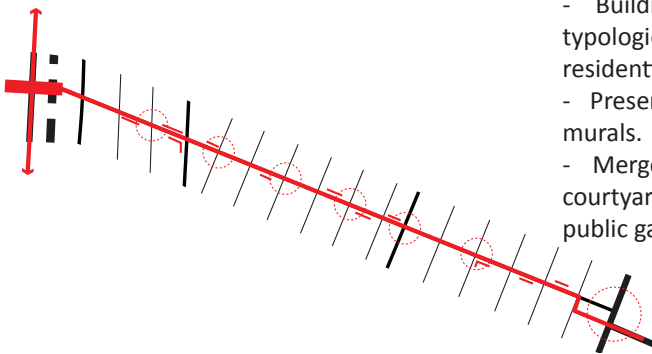
## La Rural



### DESIGN EXPLORATIONS

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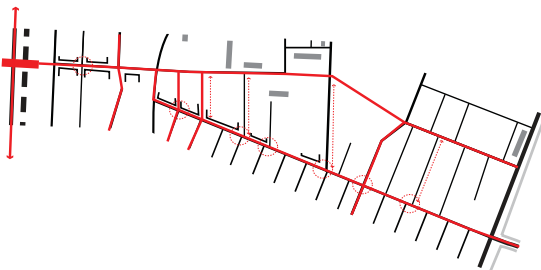
## 30 Octubre



### DESIGN EXPLORATIONS

- Building adaptation strategies and new typologies orientate corners of strategic residential plots towards the street.
- Preserve and intensify the application of murals.
- Merge patios, front gardens or internal courtyards into new collective private or semi-public gardens.

## Dos de Abril



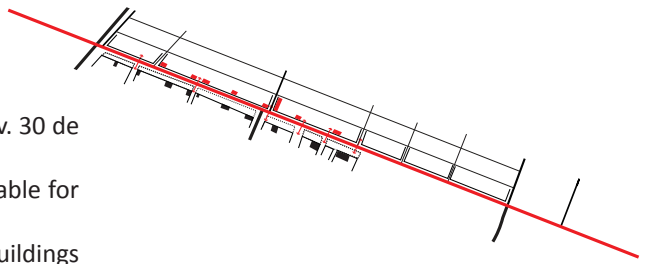
### DESIGN EXPLORATIONS

- Add or improve morphology to connect La Victoria to Av. Maipu.
- New crossing on railway line connecting Av. 2 de Abril to Lo Valledor market.
- Improve continuity of the street by densification of urban voids.
- Improve connectivity between La Victoria + San Joaquin by weaving together the urban fabrics.
- Add or improve the relation of the buildings to the public space by transformation of the architectural section and by means of a new street profile.
- Relate public space network of La Victoria + San Joaquin and that of La Victoria + Lo Valledor.

## La Feria

### DESIGN EXPLORATIONS

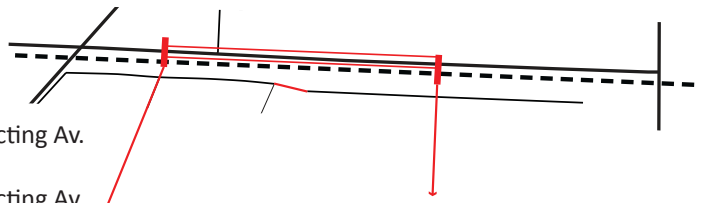
- Improve the disjointed crossing of the Av. 30 de Octubre.
- Add or improve building typologies suitable for shop-houses.
- Add or improve the relation of the buildings to the public space by transformation of the architectural section and by means of a new street profile.



## Avenida Maipu

### DESIGN EXPLORATIONS

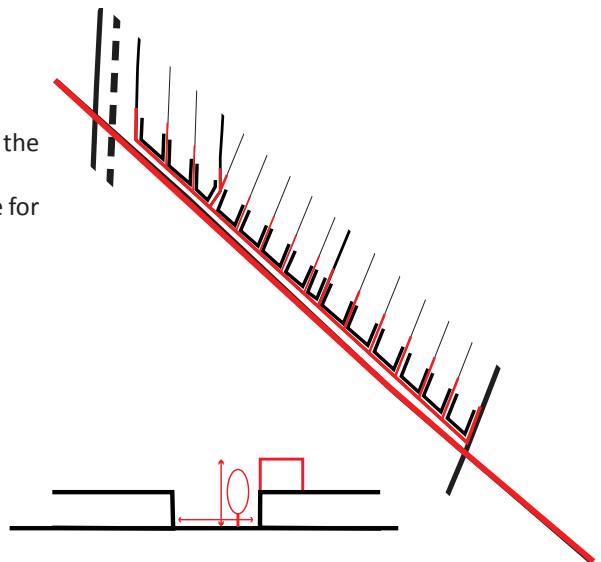
- New crossing on railway line connecting Av. 2 de Abril to Lo Valledor market.
- New crossing on railway line connecting Av. 30 Octubre to Lo Valledor housing area.
- Extension of (commercial) activities on Av. 2 de Abril and Av. 30 de Octubre towards the Av. Maipu.
- Transform the dysfunctional and anti-urban wasteland into a verdant strip in relation with the (main) streets of La Victoria to encourage neighbourly interaction.
- Transform building orientations toward new park.



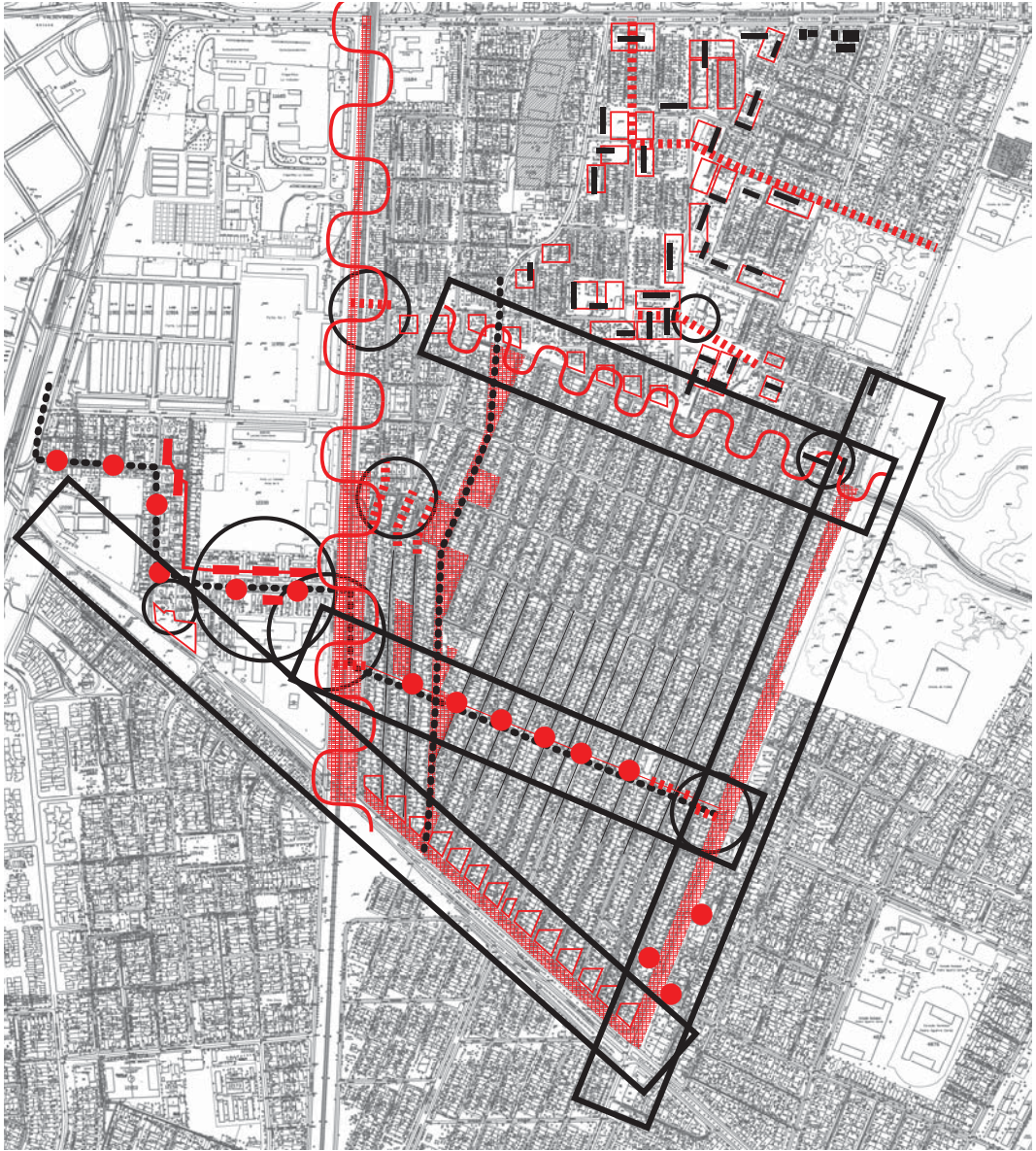
## Avenida Departamental

### DESIGN EXPLORATIONS

- Increase building heights and transform the arcades to mark the border of La Victoria.
- Improve building typologies to make suitable for studio/atelier spaces.
- Improve street profile.



## 8. Relational Strategy



### Connectivity

#### AV. MAIPU

- New crossing on railway line connecting Av. 2 de Abril to Lo Valledor market.
- New crossing on railway line connecting Av. 30 Octubre to Lo Valledor housing area.

#### AV. 2 DE ABRIL

- Add or improve morphology to connect La Victoria to Av. Maipu.
- Improve connectivity between La Victoria + San Joaquin by weaving together the urban fabrics.

#### LA FERIA

- Improve the disjointed crossing of the Av. 30 de Octubre.
- The direct connection to Avenida Maipu leads to connection with intercity roads (north and south) and to the Lo Valledor housing area.

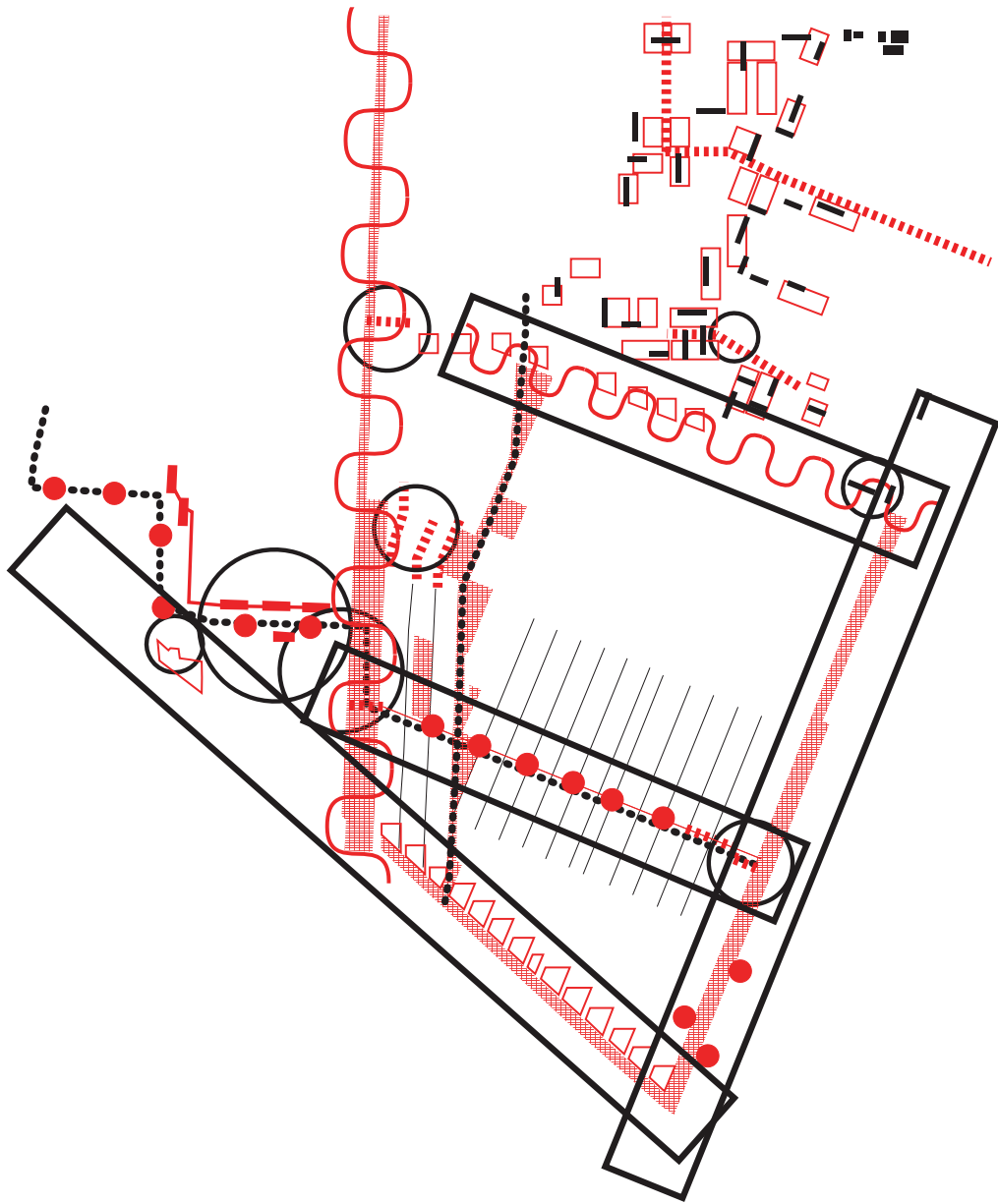
### Densification

#### AV. DEPARTEMENTAL

- Increase building heights and transform the facades to mark the border of La Victoria.
- Improve building typologies to make suitable for studio/atelier spaces.
- Program: new typologies of living and working: e.g. studio/atelier spaces.

#### AV. MAIPU

- Transform the dysfunctional and anti-urban wasteland into a verdant strip in relation with the (main) streets of La Victoria to encourage neighborly interaction.
- Extension of (commercial) activities on Av. 2 de Abril and Av. 30 de Octubre towards the Av. Maipu.
- Transform the dysfunctional and anti-urban wasteland into a verdant strip



- Program: workshop spaces for production/exchange e.g car/truck repair, electronic repair, (cooking) gas shops, hardware shops.

LA FERIA

- Add or improve building typologies suitable for shop-houses.
- Transform the dysfunctional and anti-urban wasteland into a verdant strip in relation with the (main) streets of La Victoria to encourage neighborly interaction.
- Program: new typologies of shop-houses: e.g. construction workshops, hardware shops, furniture consignment shops.

Av 2 DE ABRIL

- Improve continuity of the street by densification of urban voids.

- Program: diversification of the existing residential building stock, workshop spaces for clothing and shoe (repair) shops, laundry shops, charity and consignment shops, a soup kitchen (cocinas populares), kindergarten and mother care centres, a medical post, empanada and tabachhi shops.

AV. 30 DE OCTUBRE

- Building adaptation strategies and new typologies orientate corners of strategic residential plots towards the street.
- Program: Intensifying current economic activities such as grocery stores, vegetable and bakery shops

## Public Space

### LO VALLEDOR

-Densification of urban voids and an adaptation strategy for the existing buildings (orientation of buildings towards Avenida Maipu and opening up of the plinth for commercial functions) allows for an improvement and diversification of the existing residential building stock as well as the accommodation of commercial activities in relation to the Av. 30 de Octubre and the Av. Maipu e.g car/truck repair, electronic repair, (cooking) gas shops, hardware shops etc.

### AV. DEPARTEMENTAL

- Improve street profile.

### AV. MAIPU

- (also said in 'Densification') Transform the dysfunctional and anti-urban wasteland into a verdant strip in relation with the (main) streets of La Victoria to encourage neighborly interaction.  
- Transform building orientations toward new park.

### LA FERIA

- Add or improve the relation of the buildings to the public space by transformation of the architectural section and by means of a new street profile.

### Av 2 DE ABRIL

- Add or improve the relation of the buildings to the public space by transformation of the architectural section and by means of a new street profile.  
- Relate public space network of La Victoria + San Joaquin and that of La Victoria + Lo Valledor.

### AV. 30 DE OCTUBRE

- Preserve and intensify the application of murals.  
- Merge patios, front gardens or internal courtyards into new collective private or semi-public gardens.

### LO VALLEDOR

- Intensify use of the derelict, undefined open spaces in general.  
- Merge internal courtyards between building blocks into new collective private or semi-public gardens.





**Local Analysis**

**[6]**



PARK AGUADA

LO VALLEDOR

LA VICTORIA

PAN AMERICAN HIGHWAY  
BICENTENARY PLAN AREA

RAILWAY

# 1. Introduction

## CONTEXT

Lo Valledor housing area or *Poblacion Nueva Lo Valledor* is only one of numerous areas in Santiago de Chile meant for social housing, however this case in particular has some distinctive features. The area is extremely well connected as it is located in a vicinity to the municipality of Santiago and next to Pan-American highway. Therefore it is connected not only on metropolitan level, but on national and international scales also. On the other hand highway and railroad on the Eastern side of the area are also main borders causing its isolation, spatial and social segregation. In the North of the area - the largest grocery market in Chile serving more than 70% of vegetables for entire Santiago. It occupies an area of more than 20 hectares and can be considered one of the most powerful stakeholders in the area, furthermore currently it owns the former slaughterhouse soon to be developed into offices. Despite its orientation to wholesale customers it also has a section where it sells goods to retailers hereby providing fresh vegetables for a really low price to be sold throughout entire Santiago.

The neighborhood of La Victoria which is located on the Eastern side of the railroad is one of the main focal points of the research. In contrary to Lo Valledor housing area it shares a long history of community organization dating 1951 when it was squatted. Their ability to self-organize makes it one great example what community can do to improve their habitat.

If we are to zoom into the surroundings of the Poblacion Nueva Lo Valledor, it is not hard to notice that the area is constrained with barriers. Two industrial areas and Lo Valledor market erected the walls marking their property hereby creating extremely awkward urban condition. Numerous housing units are facing walls or are built along them, in some cases these walls are higher than housing units themselves.

## POBLACION NUEVA LO VALLEDOR

Social cohesion in Lo Valledor is very little as most of the residents are the ones that were displaced during general Pinochet regime from different areas of Santiago. Naturally diverse backgrounds and origins makes it even harder to see them as a community, rather than group of individuals. Individuality as such is especially evident when analyzing informal housing extensions and adaptations. Chaotic, structurally unsound structures claim exterior spaces of the housing units hereby not only blocking sunlight and worsening hygienic con-

ditions of the other residents but also threatening to collapse without any particular reason or in case of an earthquake. This phenomenon is of course related to the typology of the housing units that shall be analyzed in this chapter more extensively. However small apartments and extremely high population density causes lots of internal friction in larger households making these extensions rather reasonable response to current conditions and individual needs.

Another great issue is high criminality which is evident when analyzing police reports on municipality of PAC. Extreme frequency and quantity of criminal assaults on the borders of the site makes it a no-go zone. In addition to its dangerous character, the area has raging problem of domestic violence. All the aforementioned issues to a certain extent can be related to the lack of complexity, uniformity, lack of diversification, high internal friction, spatial segregation and most importantly - absence of social cohesion.

## GENTRIFICATION

Without a doubt, community strength can be characterized by the amount of social interaction, self identification to a place of residence and strive for common goals. Lo Valledor is none of that and as most of the areas with such profile are the first ones to become subjects of gentrification. Projects like Bicentenary plan, Park Aguada, and potential redevelopment of two aforementioned industrial plots are the exact factors to cause most concern. Considering history of displacement, and decades in degrading urban environment - gentrification of existing population is not at all the goal to strive for. In contrary - the project analyzes the current community needs in relation to multiple scales and layers trying to establish a clear method to avoid the 'second displacement' and empower the community to change their habitat through smart use of potentialities arising from new urban conditions.



Threats and potentialities

# 2. Surrounding Developments

## New shopping mall

Shopping mall in south from bicentenary plan (the former airport), including mixed facilities, shops, bars, cafes, restaurants and etc.



## Park Aguada

Park Aguada borders four municipalities, center of Santiago in north and PAC, San Miguel, San Joaquin. It involves variety of programmatic interventions: green spaces, light industrial areas, residential neighborhoods and etc. Green areas stretch through entire area along the river. Western part of Aguada (where turn-tables are) is primarily dedicated to light industry and multifunctional areas (residential offices, commerce). At central part of an intervention where 3 districts

come together, developers intends to build commercial centre accompanied with residential developments and some mixed function buildings. Vast areas on the eastern part of the project are dedicated to commerce and industry. These developments will go in hand with redevelopment of the street section (capacity). Most parts are still in planning phase, except middle part (commercial centre) that is already under construction.



Project is aiming at density of 150 inhabitants per hectare, which means that they attempting to build around 15.000 dwellings oriented towards middle income group. Park stretches through entire area connecting functions both sides of it. Northern part houses convention centre and commercial centre (mall). Housing stock consists of four main typologies:

Type 1 (Single family houses: compact houses): Single family housing from 85sqm to 160sqm, located in the central areas of the projects along the perimeters of a park.

Type 2 (Single family houses: compact houses): constructed on the southern and northern borders of the park, sizing from 70 to 90sqm

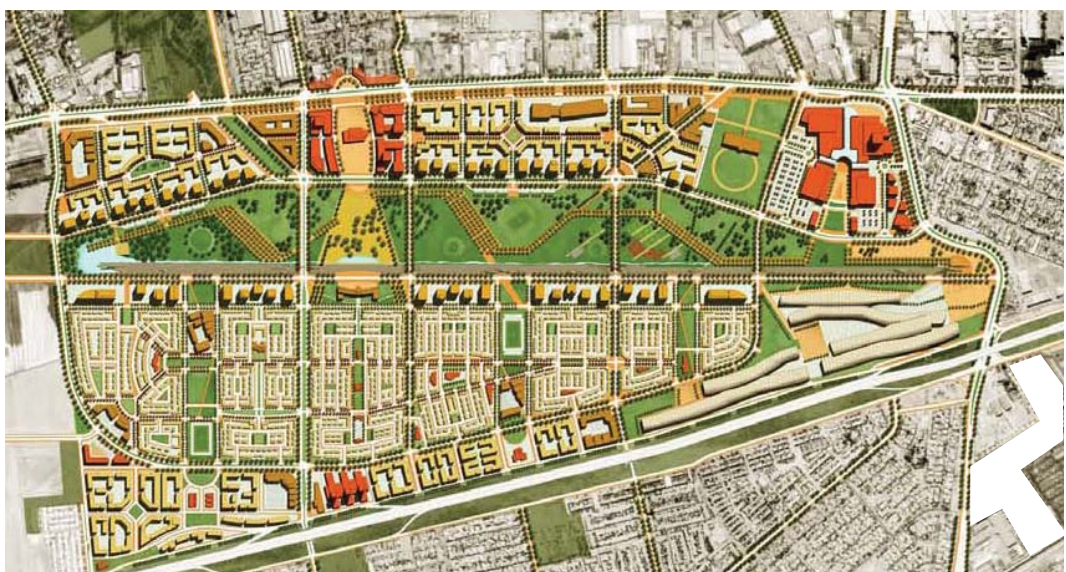
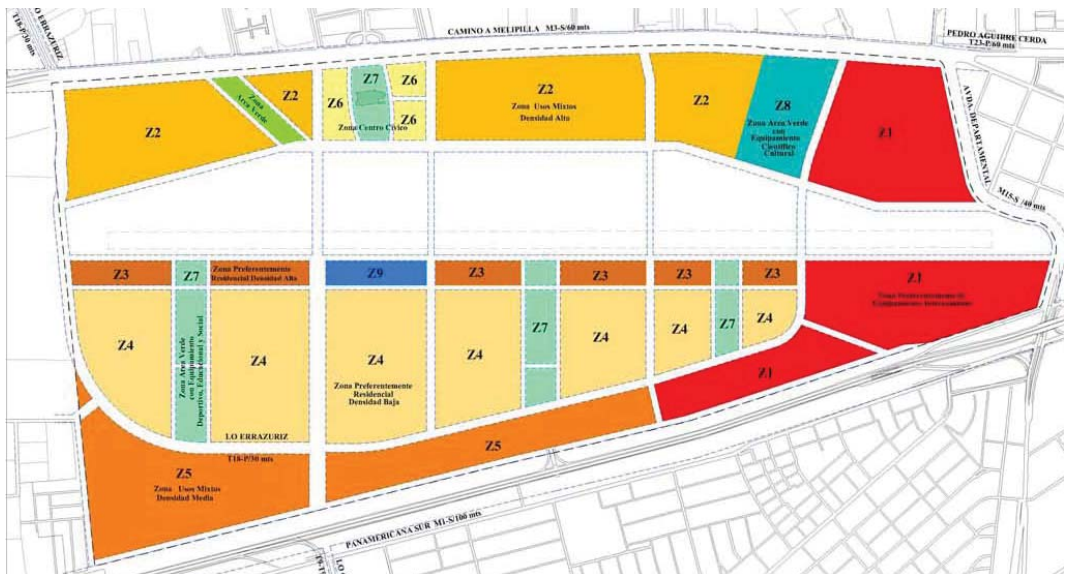
Type 3 (Multistorey housing) 4 storey houses with one family apartments ranging from 46 to 65 square meters, with commercial activi-

ties on ground floor

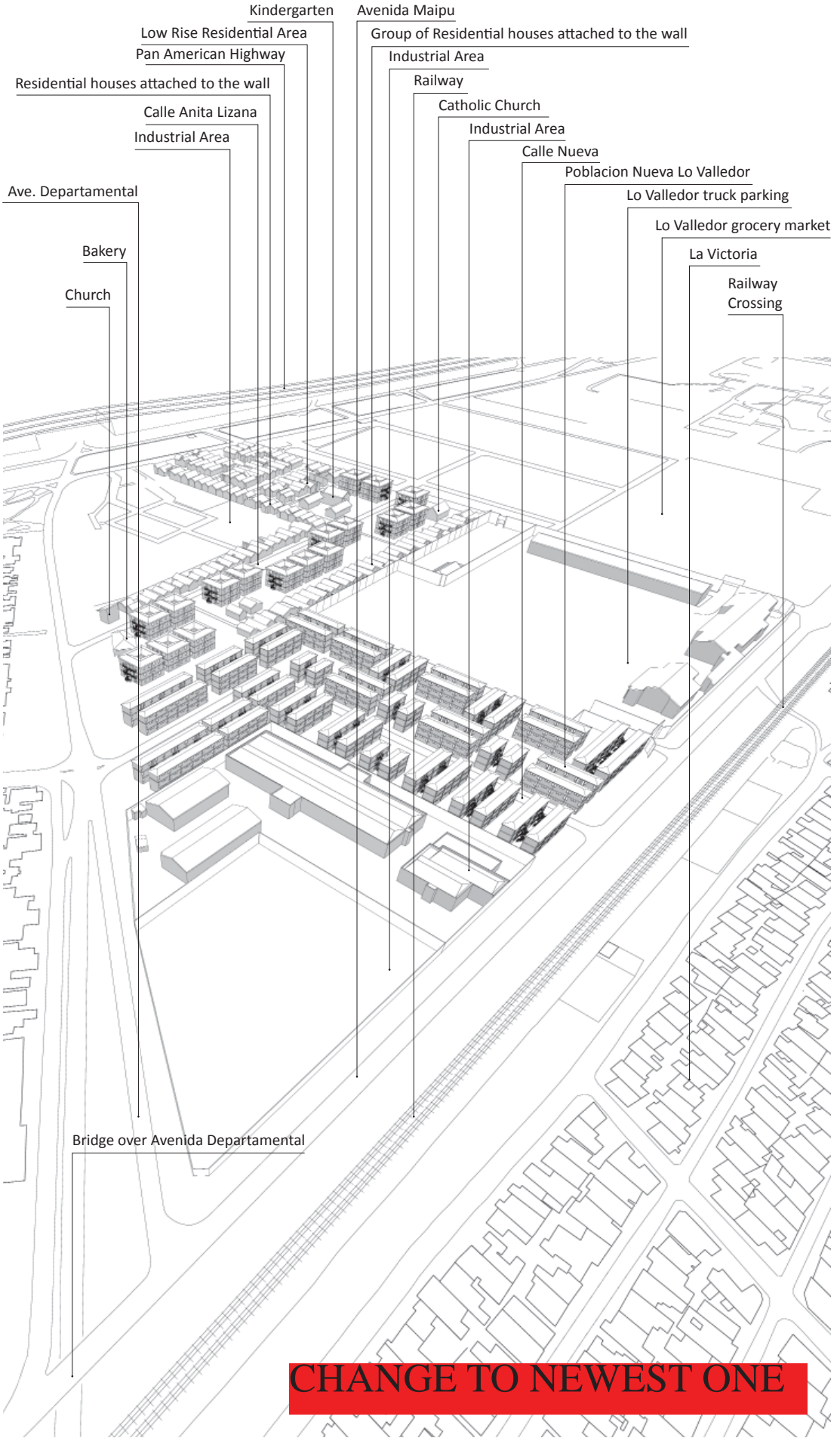
Type 4 (Residential towers) 10 and 15 storey towers with apartment sizes of 46, 65 & 72 square meters

Western part is dedicated to commercial activities with civic centre in the middle of it. Purpose of this building is to manage institutional, commercial and residential activities of the commune.

Despite the lagging implementation of the project it is obvious that this area of Santiago can no remain undeveloped. Even though there is a great possibility that the area will have to face many phases of construction, there is no mistake to claim that eventually after facing probable changes of program or numerous halts this will turn into the highest gentrifier of Poblacion Nueva Lo Valledor, on the other hand the area bringing most of new potentialities.



### 3. Lo Valledor Housing Area

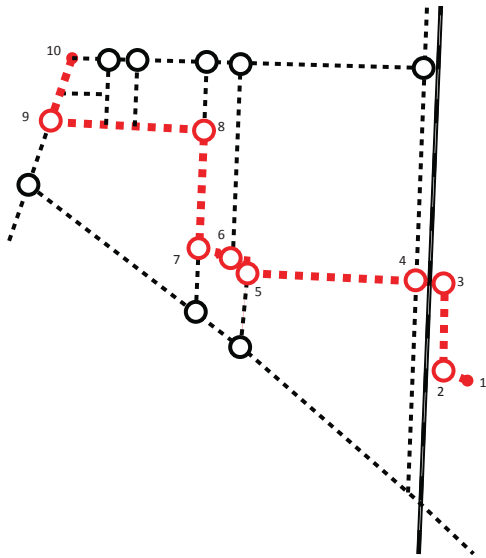


## 4. Analysis Method to map Needs within the Network



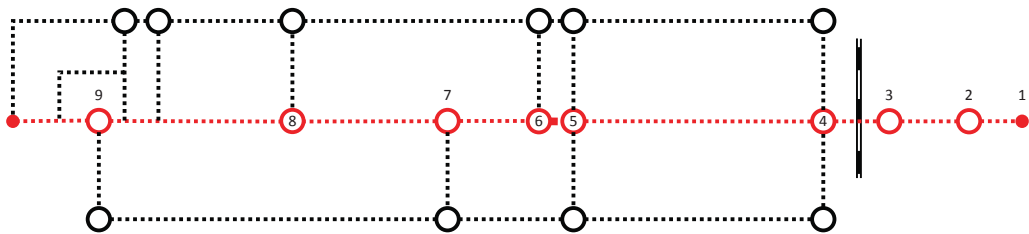
Acknowledgement of spatial conflicts and links

Spatial representation of a network with the most extensive link in red



In the environment of excessive complexity existence of clear method that enables to map community needs and spatial demands becomes of a major necessity. Firstly, the area has an extremely weird configuration. It is literally inserted in between impermeable walls, meanwhile typological diversification is absent. Walls accompanied with infrastructural borders and lacking clarity in morphological structure makes it somewhat disturbing and especially challenging when attempted to analyze it in different scales and layers. The method is aiming to decomplexify the urban fabric and its features ensuring the ability to perceive possible similarities in between localities. One of the first steps to undertake is related to acknowledgement of the existing urban conflicts (nodes) that should serve as a basis to draw a schematic representation of a network. The most relevant to analyze is usually the most extensive combination of links within it, however it is necessary to point out that the same method can be applied to analyze the urban structures in between any two nodes in the network. After creating spatial representation of the links and nodes it is always possible to see it as a line with clear start and end points. Deducting all the irrelevant links results in a linear representation of a route that does no longer carry the complexity of spatial configuration, however does not lose its capacity to understand the transversal relations in between different morphologies and urban fragments, furthermore it enables a multi-layer and multi-scalar perception of the specific needs in relation to morphology, locality, surroundings and place in the network. Finally, all the conclusions can potentialities can be once again related to a specific point within the plan hereby enabling a site-specific response to site-specific issues.

Linear Representation of a Network



Deducted Linear Representation of a Network



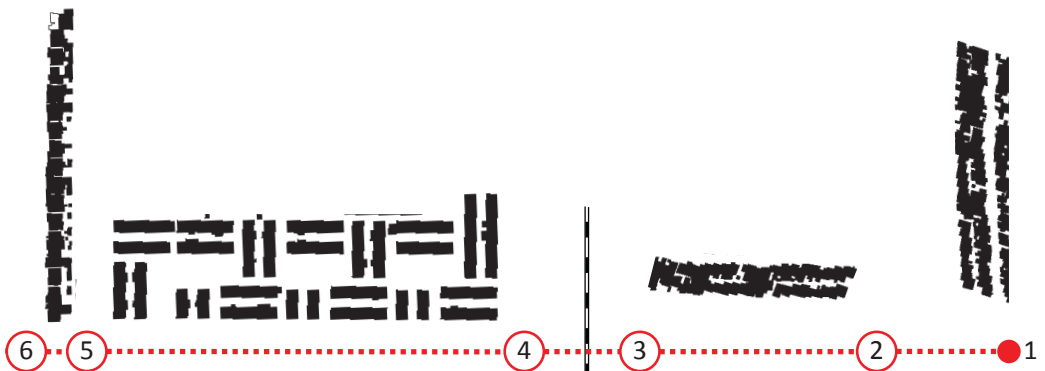
# 5. Community Needs

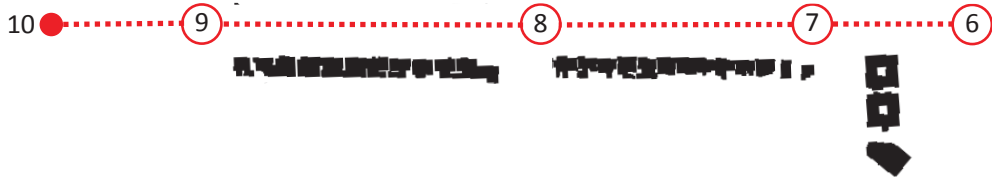
Metropolitan needs	M:H S:I S:S S:LC	Mobility:higher Social:integration Social:safety Social:lower segregation	M:H S:I S:LC	Mobility:higher Social:integration Social:lower segregation
	S:ACC F:SQ H:BQ	Facilities:accessibility Facilities:service quality Housing:better quality	S:ACC F:SQ H:BQ	Facilities:accessibility Facilities:service quality Housing:better quality
Municipal needs	M:H S:I S:S E:I SP:I SP:MP S:ACC F:A F:PQ F:SQ H:BQ H:LHI	Mobility:higher Social:integration Social:safety Economic:integration Facilities:amount Facilities:physical quality Facilities:service quality Housing:better quality Housing:lower household index	M:H S:I S:S E:I SP:I SP:MP S:ACC F:A F:PQ F:SQ H:BQ H:LHI	Mobility:higher Social:integration Social:safety Economic:integration Spatial:integration Spatial:morphological permiation Facilities:accessibility Facilities:amount Facilities:physical quality Facilities:service quality Housing:better quality Housing:lower household index
Neighborhood needs	S:I S:CC S:SA S:S E:S E:LPM SP:MP S:ACC F:A F:PQ F:SQ	Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Spatial:morphological permiation Facilities:accessibility Facilities:amount Facilities:physical quality Facilities:service quality	S:I S:CC S:SA S:S E:S E:LPM E:I SP:I SP:MP F:A F:PQ F:SQ H:BQ H:LHI	Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Spatial:integration Spatial:morphological permiation Facilities:amount Facilities:physical quality Facilities:service quality Housing:better quality Housing:lower household index
Community needs	C:PF S:I S:CC S:SA S:S E:S E:LPM E:O SP:MP F:A	Connectivity:population flows Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:organization Spatial:morphological permiation Facilities:amount	C:PF S:I S:CC S:SA S:S E:S E:LPM E:I E:O SP:I SP:MP S:ACC F:A F:PQ F:SQ H:BQ H:LHI H:BSQ H:BAQ H:BD	Connectivity:population flows Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Economic:organization Spatial:integration Spatial:morphological permiation Housing:better quality Housing:lower household index Housing:better structural quality Housing:better architectural quality Housing:bigger dwellings





M:H S:I	Mobility:higher		Mobility:higher	M:H
S:LC	Social:safety Social:lower segregation Economic:sustainability Economic:integration Spatial:integration	S:S E:S SP:I	Social:safety Social:lower segregation Economic:integration	S:S S:LC E:I
S:ACC F:SQ H:BQ	Facilities:accessibility Facilities:physical quality Facilities:service quality Housing:better quality			
M:H S:I	Mobility:higher Social:integration	M:H S:I S:CC S:S	Mobility:higher Social:safety	M:H S:S
S:I	Social:safety			
SP:I	Economic:integration Spatial:integration	E:I SP:I		
S:ACC F:A	Spatial:morphological permiation Facilities:accessibility Facilities:amount Facilities:physical quality Facilities:service quality Housing:better quality Housing:lower household index	SP:MP S:ACC F:A F:PQ F:SQ H:BQ H:LHI	Facilities:accessibility Facilities:physical quality Housing:better quality	S:ACC F:PQ H:BQ
C:B M:H S:I	Mobility:higher Social:integration	C:B	Mobility:higher	M:H
S:SA S:S	Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Spatial:integration	S:SA S:S E:S E:LPM E:I SP:I	Social:safety	S:S
SP:I	Spatial:morphological permiation	SP:MP SP:C		
SP:C S:ACC F:A F:PQ	Facilities:accessibility Facilities:amount Facilities:physical quality Housing:better quality Housing:lower household index	S:ACC F:A F:PQ H:BQ	Facilities:accessibility Facilities:physical quality Housing:better quality	S:ACC F:PQ H:BQ
S:I S:CC S:SA S:S	Connectivity:population flows Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Economic:organization Spatial:integration	C:PF S:SA S:S E:S E:LPM E:I E:O SP:I	Social:safety Economic:sustainability	S:S E:S
SP:I SP:MP	Spatial:morphological permiation	SP:MP SP:C	Spatial:morphological permiation	SP:MP
S:ACC F:A	Facilities:amount		Facilities:physical quality	F:PQ
H:BQ H:LHI H:BSQ	Housing:better quality Housing:lower household index Housing:better structural quality Housing:better architectural quality Housing:bigger dwellings	H:BQ H:BAQ	Housing:better quality Housing:lower household index Housing:better architectural quality	H:BQ H:LHI H:BAQ





Community needs

			Connectivity:population flows Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Economic:organization Spatial:integration Spatial:morphological permiation
Social:social activity	S:S		
Social:safety	S:S		
Economic:organization	SP:I		
Spatial:integration	SP:MP		
Spatial:coherence	S:ACC		
Facilities:accessibility	F:A		
Facilities:service quality	H:BQ		Housing:better quality
Housing:better quality	H:LHI		Housing:lower household index
Housing:lower household index	H:BSQ		Housing:better structural quality Housing:better architectural quality Housing:bigger dwellings

Neighborhoodneeds

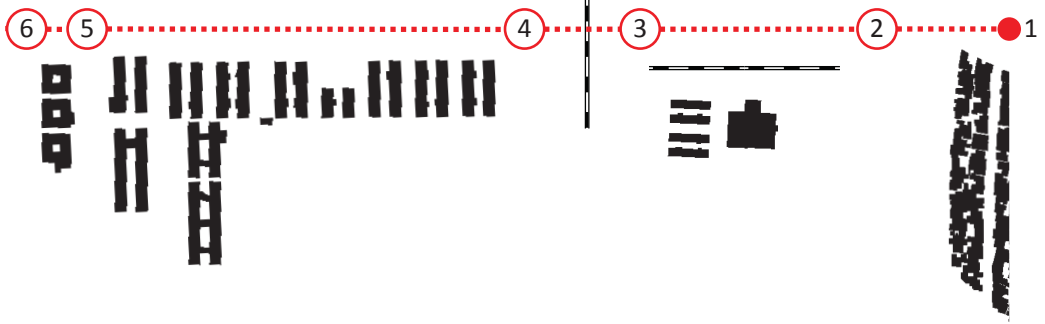
			Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Spatial:integration Spatial:morphological permiation
Social:social activity	S:S		
Social:safety	S:S		
Economic:sustainability	E:S		
Economic:local production modes	E:LPM		
Spatial:morphological permiation	SP:I		
Facilities:accessibility	F:A		Facilities:amount
Facilities:amount	S:ACC		Facilities:physical quality
Facilities:physical quality	F:A		Facilities:service quality
Facilities:service quality			Housing:better quality
			Housing:lower household index

Municipal needs

Mobility:higher	M:H		Mobility:higher
Social:integration	S:I		Social:integration
Social:safety	S:S		Social:safety
Economic:integration	E:I		Economic:integration Spatial:integration Spatial:morphological permiation Facilities:accessibility
Facilities:amount	F:A		Facilities:amount
Facilities:physical quality	F:PQ		Facilities:physical quality
Facilities:service quality	F:SQ		Facilities:service quality
Housing:better quality	H:BQ		Housing:better quality
Housing:lower household index	H:LHI		Housing:lower household index

Metropolitan needs

Mobility:higher	M:H		Mobility:higher
Social:integration	S:I		Social:integration
Social:safety	S:S		
Social:lower segregation	S:LC		Social:lower segregation
Facilities:accessibility	S:ACC		Facilities:accessibility
Facilities:service quality	F:SQ		Facilities:service quality
Housing:better quality	H:BQ		Housing:better quality



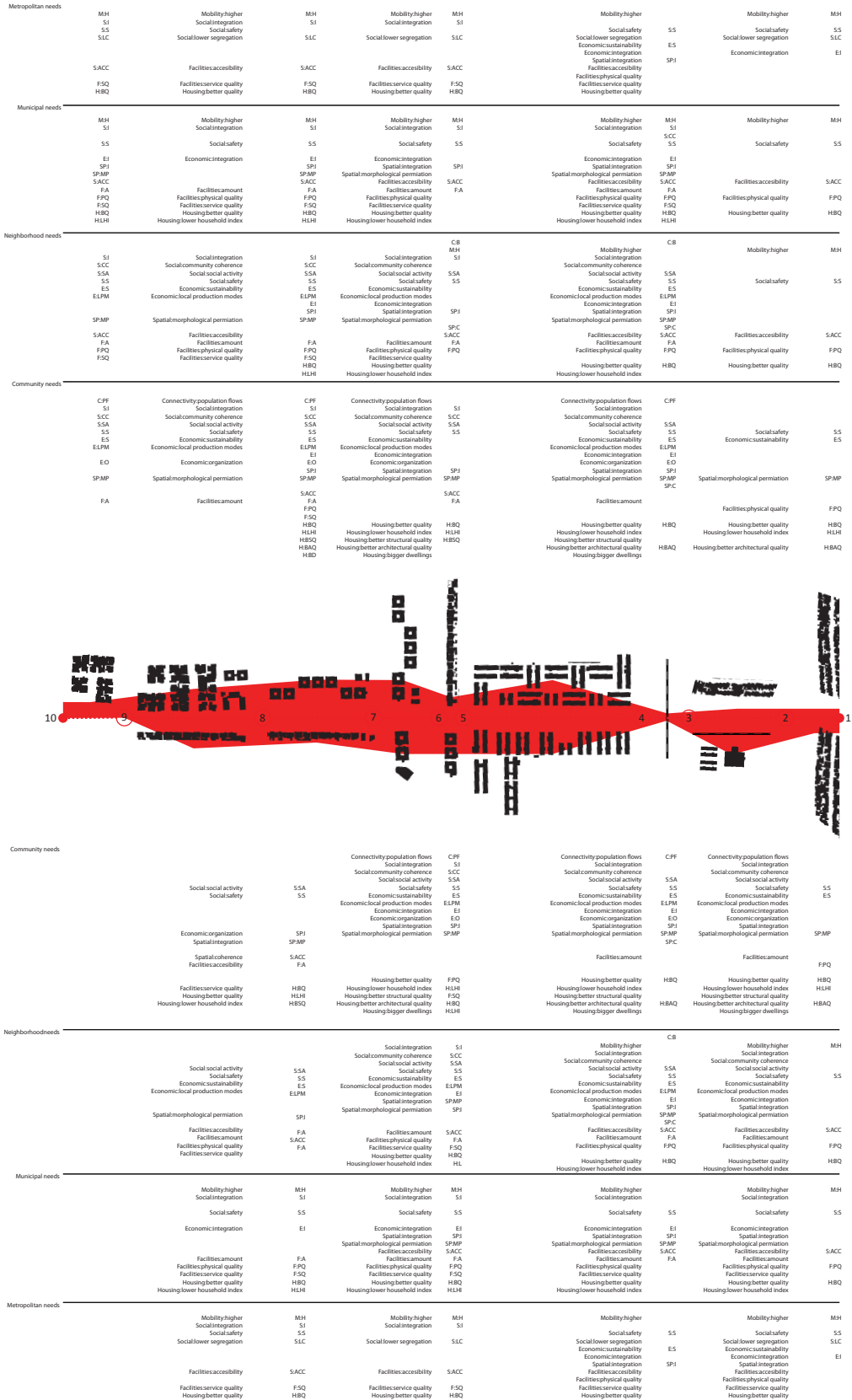
C:PF S:I S:CC S:SA S:S E:S E:LPM E:I E:O SP:I SP:MP	Connectivity:population flows Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Economic:organization Spatial:integration Spatial:morphological permiation	C:PF S:SA S:S E:S E:LPM E:I E:O SP:I SP:MP SP:C	Connectivity:population flows Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Economic:organization Spatial:integration Spatial:morphological permiation	S:S E:S SP:MP F:PQ H:BQ H:LHI F:SQ H:BQ H:LHI
	Facilities:amount		Facilities:amount	F:PQ
F:PQ H:LHI F:SQ H:BQ H:LHI	Housing:better quality Housing:lower household index Housing:better structural quality Housing:better architectural quality Housing:bigger dwellings	H:BQ H:BAQ	Housing:better quality Housing:lower household index Housing:better structural quality Housing:better architectural quality Housing:bigger dwellings	H:BQ H:LHI H:BAQ
S:I S:CC S:SA S:S E:S E:LPM E:I SP:MP SP:I	Mobility:higher Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Spatial:integration Spatial:morphological permiation	C:B S:SA S:S E:S E:LPM E:I SP:I SP:MP SP:C	Mobility:higher Social:integration Social:community coherence Social:social activity Social:safety Economic:sustainability Economic:local production modes Economic:integration Spatial:integration Spatial:morphological permiation	M:H S:S S:ACC F:PQ H:BQ
S:ACC F:A F:PQ F:SQ H:BQ H:L	Facilities:accessibility Facilities:amount Facilities:physical quality Housing:better quality Housing:lower household index	S:ACC F:A F:PQ H:BQ	Facilities:accessibility Facilities:amount Facilities:physical quality Housing:better quality Housing:lower household index	S:ACC F:PQ H:BQ
M:H S:I	Mobility:higher Social:integration		Mobility:higher Social:integration	M:H
S:S	Social:safety	S:S	Social:safety	S:S
E:I SP:I SP:MP S:ACC F:A F:PQ F:SQ H:BQ H:LHI	Economic:integration Spatial:integration Spatial:morphological permiation Facilities:accessibility Facilities:amount Facilities:physical quality Facilities:service quality Housing:better quality Housing:lower household index	E:I SP:I SP:MP S:ACC F:A	Economic:integration Spatial:integration Spatial:morphological permiation Facilities:accessibility Facilities:amount Facilities:physical quality Facilities:service quality Housing:better quality Housing:lower household index	S:ACC F:PQ H:BQ
M:H S:I	Mobility:higher		Mobility:higher	M:H
S:LC	Social:safety Social:lower segregation Economic:sustainability Economic:integration Spatial:integration	S:S E:S SP:I	Social:safety Social:lower segregation Economic:sustainability Economic:integration Spatial:integration	S:S S:LC E:I
S:ACC F:SQ H:BQ	Facilities:accessibility Facilities:physical quality Facilities:service quality Housing:better quality		Facilities:accessibility Facilities:physical quality Facilities:service quality Housing:better quality	S:ACC F:PQ H:BQ

# 6. Community Needs and Spatial Demands

## Schematic Representation of Social Needs

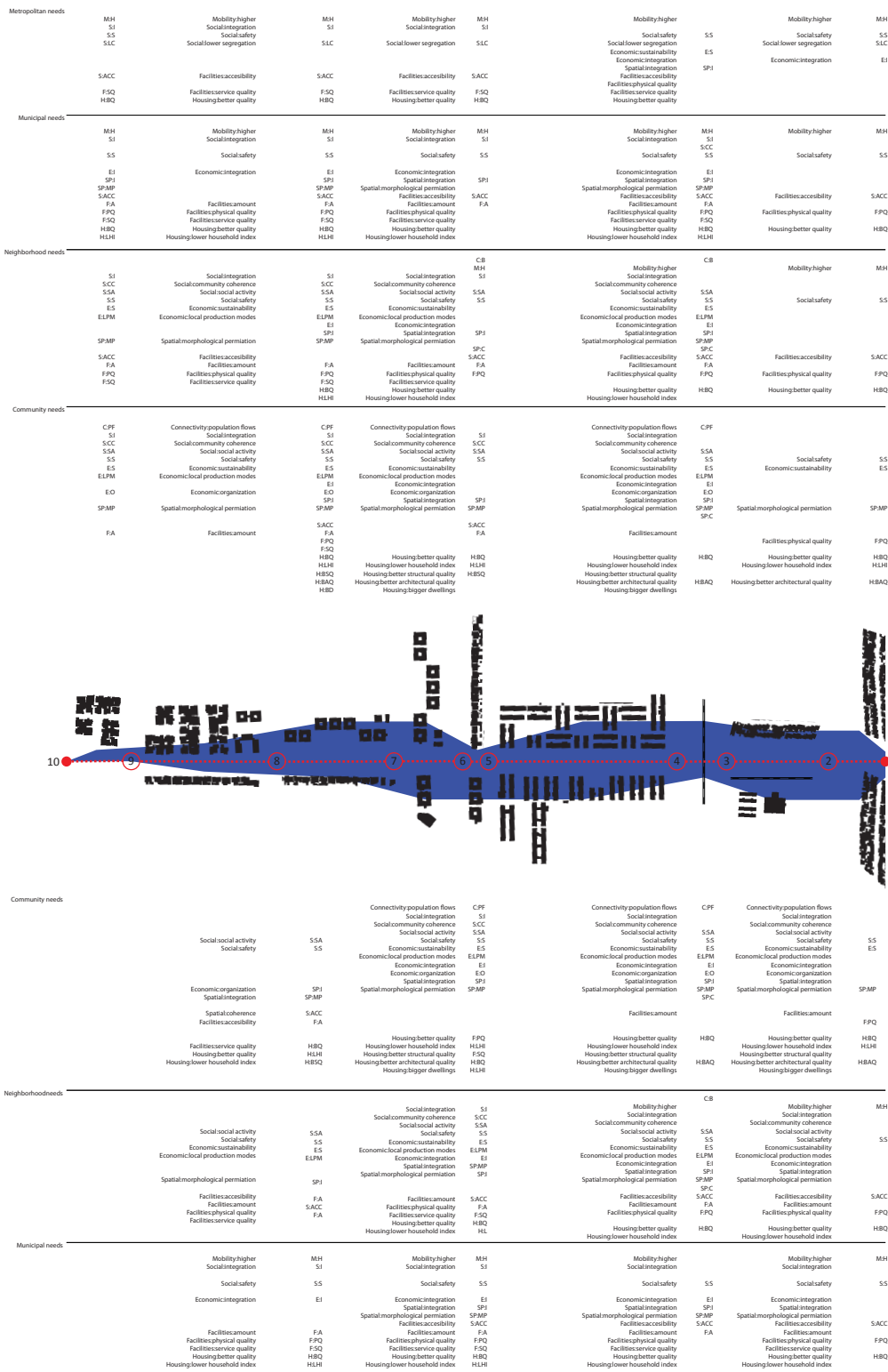
Based on quantitative representation of social needs it is evident that social issues are tightly related to morphology. However, it is worth mentioning that quantitative representation of social

issues does not mean the homogeneity of the problematique, therefore a more detailed description of the specific issues becomes much more important for the design.



# Schematic Representation of Economic Needs

Current absence of local modes of production are more evident in the central area of the route is clearly visible in the diagram of economic needs, however it does vary depending on the locality of specific morphology. The needs of the neighborhood meanwhile the necessities shrink along the edges of the neighborhood.

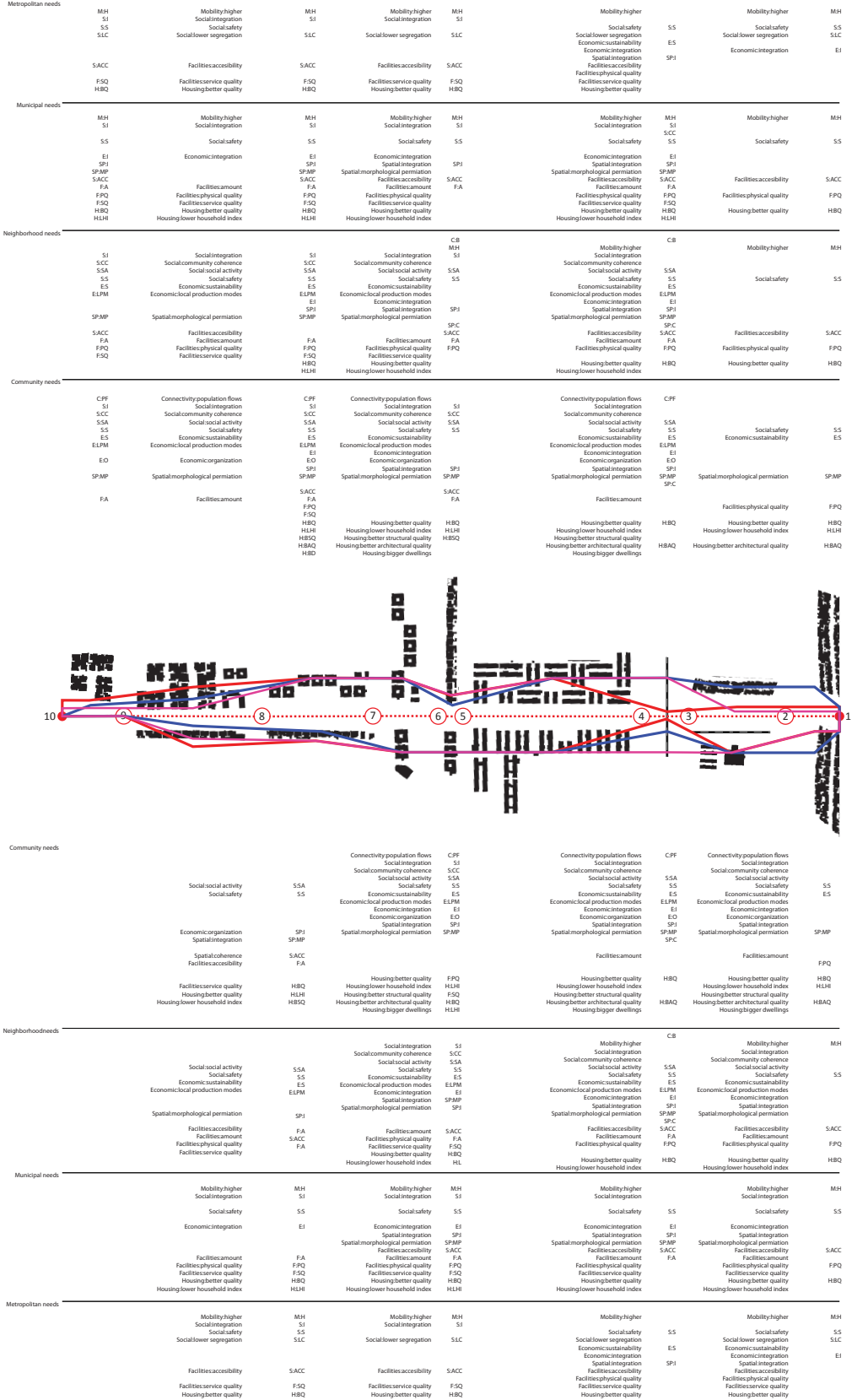




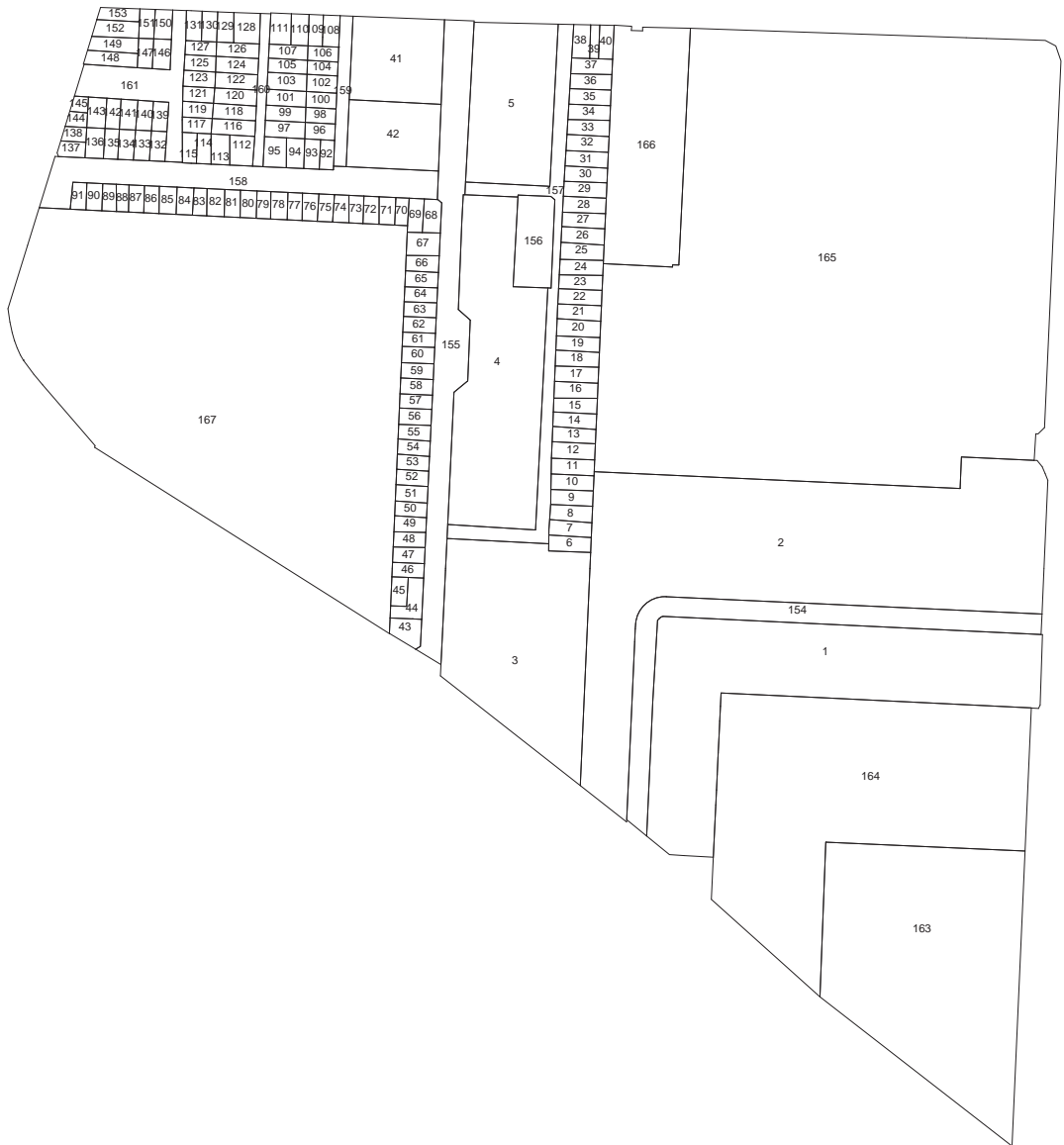
# Comparative Needs Diagram

Even though each layer reveals somewhat different results it is no mistake to conclude that the main spatial challenge lies in the areas that lack complexity and diversity. Namely,

system-built social housing units embody a clear demand for diversification, densification and establishment of new means for production.



# 7. Plot Information



Gross Floor Area		Plan Area		Built Area		FSI	GSI	OSR	L
#	Gross floor area	#	Area	#	Built Area				
1	9699,00	1	9367,00	1	3343,00	1,04	0,36	0,62	2,9
2	17310,00	2	16198,00	2	5788,00	1,07	0,36	0,60	3,0
3	4202,00	3	6413,00	3	1559,00	0,66	0,24	1,16	2,7
4	5418,00	4	6016,00	4	1915,00	0,90	0,32	0,76	2,8
5	2530,00	5	3232,00	5	950,00	0,78	0,29	0,90	2,7
6	62,00	6	155,00	6	62,00	0,40	0,40	1,50	1,0
7	141,00	7	153,00	7	141,00	0,92	0,92	0,09	1,0
8	88,00	8	159,00	8	88,00	0,55	0,55	0,81	1,0
9	82,00	9	153,00	9	82,00	0,54	0,54	0,87	1,0
10	74,00	10	156,00	10	74,00	0,47	0,47	1,11	1,0
11	93,00	11	162,00	11	93,00	0,57	0,57	0,74	1,0
12	152,00	12	168,00	12	152,00	0,90	0,90	0,11	1,0
13	74,00	13	153,00	13	74,00	0,48	0,48	1,07	1,0
14	113,00	14	154,00	14	113,00	0,73	0,73	0,36	1,0
15	97,00	15	153,00	15	97,00	0,63	0,63	0,58	1,0
16	82,00	16	165,00	16	82,00	0,50	0,50	1,01	1,0
17	95,00	17	162,00	17	95,00	0,59	0,59	0,71	1,0
18	101,00	18	160,00	18	101,00	0,63	0,63	0,58	1,0
19	96,00	19	151,00	19	96,00	0,64	0,64	0,57	1,0
20	134,00	20	175,00	20	134,00	0,77	0,77	0,31	1,0
21	132,00	21	158,00	21	132,00	0,84	0,84	0,20	1,0
22	96,00	22	159,00	22	96,00	0,60	0,60	0,66	1,0
23	110,00	23	149,00	23	110,00	0,74	0,74	0,35	1,0
24	77,00	24	158,00	24	77,00	0,49	0,49	1,05	1,0



Gross Floor Area		Plan Area		Built Area		FSI	GSI	OSR	L
#	Gross floor area	#	Area	#	Built Area				
25	91,00	25	167,00	25	91,00	0,54	0,54	0,84	1,0
26	74,00	26	164,00	26	74,00	0,45	0,45	1,22	1,0
27	80,00	27	152,00	27	80,00	0,53	0,53	0,90	1,0
28	94,00	28	161,00	28	94,00	0,58	0,58	0,71	1,0
29	146,00	29	155,00	29	146,00	0,94	0,94	0,06	1,0
30	95,00	30	153,00	30	95,00	0,62	0,62	0,61	1,0
31	128,00	31	158,00	31	128,00	0,81	0,81	0,23	1,0
32	106,00	32	161,00	32	106,00	0,66	0,66	0,52	1,0
33	91,00	33	155,00	33	91,00	0,59	0,59	0,70	1,0
34	103,00	34	150,00	34	103,00	0,69	0,69	0,46	1,0
35	121,00	35	154,00	35	121,00	0,79	0,79	0,27	1,0
36	97,00	36	150,00	36	97,00	0,65	0,65	0,55	1,0
37	75,00	37	152,00	37	75,00	0,49	0,49	1,03	1,0
38	89,00	38	139,00	38	89,00	0,64	0,64	0,56	1,0
39	53,00	39	72,00	39	53,00	0,74	0,74	0,36	1,0
40	110,00	40	115,00	40	110,00	0,96	0,96	0,05	1,0
41	1450,00	41	1837,00	41	483,00	0,79	0,26	0,93	3,0
42	551,00	42	1470,00	42	551,00	0,37	0,37	1,67	1,0
43	80,00	43	178,00	43	80,00	0,45	0,45	1,23	1,0
44	47,00	44	200,00	44	47,00	0,24	0,24	3,26	1,0
45	46,00	45	112,00	45	46,00	0,41	0,41	1,43	1,0
46	65,00	46	110,00	46	65,00	0,59	0,59	0,69	1,0
47	85,00	47	119,00	47	85,00	0,71	0,71	0,40	1,0
48	60,00	48	115,00	48	60,00	0,52	0,52	0,92	1,0
49	76,00	49	117,00	49	76,00	0,65	0,65	0,54	1,0
50	44,00	50	112,00	50	44,00	0,39	0,39	1,55	1,0
51	108,00	51	126,00	51	108,00	0,86	0,86	0,17	1,0
52	55,00	52	118,00	52	55,00	0,47	0,47	1,15	1,0
53	77,00	53	115,00	53	77,00	0,67	0,67	0,49	1,0
54	87,00	54	117,00	54	87,00	0,74	0,74	0,34	1,0
55	79,00	55	117,00	55	79,00	0,68	0,68	0,48	1,0
56	86,00	56	125,00	56	86,00	0,69	0,69	0,45	1,0
57	75,00	57	110,00	57	75,00	0,68	0,68	0,47	1,0
58	97,00	58	122,00	58	97,00	0,80	0,80	0,26	1,0
59	91,00	59	120,00	59	91,00	0,76	0,76	0,32	1,0
60	98,00	60	127,00	60	98,00	0,77	0,77	0,30	1,0
61	85,00	61	110,00	61	85,00	0,77	0,77	0,29	1,0
62	76,00	62	122,00	62	76,00	0,62	0,62	0,61	1,0
63	68,00	63	116,00	63	68,00	0,59	0,59	0,71	1,0
64	59,00	64	117,00	64	59,00	0,50	0,50	0,98	1,0
65	103,00	65	123,00	65	103,00	0,84	0,84	0,19	1,0
66	65,00	66	126,00	66	65,00	0,52	0,52	0,94	1,0
67	125,00	67	181,00	67	125,00	0,69	0,69	0,45	1,0
68	75,00	68	141,00	68	75,00	0,53	0,53	0,88	1,0
69	51,00	69	122,00	69	51,00	0,42	0,42	1,39	1,0
70	77,00	70	86,00	70	77,00	0,90	0,90	0,12	1,0
71	79,00	71	106,00	71	79,00	0,75	0,75	0,34	1,0
72	85,00	72	103,00	72	85,00	0,83	0,83	0,21	1,0
73	55,00	73	95,00	73	55,00	0,58	0,58	0,73	1,0
74	67,00	74	101,00	74	67,00	0,66	0,66	0,51	1,0
75	66,00	75	101,00	75	66,00	0,65	0,65	0,53	1,0
76	70,00	76	103,00	76	70,00	0,68	0,68	0,47	1,0
77	67,00	77	96,00	77	67,00	0,70	0,70	0,43	1,0
78	83,00	78	110,00	78	83,00	0,75	0,75	0,33	1,0
79	73,00	79	92,00	79	73,00	0,79	0,79	0,26	1,0
80	96,00	80	107,00	80	96,00	0,90	0,90	0,11	1,0
81	74,00	81	103,00	81	74,00	0,72	0,72	0,39	1,0
82	103,00	82	114,00	82	103,00	0,90	0,90	0,11	1,0
83	68,00	83	89,00	83	68,00	0,76	0,76	0,31	1,0
84	97,00	84	108,00	84	97,00	0,90	0,90	0,11	1,0
85	80,00	85	113,00	85	80,00	0,71	0,71	0,41	1,0
86	91,00	86	97,00	86	91,00	0,94	0,94	0,07	1,0
87	76,00	87	100,00	87	76,00	0,76	0,76	0,32	1,0
88	68,00	88	80,00	88	68,00	0,85	0,85	0,18	1,0
89	43,00	89	91,00	89	43,00	0,47	0,47	1,12	1,0
90	63,00	90	103,00	90	63,00	0,61	0,61	0,63	1,0
91	53,00	91	96,00	91	53,00	0,55	0,55	0,81	1,0
92	60,00	92	99,00	92	60,00	0,61	0,61	0,65	1,0
93	57,00	93	111,00	93	57,00	0,51	0,51	0,95	1,0

Gross Floor Area		Plan Area		Built Area		FSI	GSI	OSR	L
#	Gross floor area	#	Area	#	Built Area				
94	92,00	94	127,00	94	92,00	0,72	0,72	0,38	1,0
95	53,00	95	162,00	95	53,00	0,33	0,33	2,06	1,0
96	62,00	96	117,00	96	62,00	0,53	0,53	0,89	1,0
97	64,00	97	157,00	97	64,00	0,41	0,41	1,45	1,0
98	66,00	98	108,00	98	66,00	0,61	0,61	0,64	1,0
99	88,00	99	144,00	99	88,00	0,61	0,61	0,64	1,0
100	86,00	100	114,00	100	86,00	0,75	0,75	0,33	1,0
101	73,00	101	150,00	101	73,00	0,49	0,49	1,05	1,0
102	51,00	102	124,00	102	51,00	0,41	0,41	1,43	1,0
103	113,00	103	159,00	103	113,00	0,71	0,71	0,41	1,0
104	75,00	104	102,00	104	75,00	0,74	0,74	0,36	1,0
105	83,00	105	132,00	105	83,00	0,63	0,63	0,59	1,0
106	103,00	106	108,00	106	103,00	0,95	0,95	0,05	1,0
107	54,00	107	132,00	107	54,00	0,41	0,41	1,44	1,0
108	120,00	108	124,00	108	120,00	0,97	0,97	0,03	1,0
109	41,00	109	107,00	109	41,00	0,38	0,38	1,61	1,0
110	92,00	110	130,00	110	92,00	0,71	0,71	0,41	1,0
111	132,00	111	157,00	111	132,00	0,84	0,84	0,19	1,0
112	87,00	112	170,00	112	87,00	0,51	0,51	0,95	1,0
113	116,00	113	134,00	113	116,00	0,87	0,87	0,16	1,0
114	65,00	114	103,00	114	65,00	0,63	0,63	0,58	1,0
115	55,00	115	105,00	115	55,00	0,52	0,52	0,91	1,0
116	109,00	116	162,00	116	109,00	0,67	0,67	0,49	1,0
117	60,00	117	108,00	117	60,00	0,56	0,56	0,80	1,0
118	100,00	118	154,00	118	100,00	0,65	0,65	0,54	1,0
119	78,00	119	113,00	119	78,00	0,69	0,69	0,45	1,0
120	118,00	120	160,00	120	118,00	0,74	0,74	0,36	1,0
121	80,00	121	114,00	121	80,00	0,70	0,70	0,43	1,0
122	46,00	122	156,00	122	46,00	0,29	0,29	2,39	1,0
123	66,00	123	121,00	123	66,00	0,55	0,55	0,83	1,0
124	121,00	124	163,00	124	121,00	0,74	0,74	0,35	1,0
125	69,00	125	118,00	125	69,00	0,58	0,58	0,71	1,0
126	86,00	126	147,00	126	86,00	0,59	0,59	0,71	1,0
127	70,00	127	105,00	127	70,00	0,67	0,67	0,50	1,0
128	80,00	128	189,00	128	80,00	0,42	0,42	1,36	1,0
129	98,00	129	120,00	129	98,00	0,82	0,82	0,22	1,0
130	105,00	130	110,00	130	105,00	0,95	0,95	0,05	1,0
131	91,00	131	113,00	131	91,00	0,81	0,81	0,24	1,0
132	70,00	132	110,00	132	70,00	0,64	0,64	0,57	1,0
133	84,00	133	114,00	133	84,00	0,74	0,74	0,36	1,0
134	99,00	134	114,00	134	99,00	0,87	0,87	0,15	1,0
135	68,00	135	103,00	135	68,00	0,66	0,66	0,51	1,0
136	85,00	136	132,00	136	85,00	0,64	0,64	0,55	1,0
137	29,00	137	100,00	137	29,00	0,29	0,29	2,45	1,0
138	30,00	138	82,00	138	30,00	0,37	0,37	1,73	1,0
139	82,00	139	109,00	139	82,00	0,75	0,75	0,33	1,0
140	85,00	140	111,00	140	85,00	0,77	0,77	0,31	1,0
141	101,00	141	119,00	141	101,00	0,85	0,85	0,18	1,0
142	70,00	142	103,00	142	70,00	0,68	0,68	0,47	1,0
143	112,00	143	134,00	143	112,00	0,84	0,84	0,20	1,0
144	35,00	144	70,00	144	35,00	0,50	0,50	1,00	1,0
145	38,00	145	60,00	145	38,00	0,63	0,63	0,58	1,0
146	93,00	146	128,00	146	93,00	0,73	0,73	0,38	1,0
147	63,00	147	106,00	147	63,00	0,59	0,59	0,68	1,0
148	83,00	148	176,00	148	83,00	0,47	0,47	1,12	1,0
149	89,00	149	170,00	149	89,00	0,52	0,52	0,91	1,0
150	84,00	150	123,00	150	84,00	0,68	0,68	0,46	1,0
151	97,00	151	107,00	151	97,00	0,91	0,91	0,10	1,0
152	84,00	152	178,00	152	84,00	0,47	0,47	1,12	1,0
153	58,00	153	124,00	153	58,00	0,47	0,47	1,14	1,0
154	0,00	154	2957,00	155	0,00	0,00	0,00	0,00	0,0
155	0,00	155	3773,00	156	0,00	0,00	0,00	0,00	0,0
156	0,00	156	816,00	157	0,00	0,00	0,00	0,00	0,0
157	0,00	157	2028,00	158	0,00	0,00	0,00	0,00	0,0
158	0,00	158	2554,00	159	0,00	0,00	0,00	0,00	0,0
159	0,00	159	457,00	160	0,00	0,00	0,00	0,00	0,0
160	0,00	160	361,00	161	0,00	0,00	0,00	0,00	0,0
161	0,00	161	1223,00	162	0,00	0,00	0,00	0,00	0,0

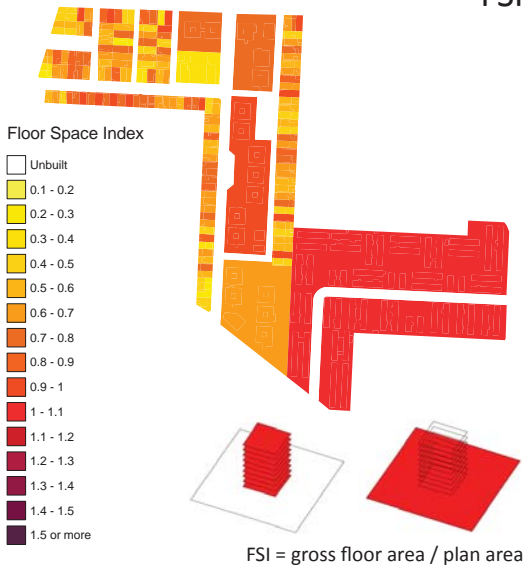
# 8. Density Data

## FSI

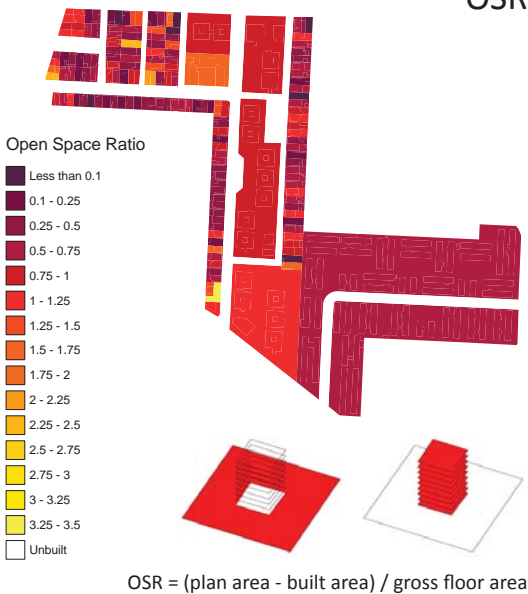
When talking about efficiency FSI becomes the most important parameter as it clearly represents the plot density or in other words, profit per square meter of the plot, which naturally means that the higher the FSI the cheaper apartments are. In Lo Valledor's case areas having floor space index higher than 1 are the ones build in the 70's meaning the maximum use of land in order to inhabit the most. However some smaller plots also have FSI above 1, but it is not relevant as these plots are usually self built and does not have any cleat density patterns.

Contrary to FSI - Open Space Ratio Usually defines the size of ones backyard, however once again smaller plots vary too much to draw any clear conclusions except that usually self constructed houses occupy more than 60% of the surface. The social housing areas have an extremely low Open Space Ratio which once again suggest the maximization of the land use and naturally poor insolation characteristics.

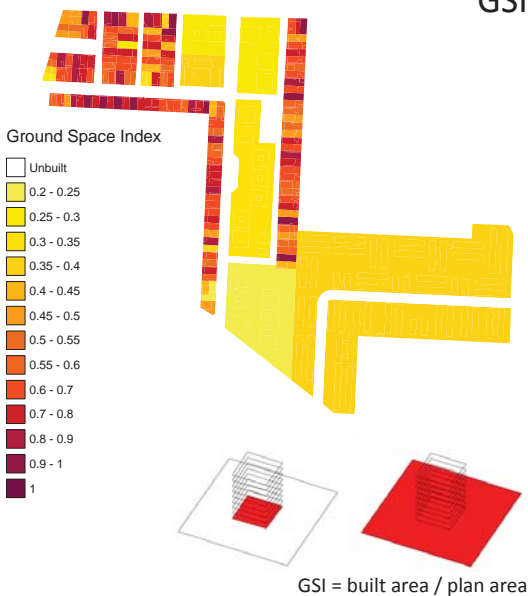
Ground Space Index similarly to Open space ration calculates the relation of built and unbuilt surfaces and represents how much of plot is build up. Despite high density social housing blocks usually occupy from 20 to 40 percent of the entire plot, on the other hand this parameter does not reveal actual differences in quality of space that remains open in a sense of light microclimate Average Amount of Levels represents average building heights which is a perfect tool to draw abstraction in larger contexts, however in this case it also gives a clear overview on the average intensity of different plots.



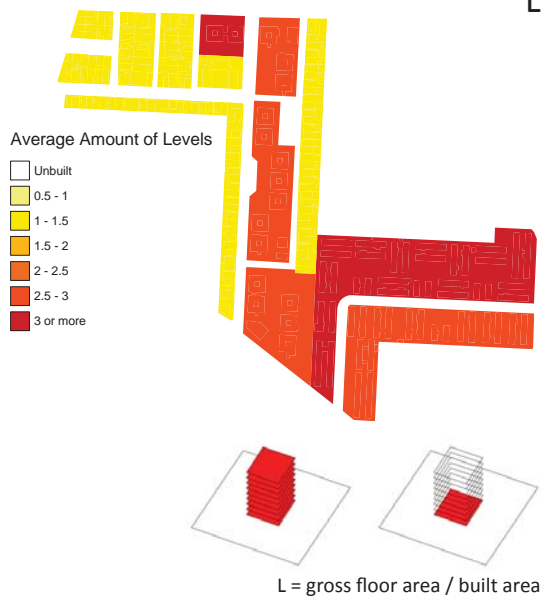
## OSR



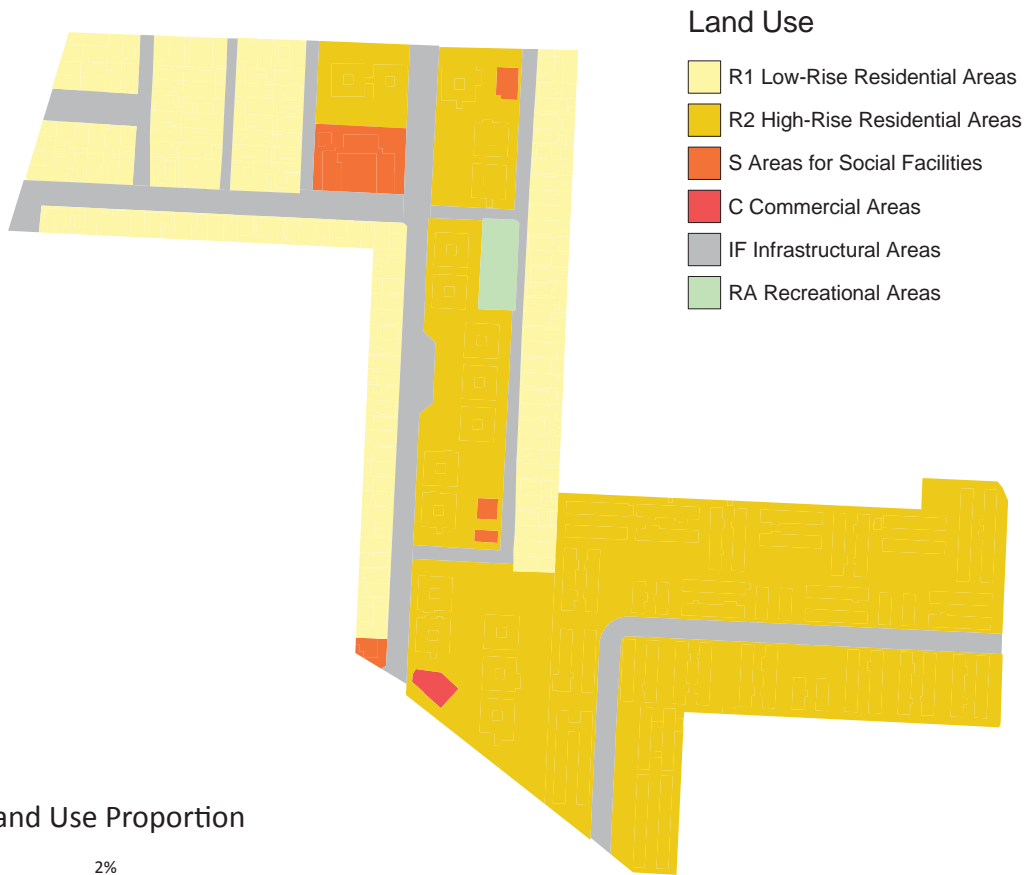
## GSI



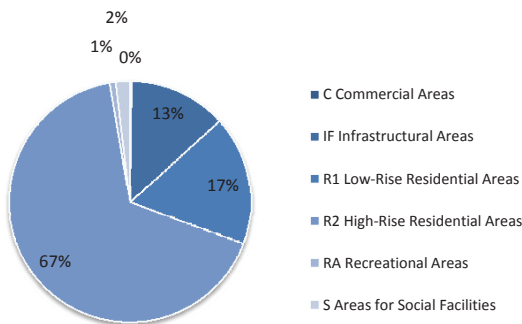
## L



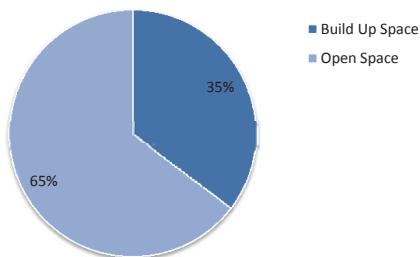
# 9. Land Use



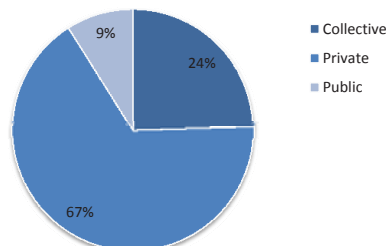
Land Use Proportion



Relationship between open and built-up



Land Ownership



The area is predominantly residential with only few plots designated for commerce however they do not serve for the neighborhood. A clear land use scheme lack of functional diversity, especially in high-rise housing areas. There are almost no space for recreational facilities and even existing ones are of poor quality. 35 percent of the area is built up contrasting with 65% of open space which in most cases is derelict, which, when analyzing land ownership distribution correlates with 67 percent of collectively owned land. Analyzing the facilities it worth mentioning two churches, kindergarten, social office and community center. Only commercial activity is a small bakery located in the South of the area. One of the most prominent issues is the amount of recreational space, despite the fact that certain places within the area are called squares, sadly they either decay or being claimed by the dwellers surrounding them. There is also one multifunctional sports field that also does not seem to be maintained whatsoever. All in all, vast homogeneity, mono functionality and excessive amount of public are the main problems limiting the improvement, therefore a solution on how to diversify, complexify, and increase maintenance is of major importance

# 10. Public Space

When analyzing public space it is necessary to establish a clear list of possible variations of spaces depending on scale on which they function and ownership model that defines their accessibility and privacy. The table below shows possible variations of spaces per type. It is clearly visible that certain types of spaces can only have couple of ownership models and scales of functionality, while the street as such should function on all except individual scale, depending on type, scale of functionality and ownership model they usually have different character and, in some cases, are called differently.

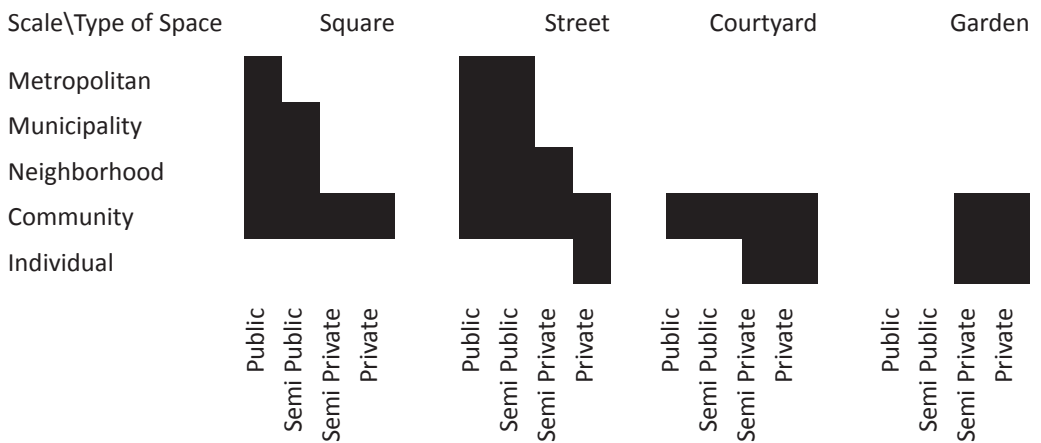
For Lo Valledor housing area it is not usually the type of space that causes its malfunctioning or degradation, but the ownership model that applies to it. Public open spaces in most cases are not maintained, abandoned and derelict, while semi-private spaces next to entrances to houses are quite well maintained, meaning that modernist model of 'floating' space in between system built housing failed

to sustain itself, furthermore lack of social cohesions and high levels of individuality make it no ones responsibility. A design proposal for public space should be based on the aforementioned statements, meaning that designing public or semi-public spaces should be avoided.

Another great issue related to open spaces is amount of typological steps in order to get into apartment, which is tightly related to space ownership models that individual has to pass-through in order to reach his place residence. Absence of cleat border between what is perceived public and semiprivate is the second major cause for degradation of public space. A design proposal has to tackle this aspect trying to accomplish as little typological steps as possible meaning direct entrances from the street.

When analyzing relational distribution of public, semi-public, semi-private and private spaces it is worth mentioning that in Lo Valledor housing area more than 80% of open space is public and semi-public leaving only less than 20% for what is considered private or semi-private. It is no sur-

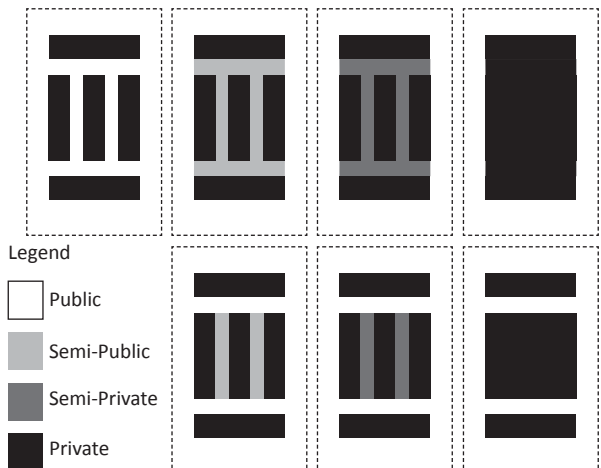
Types of Spaces in relation to Scale and Ownership Model



Build Up Space

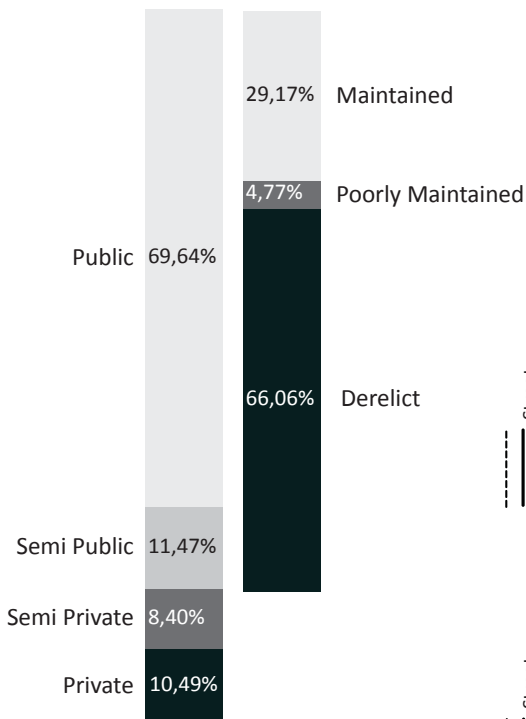


Ownership Models

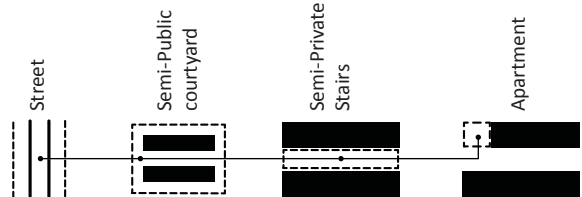




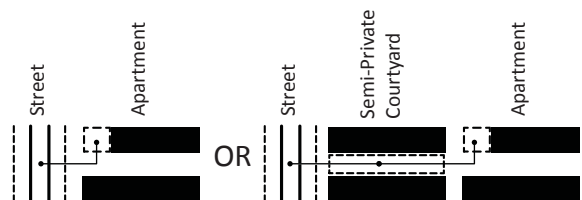
prise that only less than 30% is maintained, and this number includes municipal streets; while more than 70% remains very poorly maintained or not preserved at all. All in all, current ownership model does not function in the selected context, therefore, naturally ensuring proper maintenance of public space should be one of the key subjects in the design proposal.



#### Current Topological Steps



#### Desired Topological Schemes



# 11. Morphology



## Morphological Types



**SOCIAL HOUSING FROM 70's TYPE 1**  
Housing built during the General Pinochet era for people displaced from different areas. Having extremely high household index and intensity of over 800 people per hectare and FSI of around 1.20



**SOCIAL HOUSING FROM 70's TYPE 2**  
Housing built during the General Pinochet era for people displaced from different areas. Also is one of the areas with the highest intensity of over 800 people per hectare and FSI of around 0.9



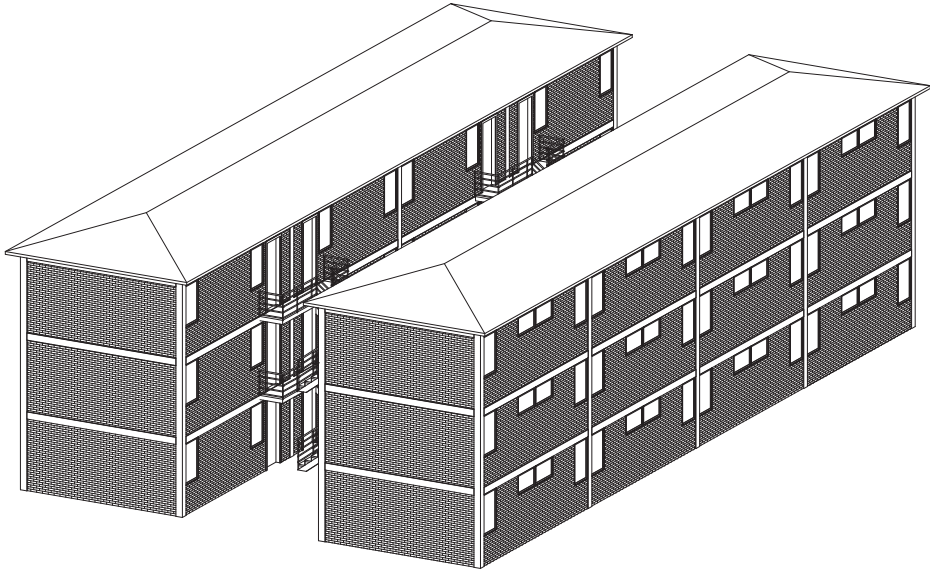
**DETACHED OR SEMI-DETACHED HOUSES TYPE 1**  
Single Family housing standing on separate plots. Main issue in this morphological type is housing quality rather than amount of square meter per person.



**DETACHED OR SEMI-DETACHED HOUSES TYPE 2**  
Single family houses standing on private plots, however, the feature of key importance is that they all are aligned to the wall of industrial or commercial areas

# 12. Existing Typologies

Axonometric View Type 1



## TYPE 1

### History

This type of house was developed in the 70's and extensively used throughout entire metropolis. More specifically, in Calle Nueva it was built in 1991, varying in sizes of the block.

### Block arrangement

Block are usually arranged in domino's structure either North to South or East to West, and most importantly do not relate to the street whatsoever.

### Organization of residential spaces

The kitchen is usually at the entrance with small dining table from which dweller can directly enter the bathroom or bedrooms.

### Internal Circulation

Residents get into their apartments through wooden staircase located in between two buildings, in some cases when apartments are extended towards the outer sides of the building, dwellers create a direct entrance from the first floor.

### Apartment sizes

This apartment type is only 41m<sup>2</sup> and can fit up to 3 bedroom, however overcrowding and subsequent in friction within families makes it a sound spots for bursting domestic violence

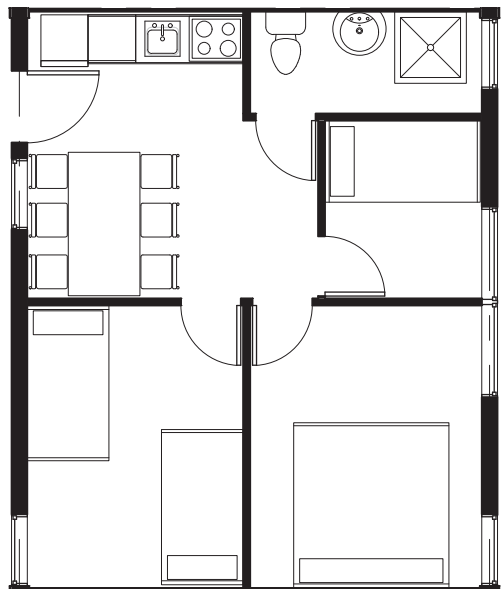
### Architectural and structural quality

Naturally, regarding the price of construction it becomes obvious that it complies only with minimum living requirements, therefore decays faster, is less isolated and most importantly - completely unsustainable.

Room Schedule	
Name	Area

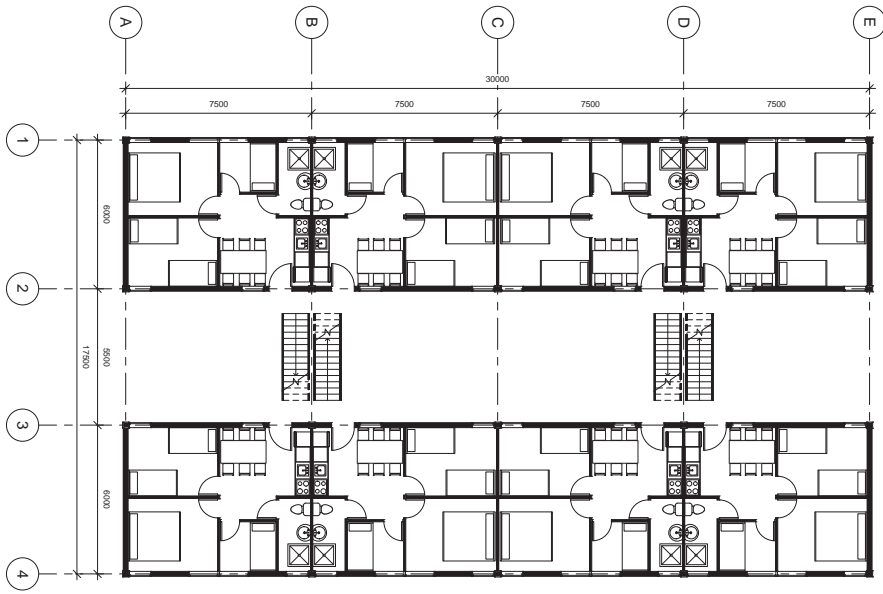
### N1-1

Bedroom	11 m <sup>2</sup>
Bedroom	10 m <sup>2</sup>
Bedroom	5 m <sup>2</sup>
Kitchen	4 m <sup>2</sup>
Living Room	9 m <sup>2</sup>
WC	4 m <sup>2</sup>
	41 m <sup>2</sup>

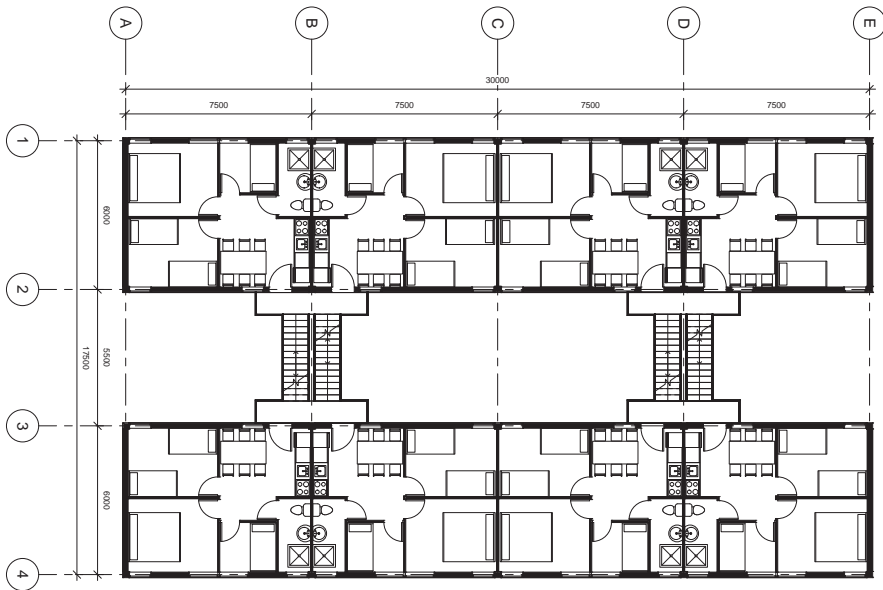


Standard apartment Plan of Type 1

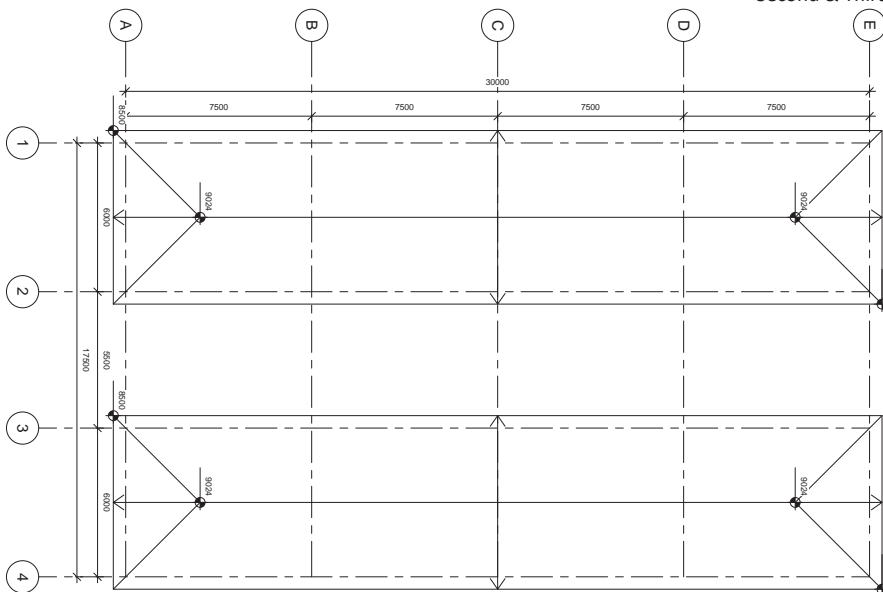




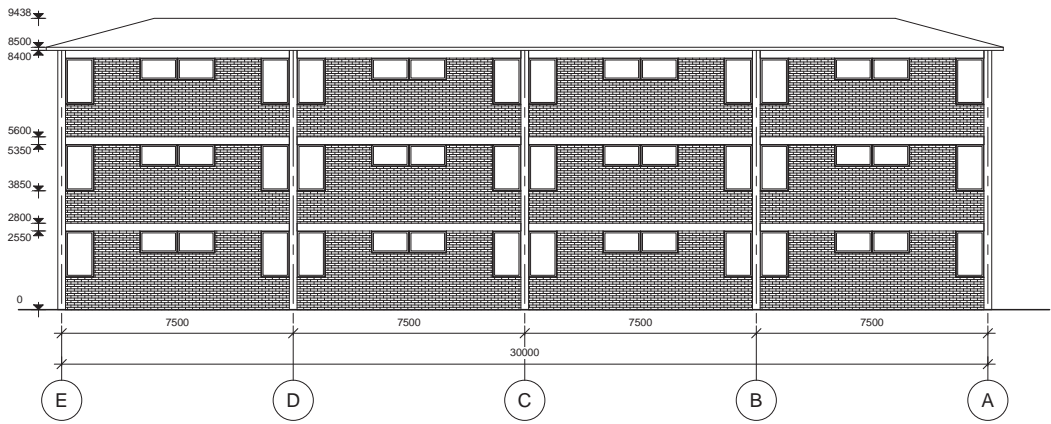
First floor Plan



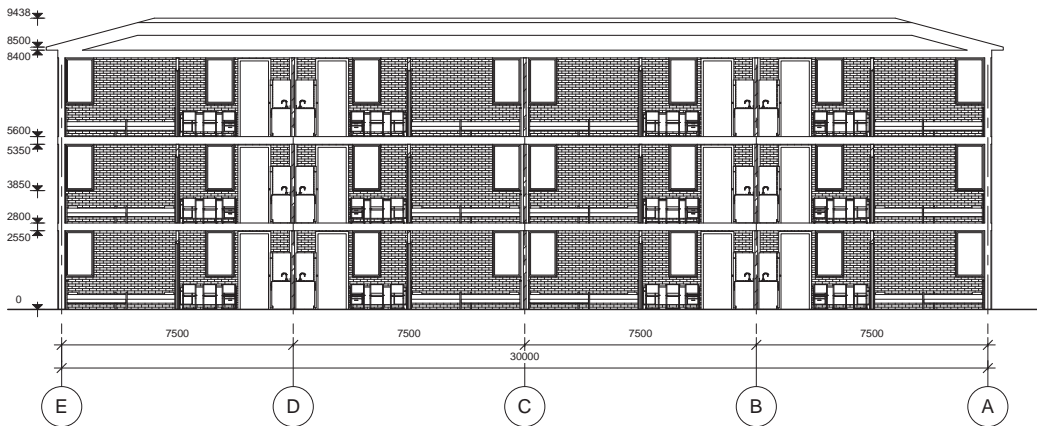
Second & Third floor Plan



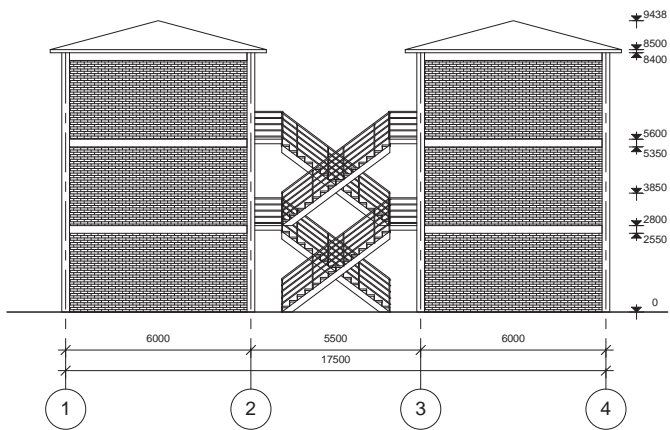
Roof Plan



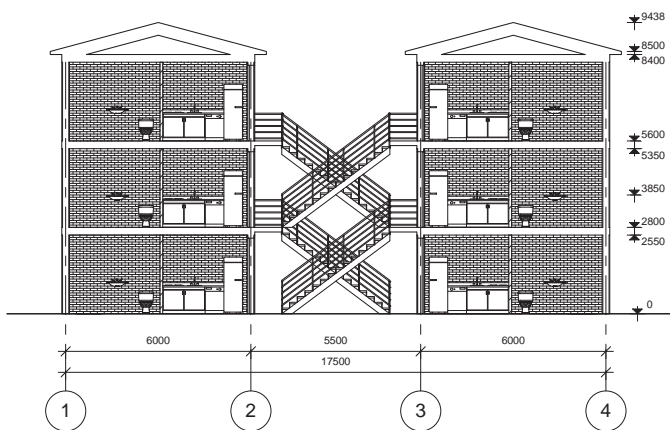
Longitudinal Facade



Longitudinal Section



Transversal Facade



Transversal Section



**TYPE 2**

Room Schedule	
Name	Area

**E1-1**

Kitchen	8 m <sup>2</sup>
Living Room	21 m <sup>2</sup>
Bedroom	7 m <sup>2</sup>
Bedroom	13 m <sup>2</sup>
Bedroom	7 m <sup>2</sup>
WC	6 m <sup>2</sup>
61 m <sup>2</sup>	

**History**

Very much like type 1 it was developed in the 70's and built along Anita Lizana street in around 1992.

**Block arrangement**

Blocks are usually arranged in couples varying from 2 to 3 in one row, this way minimizing the need for stairs

**Organization of residential spaces**

Differently from type 1 this one has a small living room and two bedrooms with windows towards outside, however there is one room with window only to tiny inner courtyard.

**Internal Circulation**

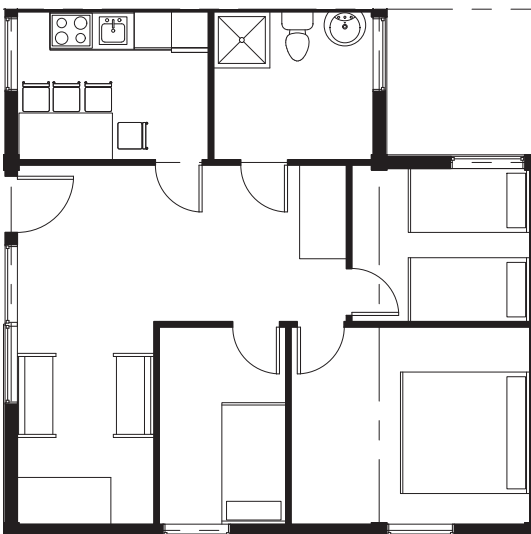
Residents get to their dwelling through staircases located on two sides of the building this time not from the inside but rather from outside or in between two buildings.

**Apartment sizes**

Apartments of this type have 61m<sup>2</sup> of space, which is a little more than in type 1, however both types share rather similar problematic.

**Architectural and structural quality**

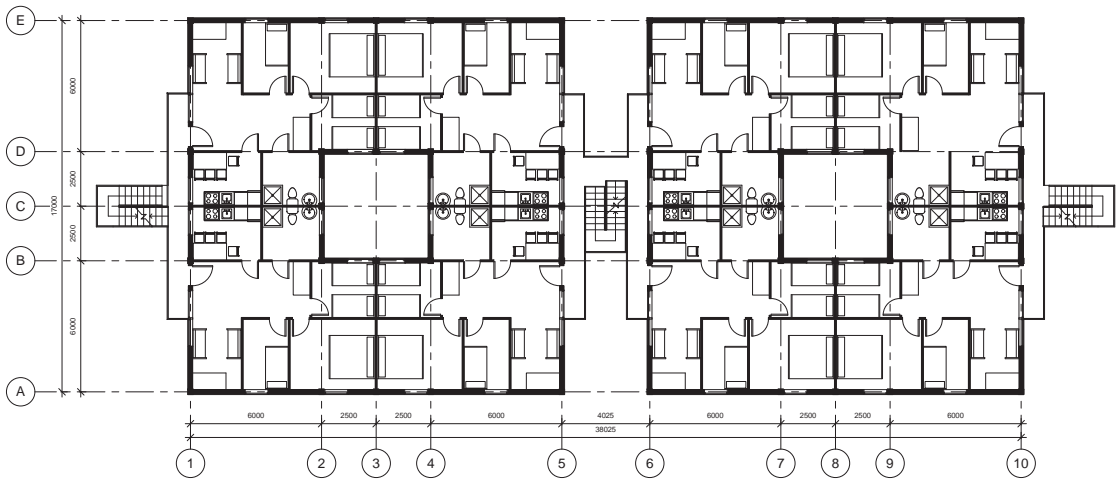
Similarly to type 1, low material quality and monotonous architecture of minimum, makes it frequent subject for informal adaptations and extensions, which naturally is rather dangerous process especially in such seismologically active area as Santiago de Chile.



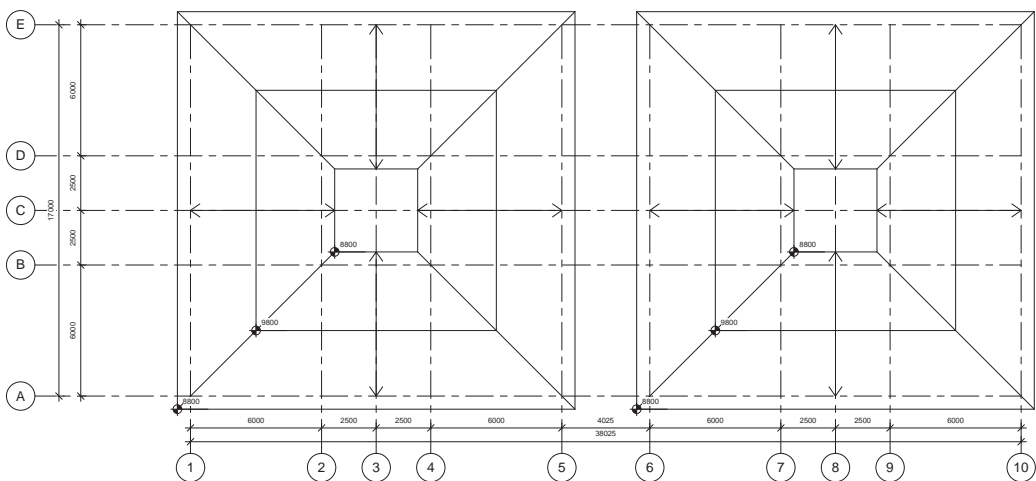
Standard apartment of Type 2



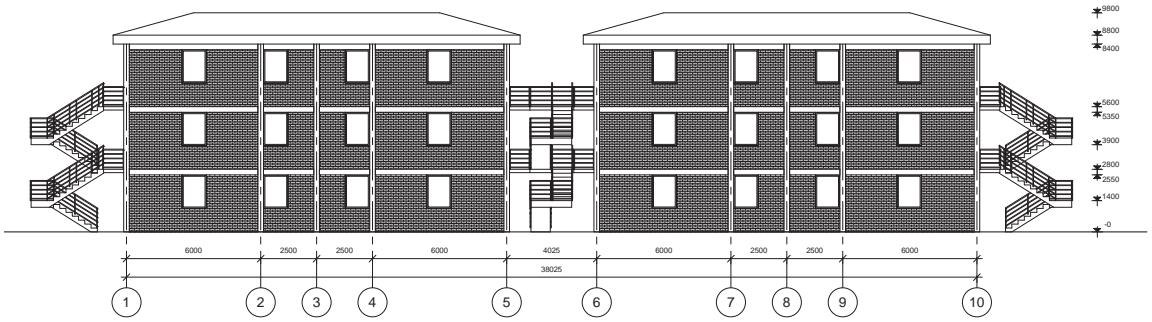
First floor Plan



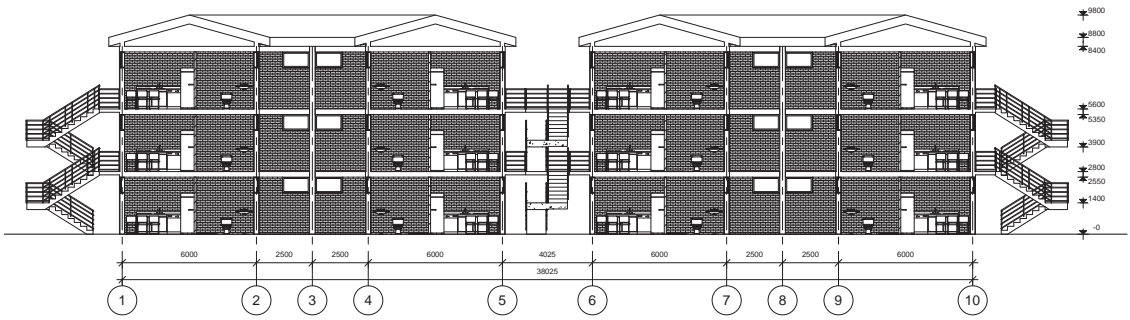
Second & Third floor Plan



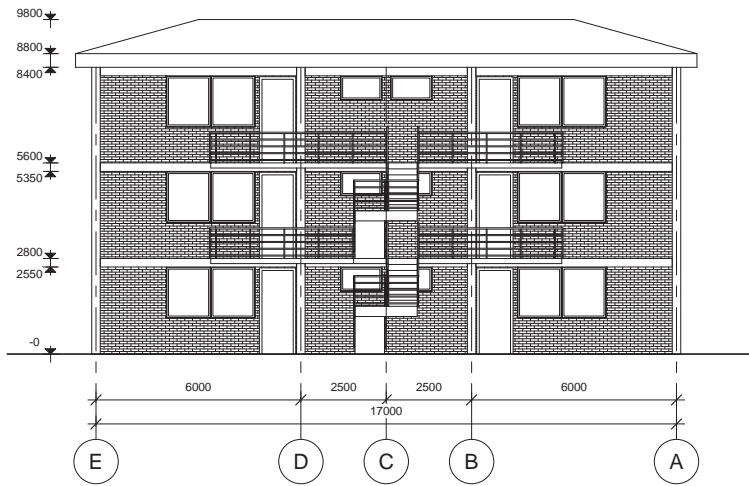
Roof Plan



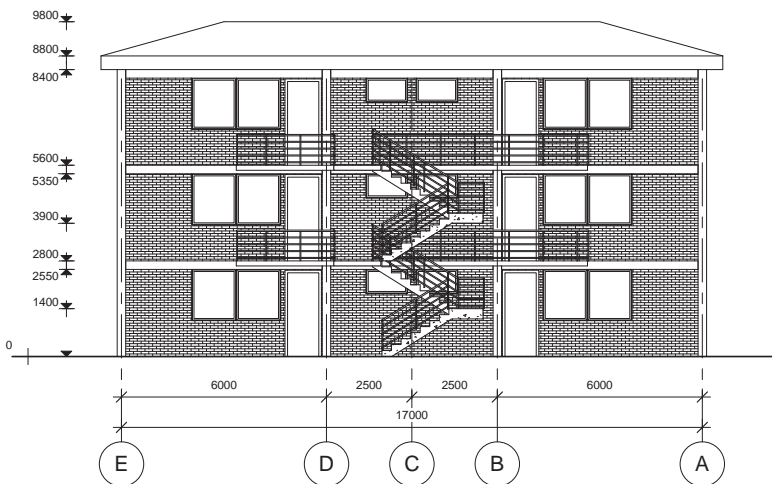
Longitudinal Facade



Longitudinal Section



Transversal Facade



Transversal Section

## 13. Local Analysis Conclusions

Excellent connectivity, strategic position on metropolitan scale, lacking social cohesion and economic pressure of the surrounding projects (Bi-centenary plan in the old airport, park Aguada) without a doubt are the most powerful factors leading to inevitable gentrification of the area. Even though this process brings better quality, it also causes local population to be displaced by higher income groups. Considering the history of displacement and current trends where least fortunate metropolitan dwellers relocate themselves towards the outskirts of the city – is not the goal to strive for. Improvement of the quality with a price of displacement does not solve the problem, but postpones/relocates it to somewhat different location.

Need analysis point clearly towards the social housing typologies, but is only the tip of the iceberg when analyzing social problematique. Homogeneity, clear absence of local production modes are one of the most prominent issues however vary depending on locality, accessibility and connectivity. One of the most evident needs in Poblacion Nueva Lo Valledor is clearly expressed in informal housing adaptations and extensions, that once more points towards the social housing areas.

Obvious demand for safety can be seen in windows with bars and, of course, in police reports of violent acts. Despite high amount of criminal onslaughts on the borders of the area, there is also a raging problem of domestic violence. Lack of public safety can be seen as an outcome of lacking social cohesion, that brings us two another issue of derelict and degrading public spaces.

Density, land use and public space research leads us to understanding that semi public or public spaces tend to become dirt fields, whereas semi-private staircases, or informal private gardens are rather well maintained. In addition, there are numerous cases, when people themselves realize the absurd topological relations and orient apartment entrances towards the street. Considering all that it easy to state that the modernist model of system built housing in between green open spaces failed utterly in numerous cases not only in Lo Valledor housing area, but through out entire Santiago. Empirical research proved that this configuration is a complete alien and does not relate to vernacular urban fabrics.

All in all a solution has to incorporate the issues of currently lacking social cohesion which causes current state of decay. It needs to rethink current relations between what is private and what is public because it directly influences maintenance of space. Most importantly, empower the community to benefit from changing condition and improve their individual spaces and lives and benefit the community at the same time.







**Local Relational Strategies**

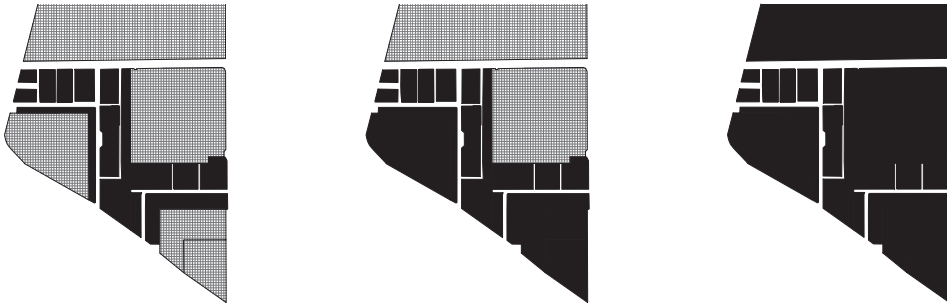
**[7]**

# 1. Scenarios

Despite the uncertainty, there are three most plausible scenarios that can possibly effect current urban fabric. With disregard to any outcome strategy has to be able to function no matter which of these will occur. First scenario can be called 'status quo' and suggests that nothing will change in the surrounding context. Lo Valledor will remain a huge stakeholder and two smaller industrial and warehouse areas will continue to function as it is now. However if we are to speculate on the effects of the Bicentenary and Aguada park that does not seem as the most probable outcome, therefore a second scenario is needed. It states that two industrial sites will be eventually be developed into residential or mixed function areas (similarly to Bicentenary Plan). In this case a major challenge would be to foresee the need of potential links in order to integrate newly devel-

oped areas instead of allowing segregation. This scenario is the most probable outcome that it will have to face sooner or later. The last possible outcome is analyzing the condition when all the surrounding sites are urbanized. Lo Valledor is moved to another location a little further from the city centre and the existing site is developed as a large commercial or mixed use area.

With disregard to any of the outcomes, the last scenario shall be used as a basis to research the potential of new links within the existing network. Despite its low probability the strategy has to create certain amount of flexibility within the plan and foresee possible links to ensure spatial and social integration and functionality within the existing urban fabric and newly created conditions.



# 2. Potentialities

## CONNECTIVITY

After analyzing the existing connectivity patterns on all scales it becomes evident that establishment of two clear links within existing street network can serve as powerful stimulus for tripling existing accessibility. These main links are namely: railway crossing from Avenida 30 Octubre to Calle Nueva, a connection of Calle Nueva to Anita Liazana and creating a clear and convenient pass under the highway towards bicentenary area. A clear morphological strategy enables to foresee possible potential links towards possible development areas. Public space can be used as an element to strengthen the connections. Currently closed Avenida Rural should be reopened hereby resulting in even better connectivity.

## PUBLIC SPACE

Vast areas of public derelict spaces can be urbanized which would be a major response to extremely high household index in the area. Redistribution of currently collectively owned public open space and creation of unitary urbanization model can be beneficial not only to the commu-

nity, but also for surrounding neighborhoods. Densifying and building up existing assets of open space empowers to rethink existing typological relations and create new modes of production. New, concentrated and multifunctional public spaces should remain active through entire span of the day, protected from decay and criminality. Differentiation of public space type could become the main community building tool whereas new identities would strengthen the sense of belonging. Even though connectivity serves as a backbone for creation of public space network it is no less important to rethink a morphological response towards new conditions.

## MORPHOLOGY

Densification of existing unused spaces should be considered as the places with the most potential. Extremely high household index is the most prominent issue in Viviendas Sociales Lo Valledor, therefore using the space to solve the issue of overcrowding is a viable scenario. Based on connectivity potentialities it is necessary to create a clear morphological plan in order not to hinder

future developments. The following feature that must be ensured is typological flexibility to changing conditions. The morphological interventions can be pursued in a way such way that housing units have the ability to adapt to changing demands. Morphological flexibility can facilitate increasing or diminishing needs for commercial spaces or, if not applicable, residential uses. It is crucial to enable the community to renovate and expand their dwelling safely and without worsening hygienic conditions for the rest of dwellers, furthermore reinforce structures that can be collapse in case of an earthquake or any other natural disaster. Typological flexibility, quality improvement and reduction of household index should be the main morphological focal points going hand in hand with functional diversity. Spatial clarity accompanied with spatial network can result in successful and viable local modes of production.

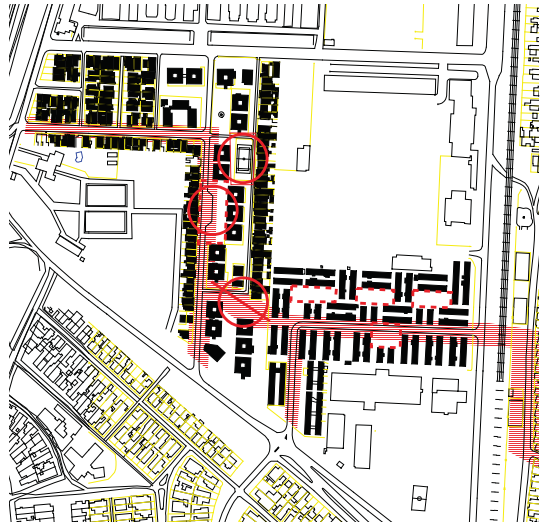
### MODES OF PRODUCTION

Local means of production is rather unpredictable development aspect, as it is not possible to predict whether the initial steps reached the target, whether urban condition actually changed, therefore it comes as a last layer when talking of potentialities. Firstly, to ensure certain amount of flexibility within the program and not to plan facilities that can be a subject for failure, it would be intelligent to see it as a self-organizing community participation-based process, slowly revitalizing the streets, squares and currently derelict open spaces. On the other hand there are certain functions that can respond to current statistical shortages of certain household equipment. For instance washing machines or extremely low access to internet. Planning of these facilities does not necessarily has to be flexible, however quantification of certain uses is subject for further debate.

Connectivity Potentials



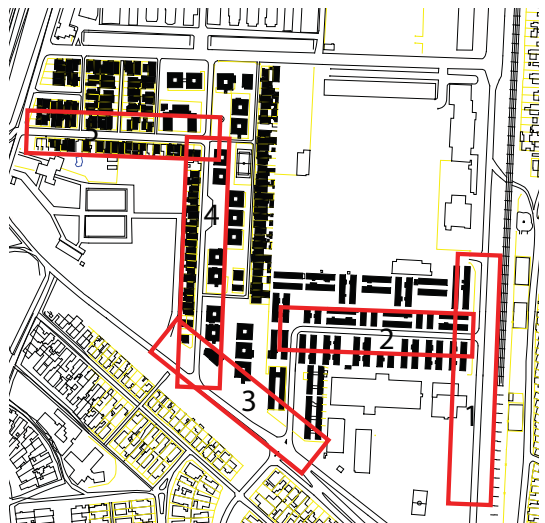
Public Space Potentials



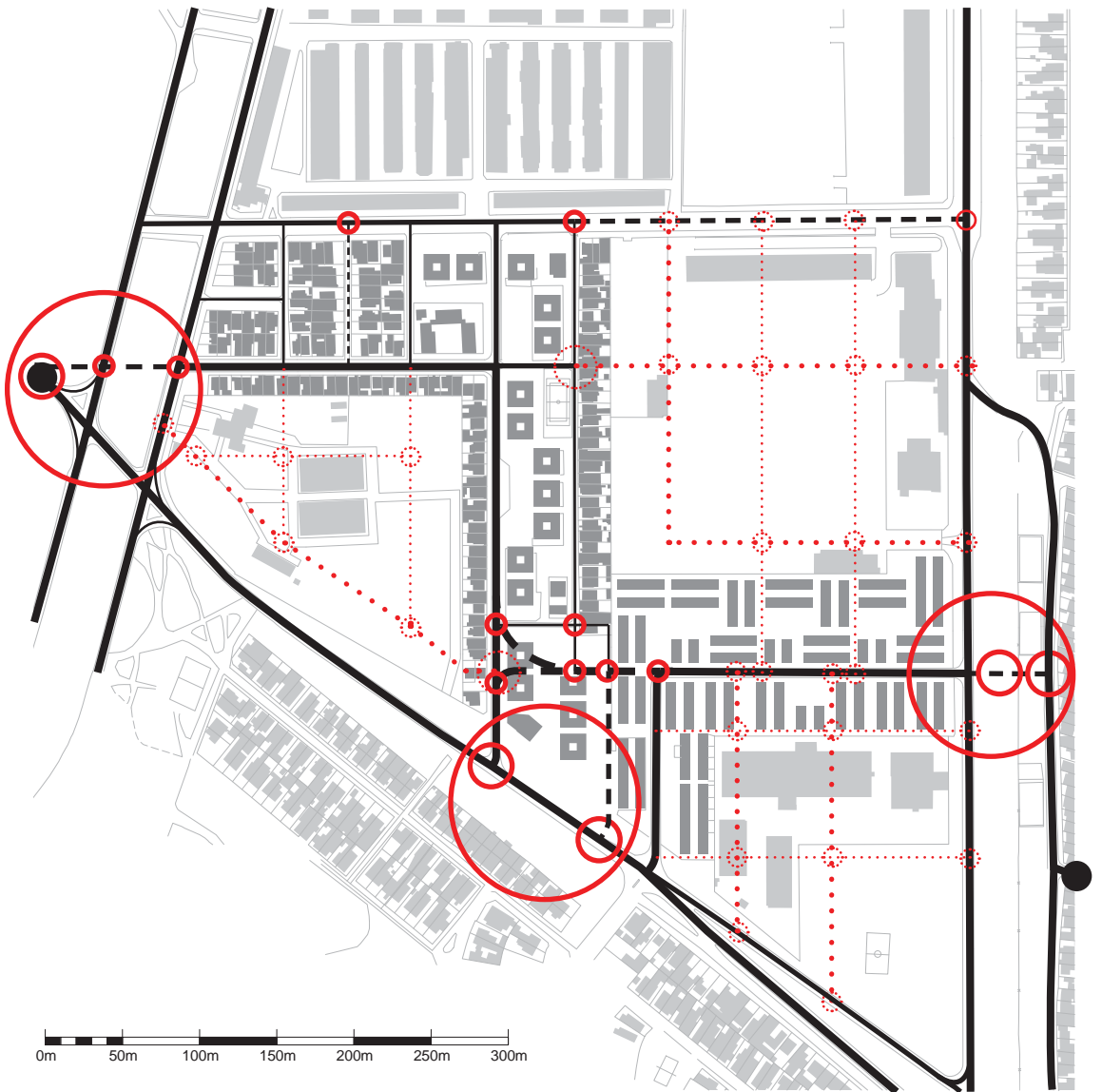
Morphology Potentialities



Modes of Production Potentials



### 3. Connectivity

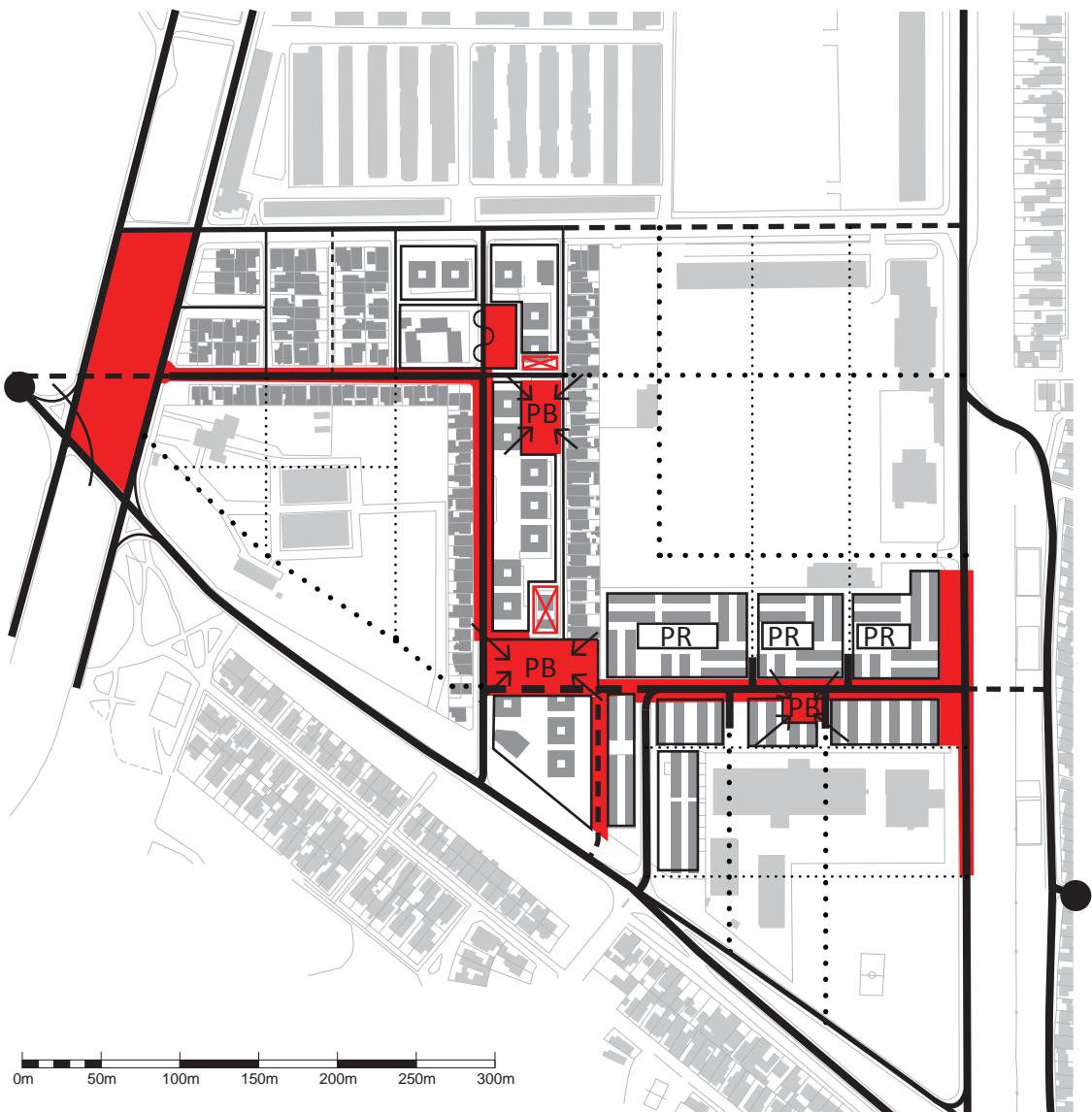


Continuing the initial relational strategy and acknowledging potentialities, first strategic interventions become evident. First things to be developed are located on the edges of the area, namely: railway crossing from Avenida 30 Octubre to Call Nueva, Clear connection to the other side of the Pan American highway and later, crossing of Avenida Departamental. These strategic projects are crucial to trigger the change in urban condition, as they provide the basic backbone for coming steps. The completion of the strategic projects is a necessary step in order to change existing conditions and to pursue onto next phase of regeneration.

The second phase should deal with strengthening the existing parts of the network together with newly established public space network. Reopening of Avenida Rural should be negotiated with Lo Valledor market. If at a certain point one of two industrial sites becomes a subject to change,

then the process should follow a potential street network to ensure integration.

Third phase tackles the scenario when the potential development areas face redevelopment. It potentializes changing importance of certain elements and nodes. New nodes and links integrate into existing network and strengthen it. Moreover, new links open new opportunities for links developed in previous phases hereby enhancing rather than fragmenting.



Public space network is an outcome of connectivity strategy, both: facilitating and enhancing. New potential and planned connections form a spatial structure that is capable of integrating into new urban fabrics this way minimizing the possibility of fragmentation. However, several steps have to be made in advance. Firstly, as a response to current issue of overcrowding one of the first steps, is densification of currently derelict open spaces. Densification of open space, naturally means diminishing amounts of it and higher densities, however strategy tries to eliminate derelict spaces and establish a network of high quality public spaces. Concentrating different functions relevant to different age groups and arranging the program in a way that ensures its vitality through entire span of the day is a goal to strive for. This means integrating and interconnecting potentialities responding to

social needs and spatial demands of the community. Strategy challenges current land ownership model by subdividing and rethinking its profile of privacy. It is a fact that currently semi-public and public spaces degrade while private and semi-private spaces are somewhat maintained. This serves as main guideline in defining privacy modes of a specific space. All in all, strategy follows the network set in connectivity strategy in order to prevent fragmentation and introduces main nodes within the network to enhance it. Concentration of functions ensures its vitality and densification of derelict space eliminates current household index-related problems. This results in several strategic projects in order to test its viability, namely: Main multifunctional square connecting Anita Lizana street and Calle Nueva, secondary square in the middle of Calle Nueva having an identity of short stop on the route and last but not least - Anita Lizana square.

## 5. Morphology



Morphological strategy focuses on establishing clear spatial structure based on the potential links and public space network. The aforementioned densification of open derelict spaces is also used to restructure existing typological flaws. Especially house and street relations. Restructuring and reconstructing existing typologies in order to facilitate potential need for modes of production is the main morphological challenge. Change of morphological profile is also necessary to ensure morphological permeation of border in between Poblacion Nueva Lo Valledor and La Victoria. Existing low-rise buildings do not face any reconstruction and is seen as a perimeter that should self-develop and create the facilities in relation to existing pedestrian flows and specific demands. In morphological sense, modernist social housing blocks will face the most changes. Firstly, subdivision into communities to ensure as less public degrading space as possible. Secondly, community

empowerment to expand their apartments depending on needs. Create much more diversity into existing typologies. Introduce community or individual based modes of production. Strengthen the public spatial structure and benefit from that.

Change of land ownership scheme can prevent physical decay of open spaces, furthermore, it can be a powerful tool to trigger processes that increase social cohesion.

## 6. Modes of Production



Morphological flexibility is a key feature necessary to introduce new modes of production, as quantification of potential programme is highly speculative. Right diversification model and street-house relation are key features of a design proposal.

Successful implementation of previous strategies is important to ensure sufficient amounts of pedestrians to sustain and revitalize the area. Main production points are drawn from connectivity and public space network, however the drawing shows maximum possible dispersal of program. Most of the solutions derive from previously discussed strategies, however a specific definition of projects is necessary. First thing on a route is a railway crossing and facilities that will serve for permeation of the border. First row of houses on Calle Nueva share quite distinctive potentialities to relate to Avenida Maipu strengthen-

ing the perimeter even more. Secondly, due to vicinity to Lo Valledor parking area it is possible to establish facilities meeting drivers needs. Calle Nueva can have a commercial profile, however flexible and developed in dependency on specific spatial condition. The main square connecting Anita Lizana and Calle Nueva remains a major point of exchange. Perimeter of Avenida Departamental is suitable for garages and workshops while low-rise buildings have a possibility to introduce new program themselves.

Strategy proposes solutions also for several public buildings, such as existing community centre and kindergarten in the north. It is possible to reconstruct the community centre in relation to the central square, while expanding kindergarten towards currently derelict plaza can undoubtedly improve the quality of the facility (in relation to notion that more space means better quality).

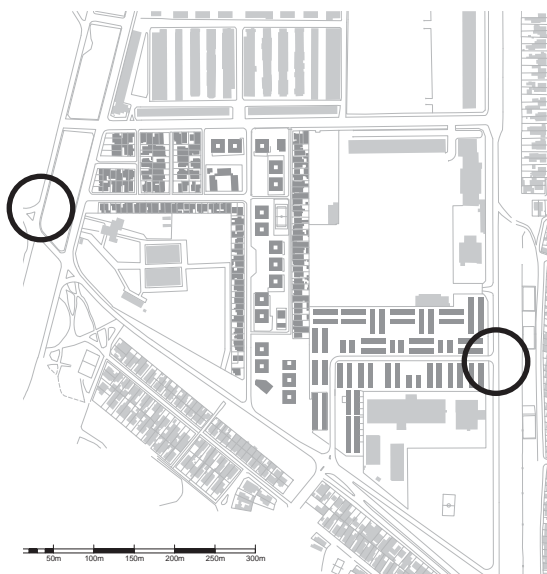




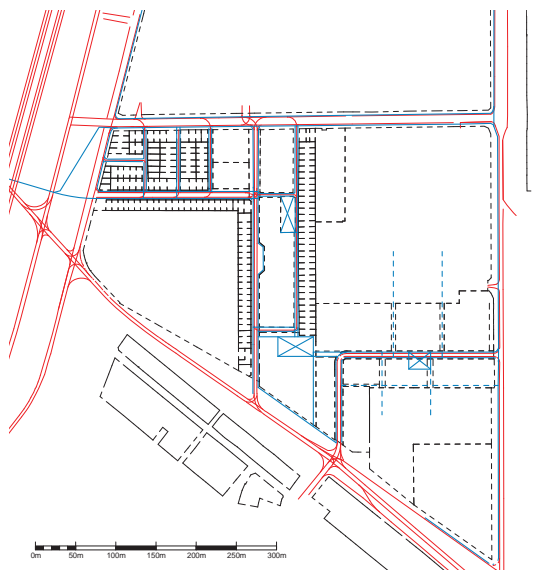
**Planning on Local Scale**

**[ 8 ]**

# 1. Connectivity projects

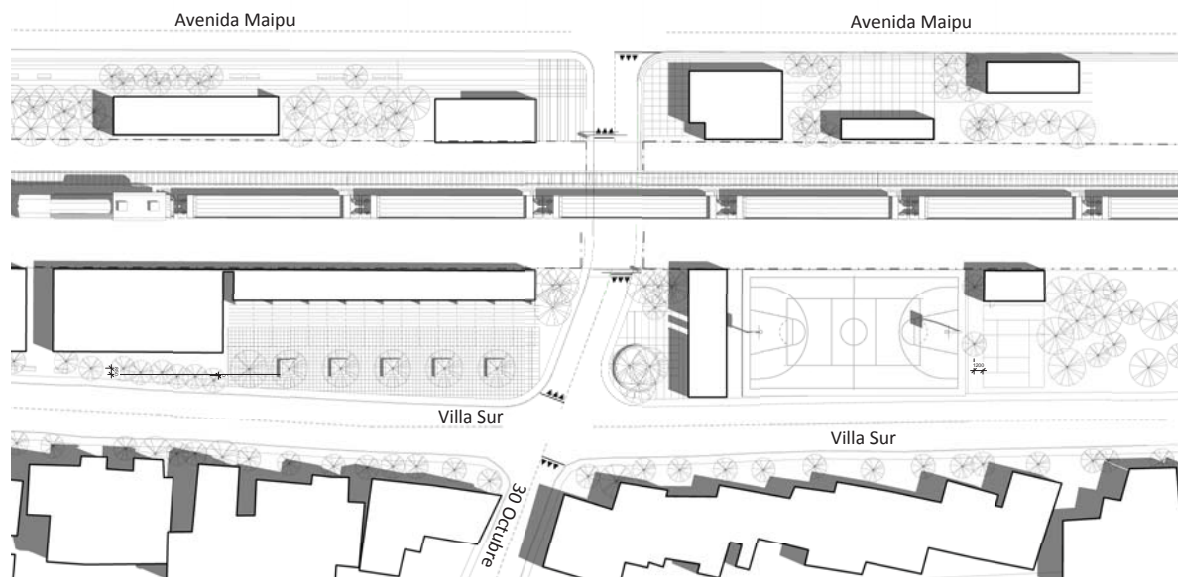


In order to trigger the change in current urban condition there are two projects of major necessity that shall slowly lead to subsequent steps of transformation. First projects will serve as generators ensuring a higher accessibility and integration at the same time. Railway crossing from Avenida 30 Octubre without a doubt can ad up to successful linking of two urban fragments and if we are to believe the potentiality analysis of the network- it can soften current border - the railway. Hand in hand with the previous one, a clear link towards bicentenary plan area should be established increasing the pedestrian activity and minimizing the possibility of criminal acts. It is worth mentioning that currently the aforementioned area has extremely high numbers of criminal activity.



Traffic organization on site is tightly related to connectivity strategy and aims to ensure a sustainable public space, street, pedestrian networks. Reprofilling and refurbishing current infrastructure should diminish currently chaotic relations of pedestrians and car traffic.

## Railway Crossing from 30 Octubre to Avenida Maipu



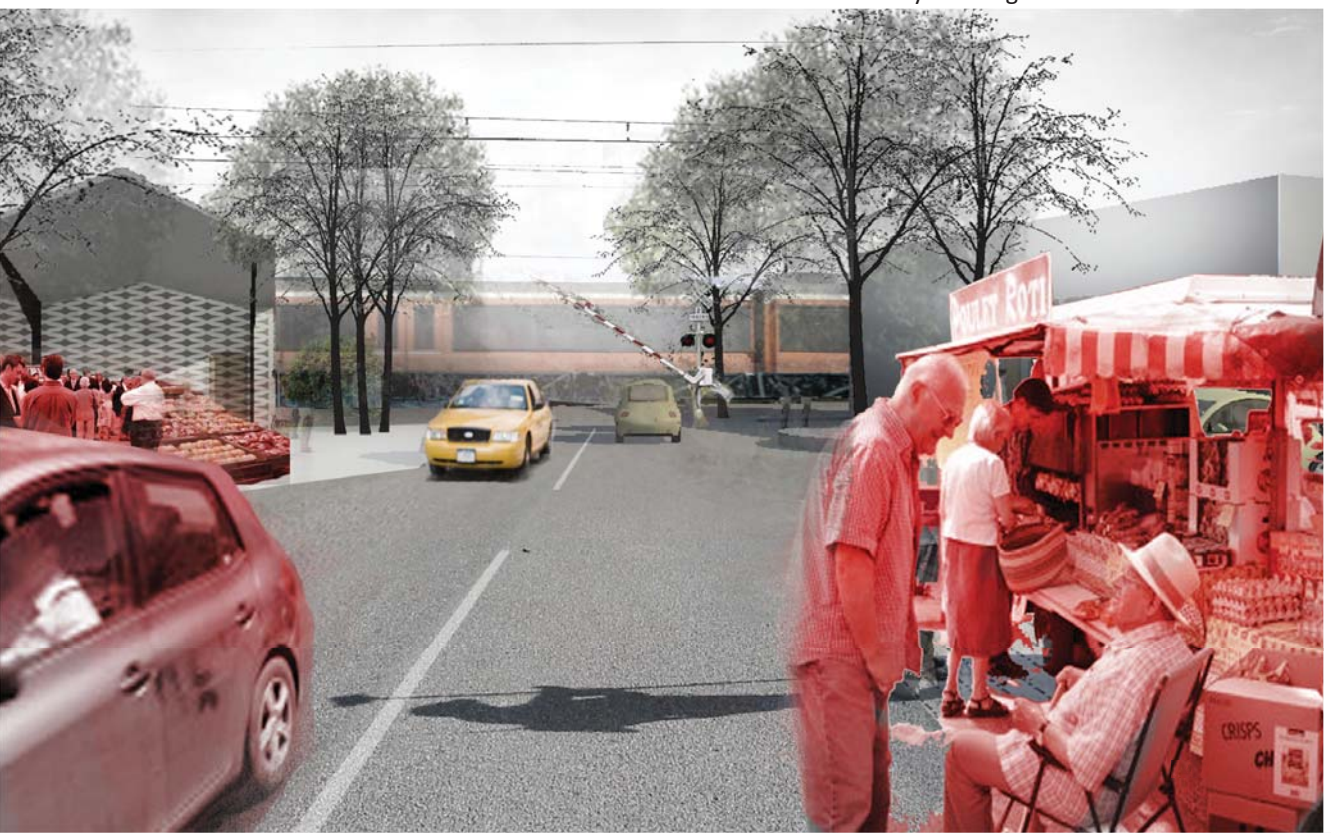


Villa Sur

Deriving from collective strategy, link from 30 Octubre to Avenida Maimu has a major significance, it not only triples the connectivity of the area, but also eases the access towards Lo Valledror market. Furthermore, idea to place commercial activities, workshops and sports facilities along the railway serves as a tool to permeate the border created by the rail. Currently, park along the street Villa Sur had some major accidents when children were hit by a train after using the informal railway crossings. It also became a perfect quiet spot

for drug trafficking other criminal activities. These problems are partially caused by the fact that currently there are too little crossings over the railway which makes the park along Villa Sur a deserted place. Diminishing the amount of casualties, creating more comfortable links and diminishing the amounts of informal crossing is of everyone's mutual interest, however railway company is a major stakeholder here.

View towards railway crossing from 30 Octubre

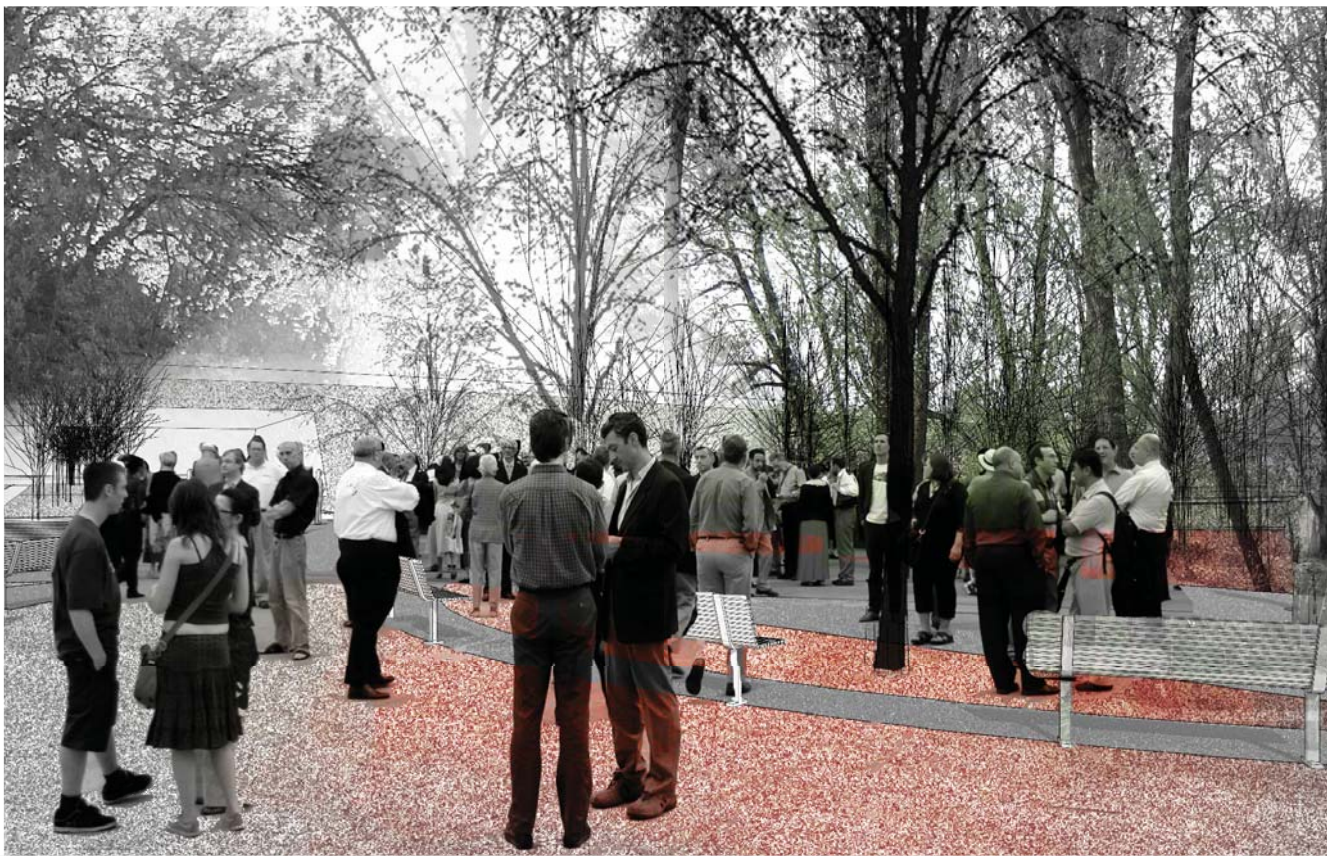




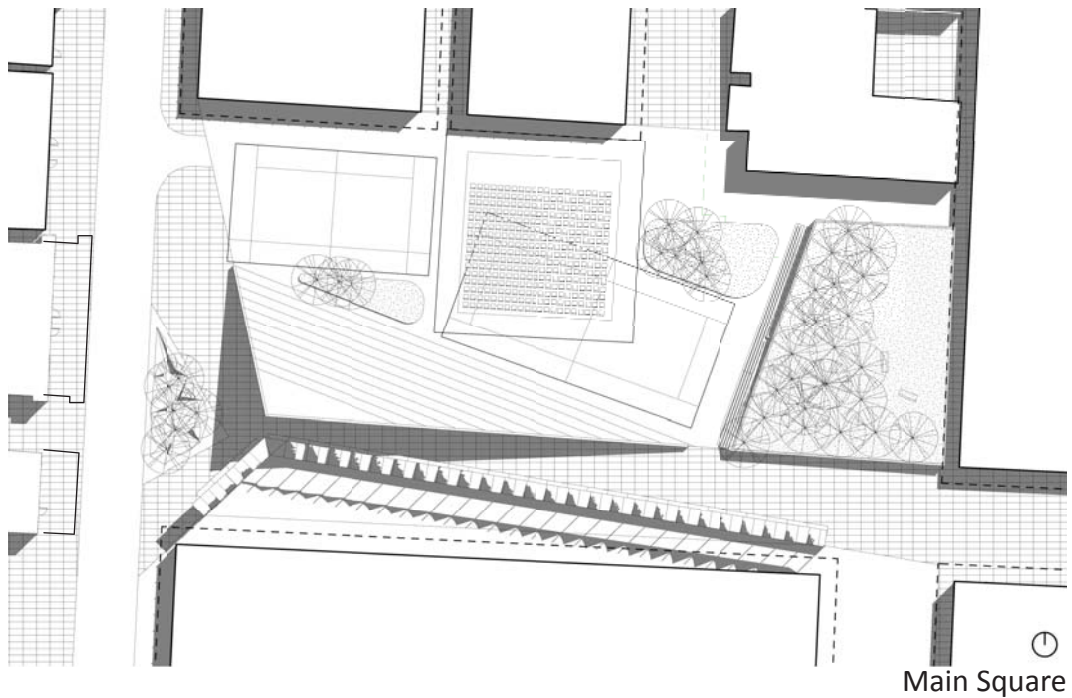
Highway Passage

Currently this area is one of the most dangerous areas not only if compared to surroundings, but also in entire Pedro Aquirre Cerda municipality. Knowing that, it is essential to ensure safety of future pedestrian flows and vitality of the space. The project is on borders of Bicentenary plan area, and Park Aguada, furthermore it is located within the sanitary zone of the Pan American highway. All the aforementioned in addition to Lo Valledor and Local communities are the main actors that will be involved in redevelopment of

this potential and necessary link. The project aims to diminish the negative effects of the highway (pollution, noise, etc) and establish a clear and safe link towards infrastructural node soon to be allocated in a vicinity of the Bicentenary area (Old Airport). Failure of this project could seriously undermine functioning of the entire plan, therefore it has to be dealt with a great consciences of existing constrains.

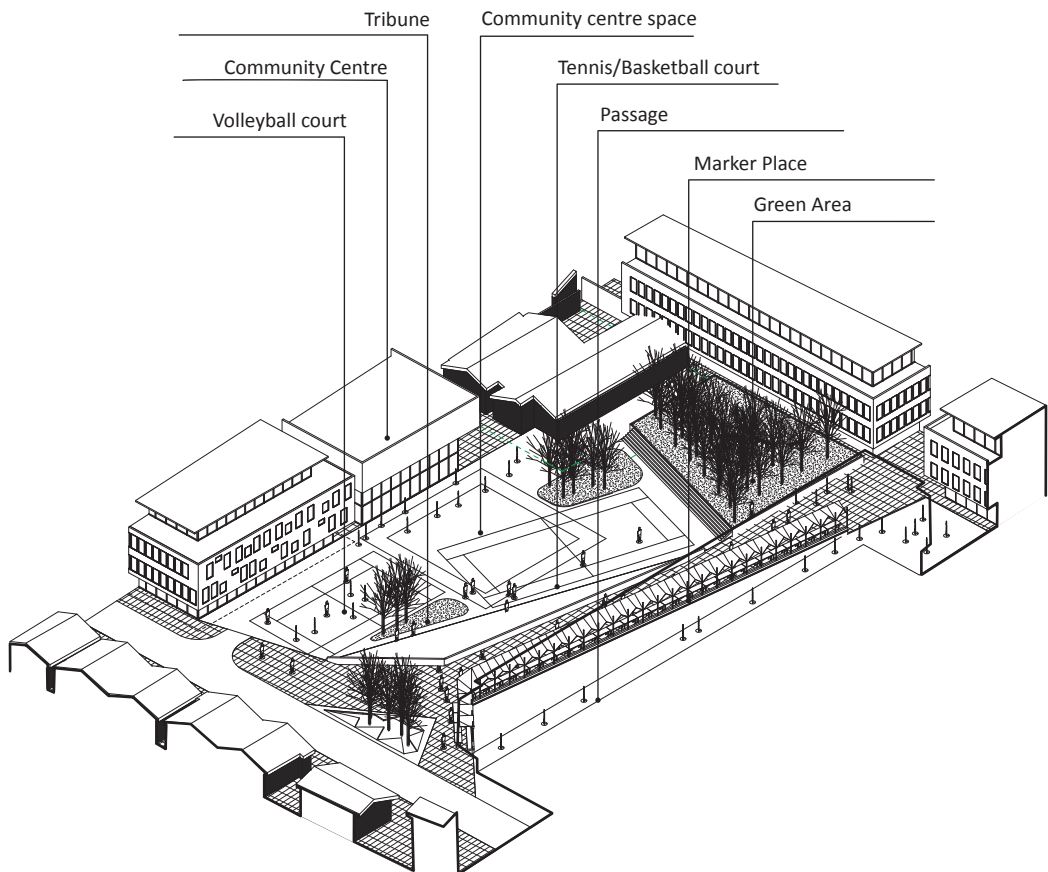


## 2. Public Space projects



The project embodies several concepts, first, multiplicity of functions that ensures vitality and usage by different age groups through entire span of the day. Second- enhances the pedestrian network and integrates it to the whole plan. Last but no least - densification of public space, which means that spaces

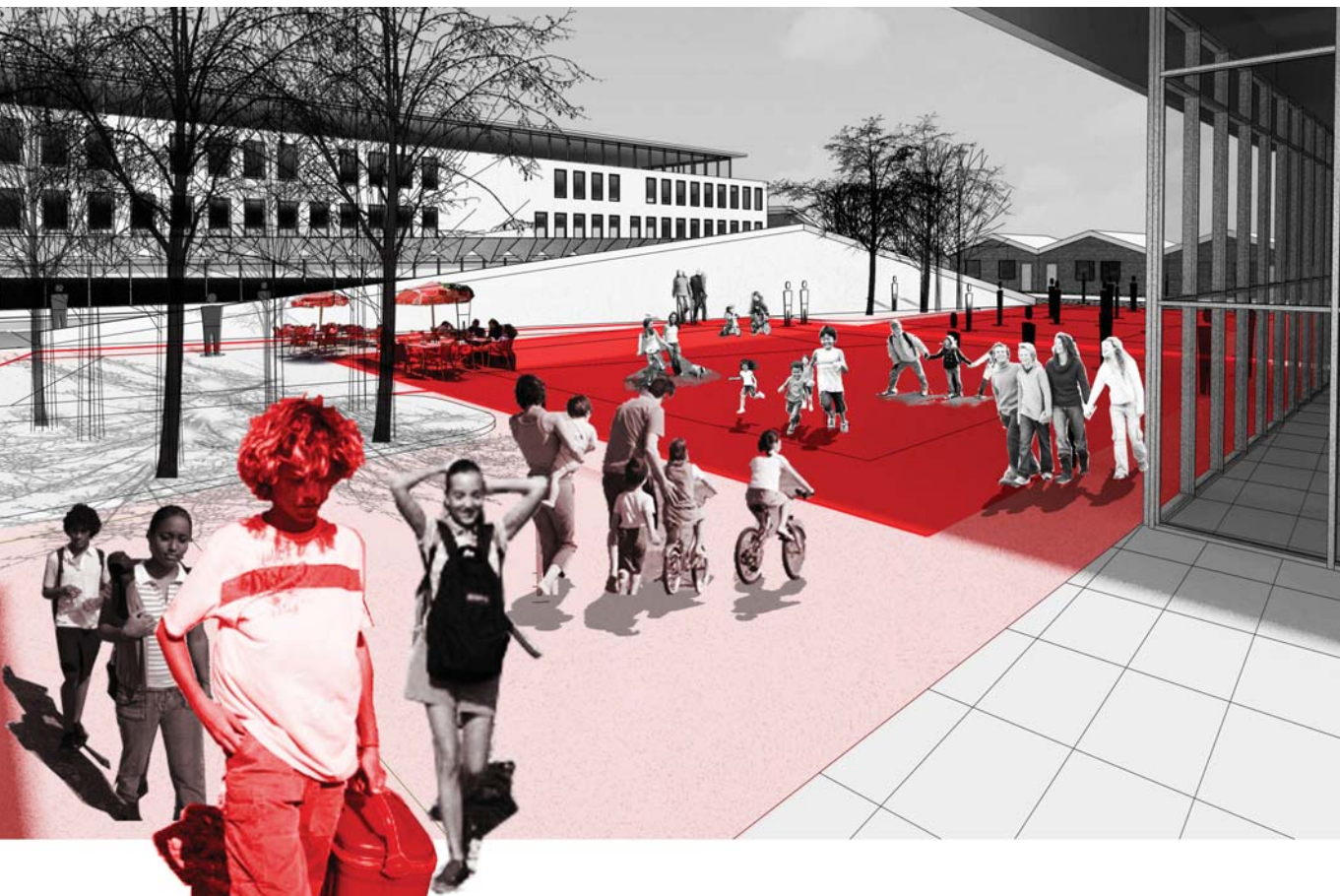
change depending on hierarchical peaks during different times of the day. All the aforementioned can should prevent public space from decay and increase public safety in it. Four images illustrate the usage of space during the day (next page). In the mornings when people are heading to work it is possible to establish a free market along the





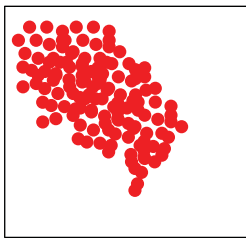
main route while at midday (bottom) it can turn into multiple playground for kids coming back from school. Small green area (top right) on the eastern side should be a lively spot in the afternoons, while in the evenings it is possible to organize various activities in front of refurbished community centre. Bringing local communities to the streets without a doubt can be a powerful step towards diminishing criminality rates, furthermore

social interaction and establishment of new trust based networks is a backbone of high social cohesion. Knowing the triggering power of such intervention and inability of current population to engage into social activities, the major stakeholder in these projects should be the municipality together with a labour of the communities. Increasing social interaction serves a solid ground for further strategic interventions.

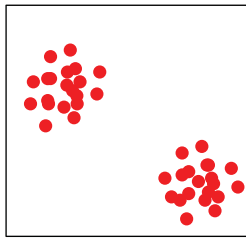




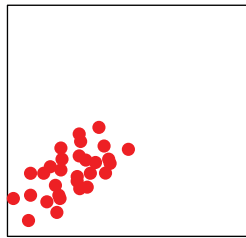
Square use during the day



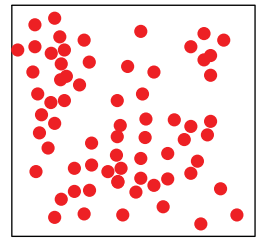
Morning



Mid-day

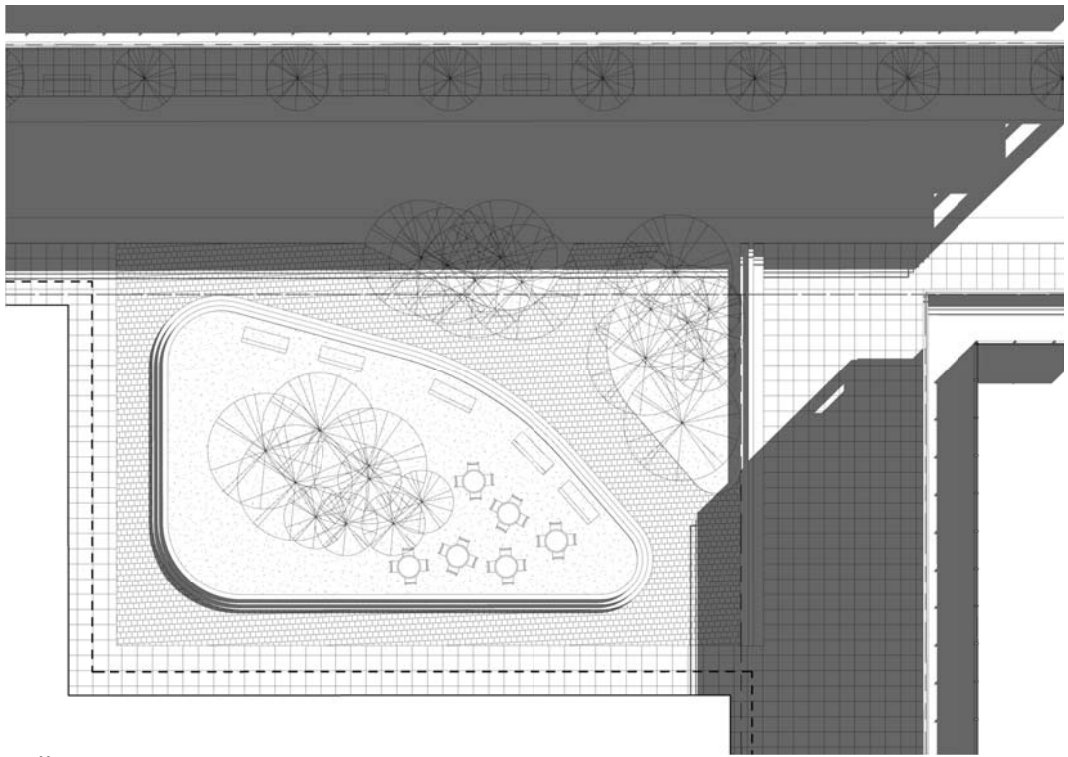


Afternoon



Evening

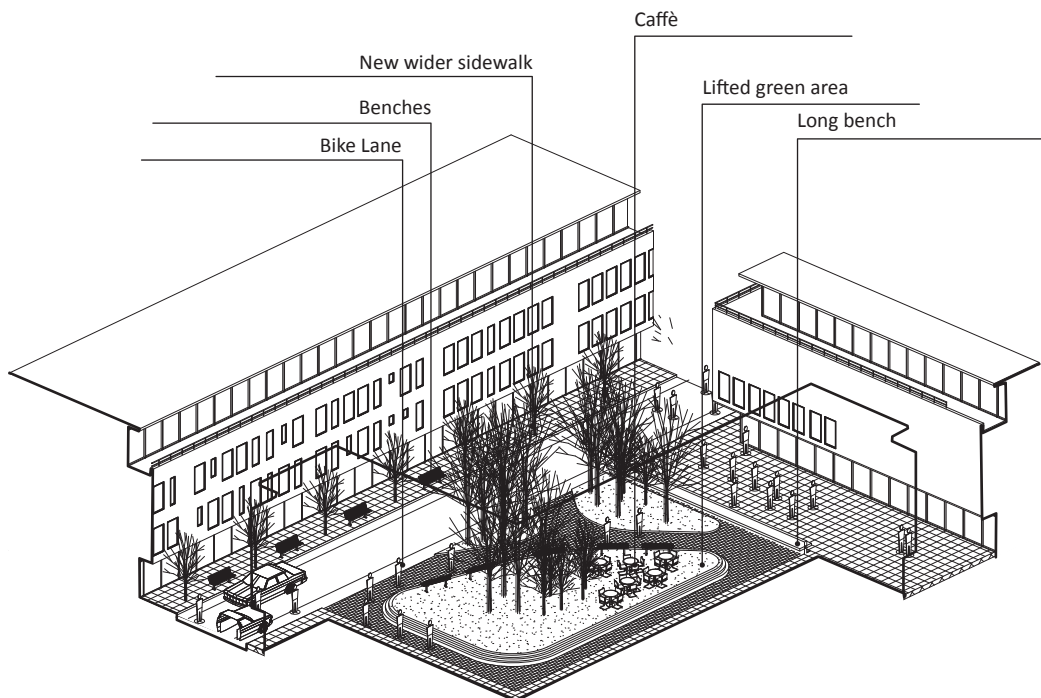




### Calle Nueva Square

Differently from the main square, Calle Nueva square has a little more intimate character, on the other hand serves as a stopping point for the daily flow. It can also facilitate different functions and activities, but it is not its major function, because morphological transformation strategy implies that community activities are also present in the inner courtyards. Disregarding that, it should have either commercial perimeter, or community based functions responding to specific needs, such as diner, cafe, laundry, small workshops,

day-care centres etc. One of the most important constrains though is to ensure that link to potentially developed areas (passage on the eastern side) remains untouched. Even though it will have much lower community activity, 'eyes on the street' from reoriented housing estates should prevent criminal activities.







# Anita Lizana Square

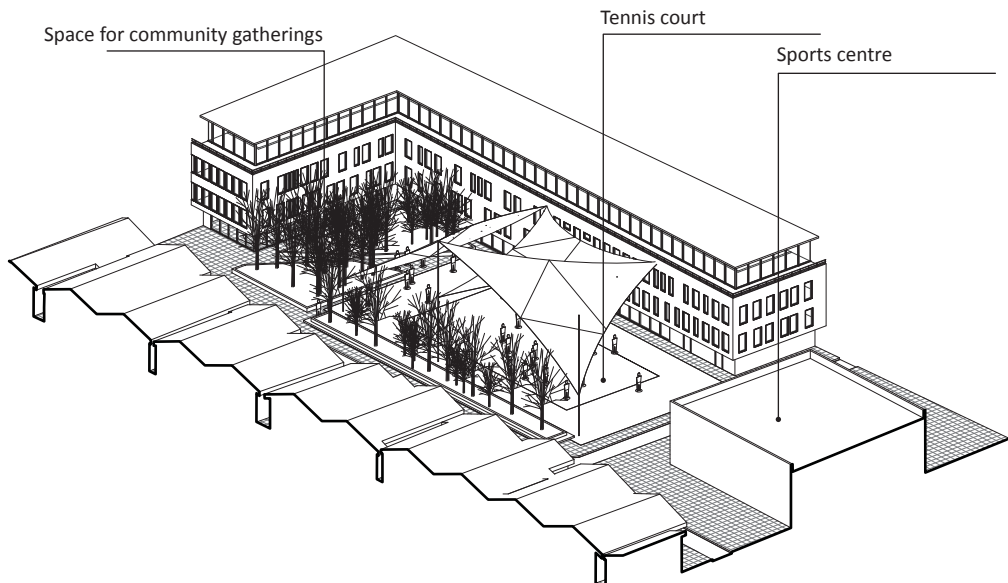
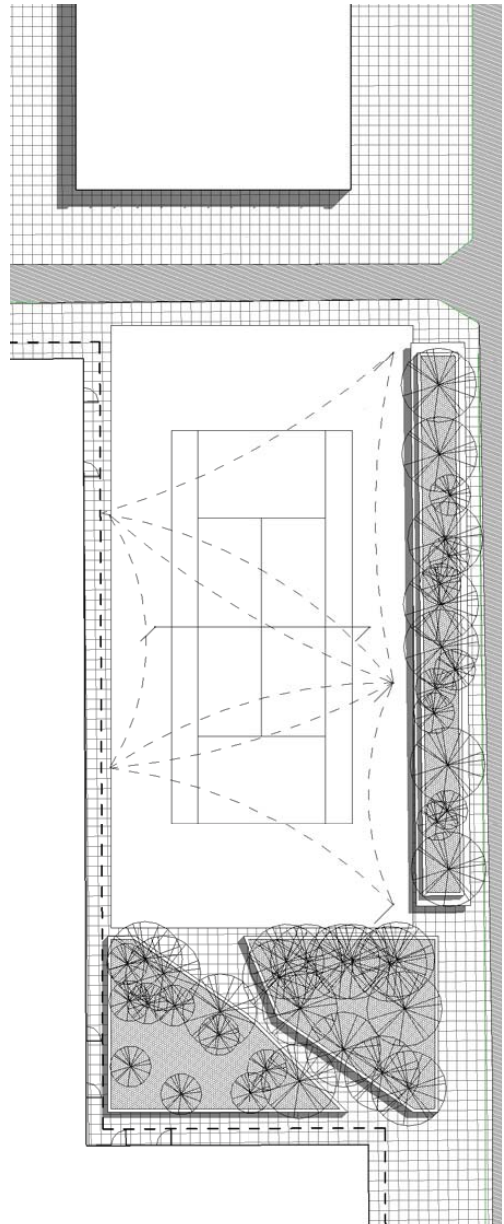


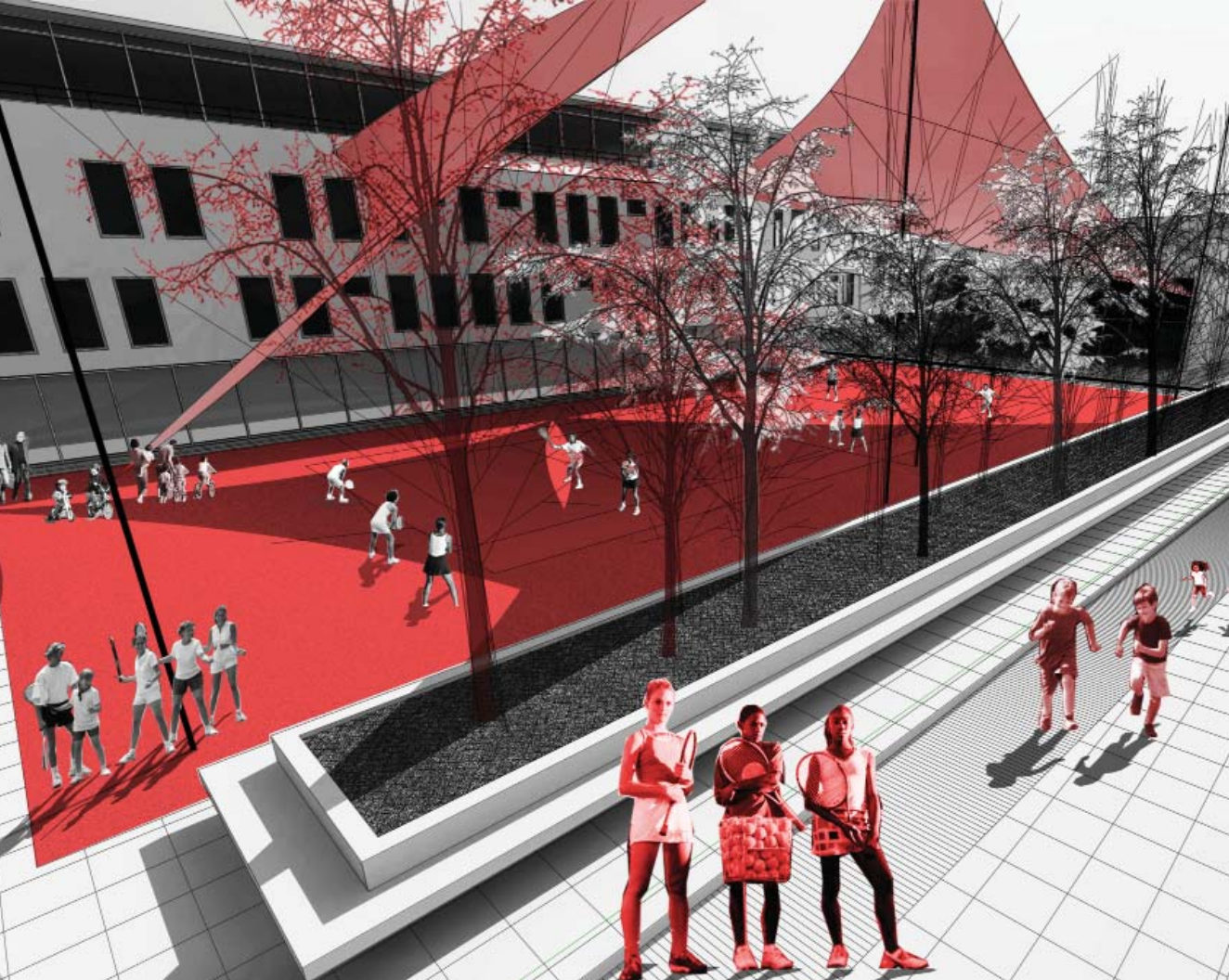
Anita Lizana de Ellis (born November 19, 1915, Santiago, Chile - died August 21, 1994) was a World No. 1 tennis player from Chile and the first Latin American female to win a Grand Slam singles championship. She also won the U.S. Championships in 1937.

According to Wallis Myers of The Daily Telegraph and the Daily Mail, she was ranked in the world top ten in 1936 and 1937 (no rankings issued from 1940 through 1945), reaching a career high of World No. 1 in those rankings in 1937.

Partially because of the name square is called and the fact that there was a sports square in this spot already, it is no mistake in trying to enhance it. One of the most expensive and costly additions is new sports centre for those who use the tennis court, on the other hand surplus value of such intervention is enormous. Sport facilities guarantee constant surveillance and vitality of space, furthermore increasing the amount of good quality sports facilities increases the occupation of the local youth and withdraws them from negative or even criminal activities.

Despite its sporty character and safety in daytime, it is essential to guaranty certain activities during the night. The easiest is to organize some local gatherings, community dinners, parties or sports competitions. Subdivision of space into different zones, namely: green, sports and observational sustains it and ensures safety.





### 3. Morphological projects

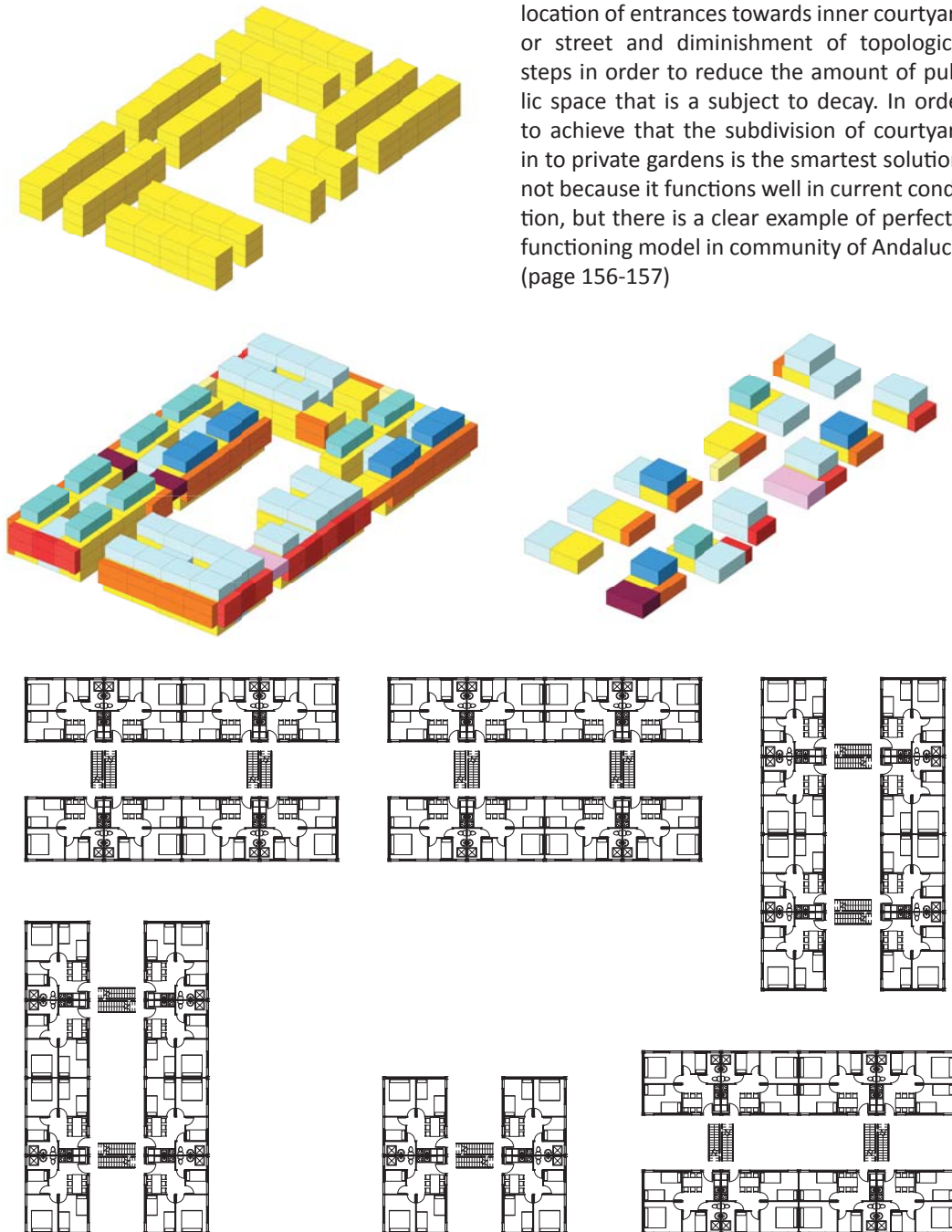
The fundamental problem clearly visible in entire area is housing where community need for bigger and better quality apartments is expressed in informal extensions and adaptations. The self-built structures are poorly erected which causes some major threats especially in such active seismic area as Santiago. At the nucleus of most problems not only in Santiago, but throughout the world is uniformity, mono functionality, and lacking complexity. Poblacion Nueva Lo Valledor is a clear example of how modernist ideals failed in front of indigenous landscapes and traditions. All in all, the main goals for the morphological transformation are as follows: multi-functionality, diversity, unique identity - all designed in relation

to local tradition.

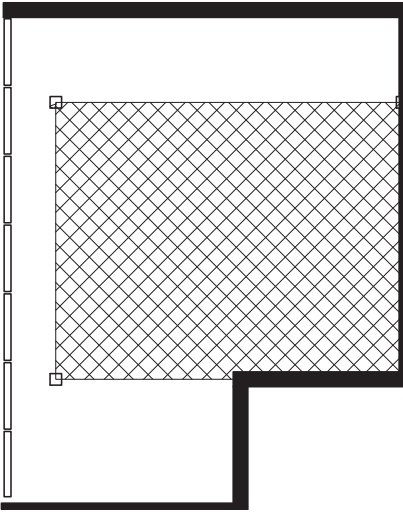
Deriving from public space strategy of concentration and densification it is necessary to set the maximum possible extension of current housing estates, furthermore it needs to re-think current circulation topological schemes. After setting the maximum possible volume it becomes easy to extract new different apartment configurations that shall be elaborated further.

Even though it is possible to pursue densification per unit (0-2 floors) but refurbishment is much faster and much more cost effective when it is done with one heap for entire house.

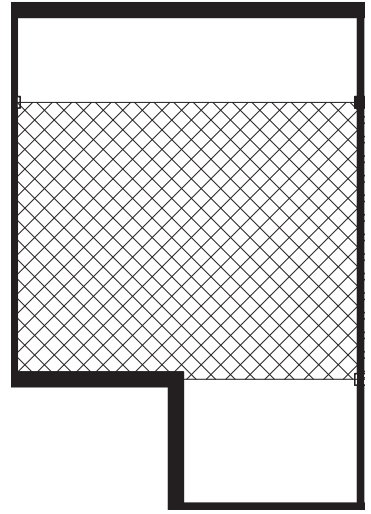
One of the most important adjustments is relocation of entrances towards inner courtyard or street and diminishment of topological steps in order to reduce the amount of public space that is a subject to decay. In order to achieve that the subdivision of courtyard in to private gardens is the smartest solution, not because it functions well in current condition, but there is a clear example of perfectly functioning model in community of Andalusia (page 156-157)



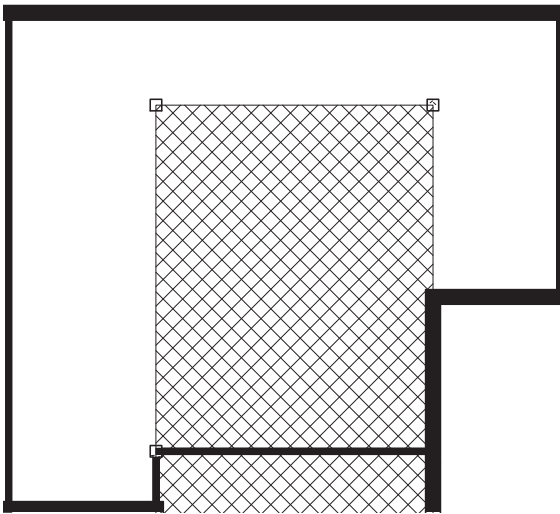
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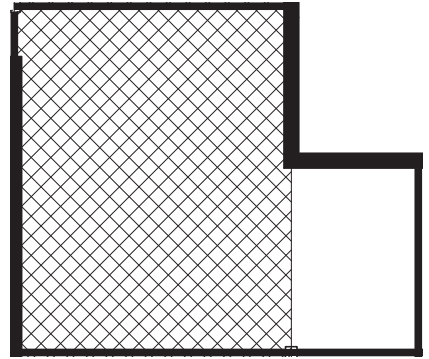
Type 2



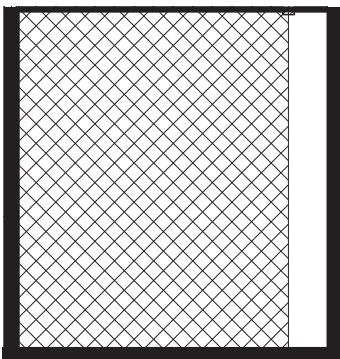
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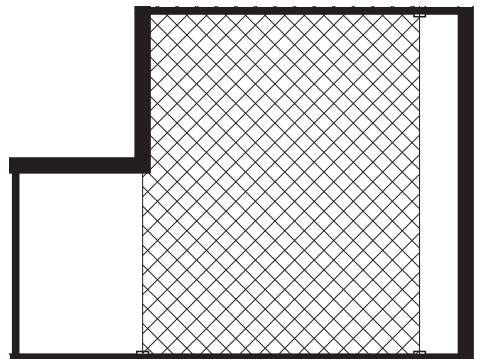
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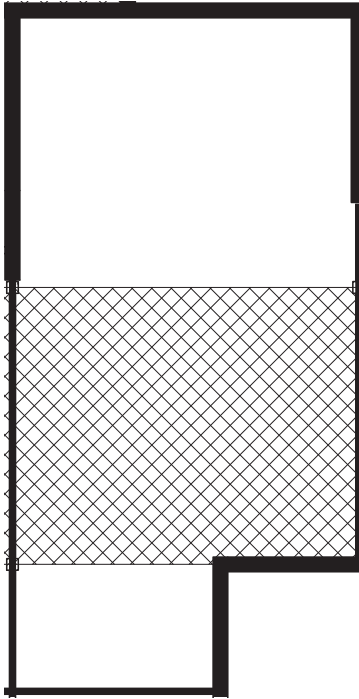
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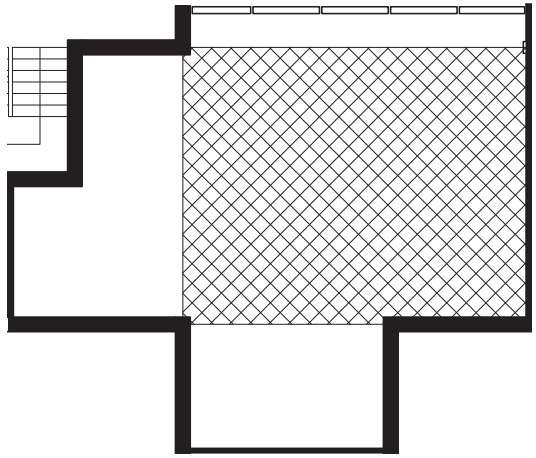
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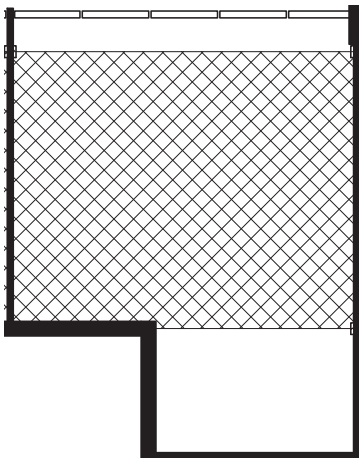
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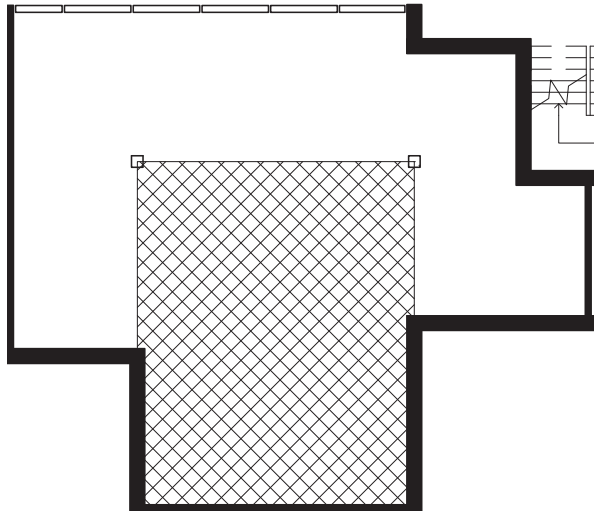
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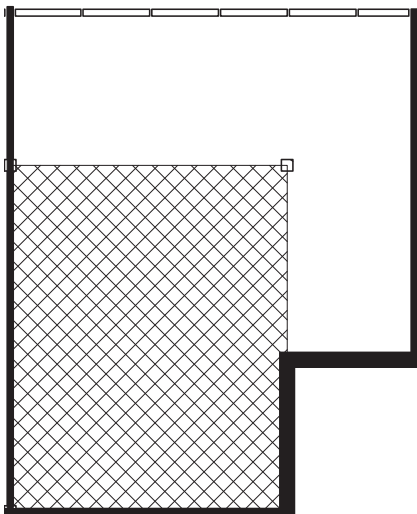
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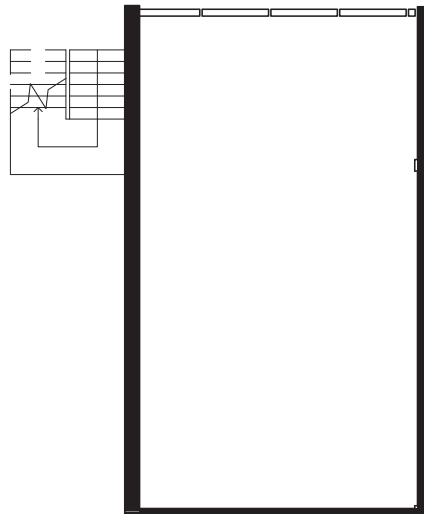
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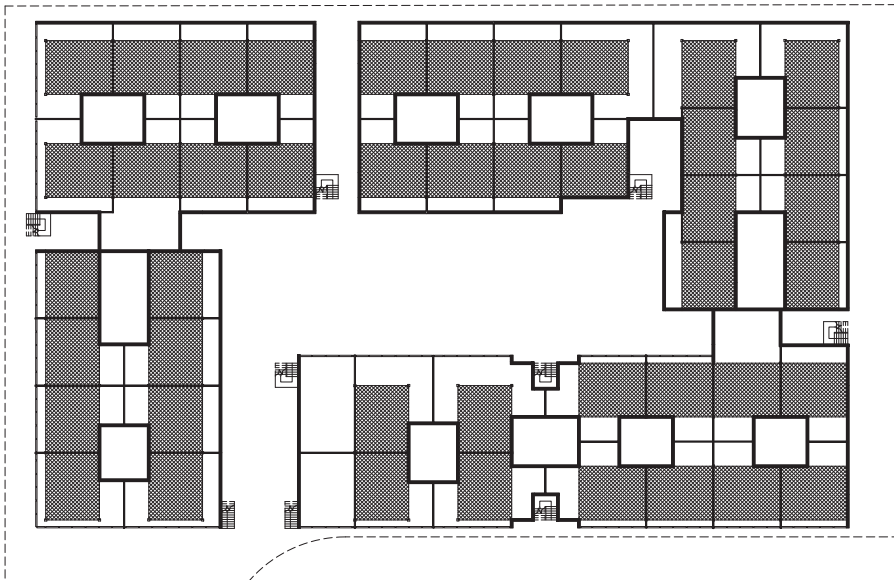
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Type 12



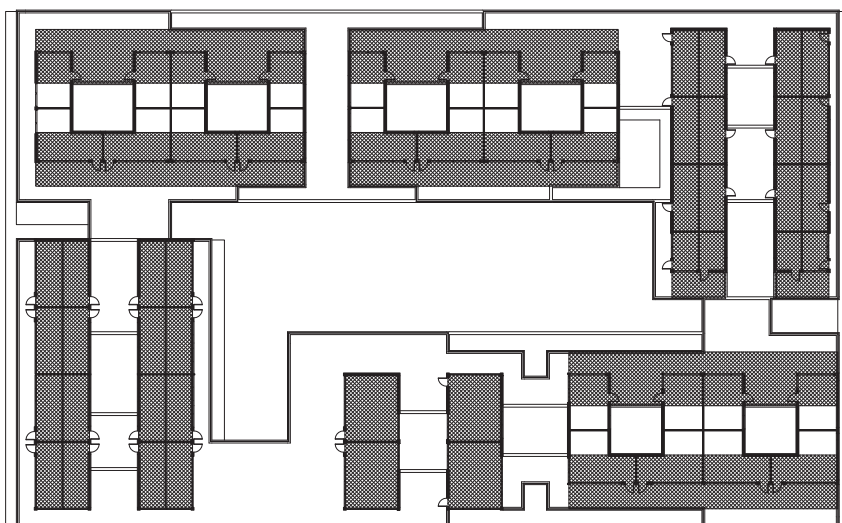
1st Floor Plan

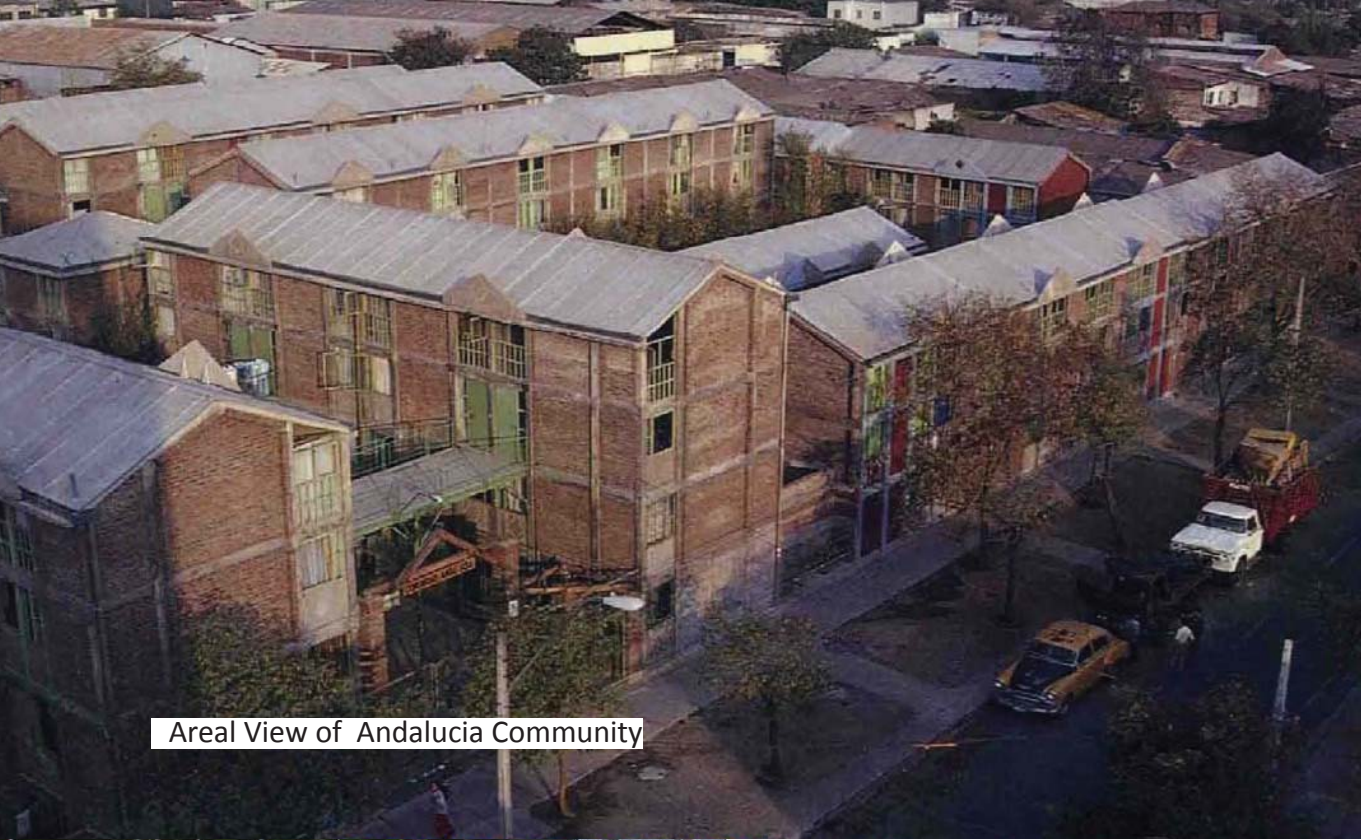


2nd & 3rd Floor Plan



4th Floor Plan





Areal View of Andalusia Community



Small Private well maintained gardens



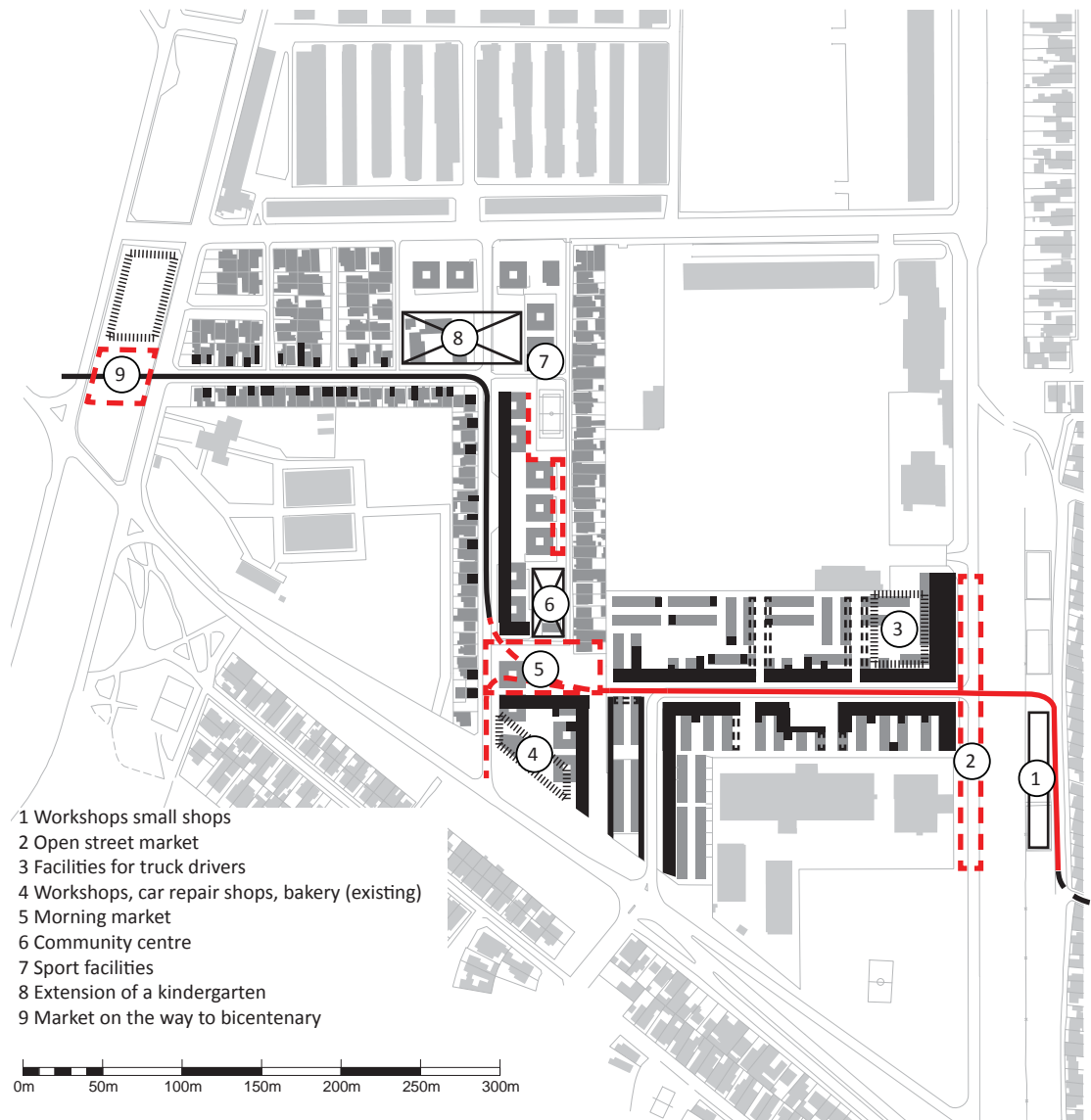


Well maintained private gardens



A little less organized semi public space

## 4. Modes of Production

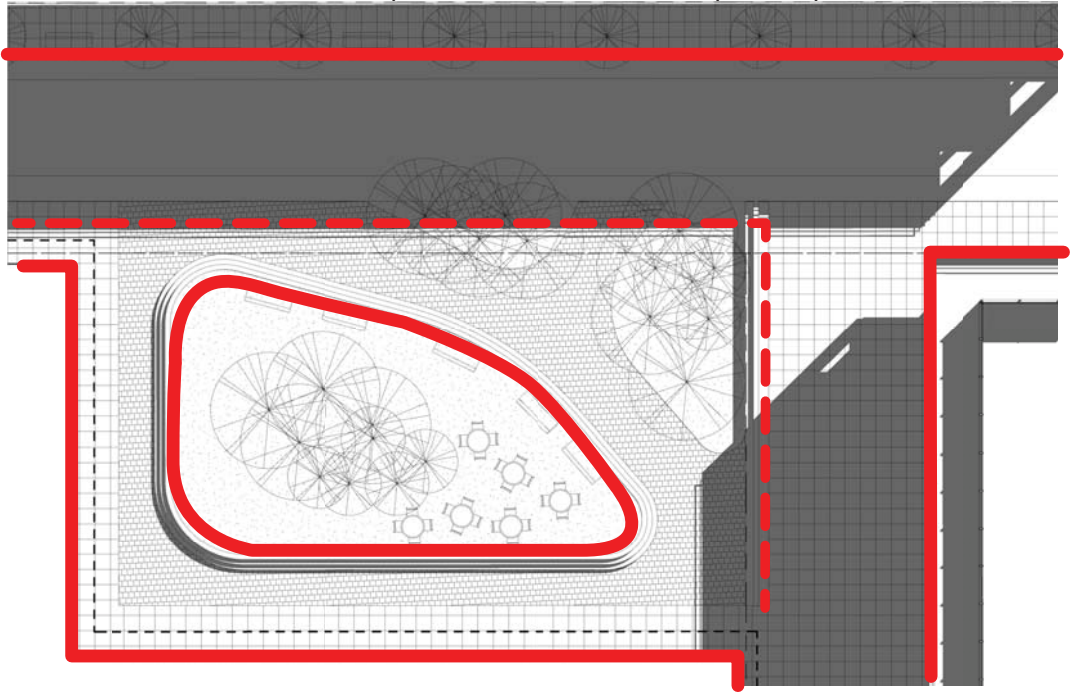


Connectivity network facilitates public space network which combined formulate guidelines on how to approach morphological transformations. Local modes of production in this sense is an outcome of morphological strategy. Morphological solutions may allow or constrain establishment of certain facilities, therefore flexible morphological solutions were distinguished as the most promising ones. It is not possible to predict where certain facilities locate themselves as it is a spontaneous process influenced mainly by changing conditions. If superimposed - certain functions may result in utter failure, if uncontrolled - in chaos. None of the aforementioned is an outcome to wish for, therefore "Local Modes of Productions" comes in to play.

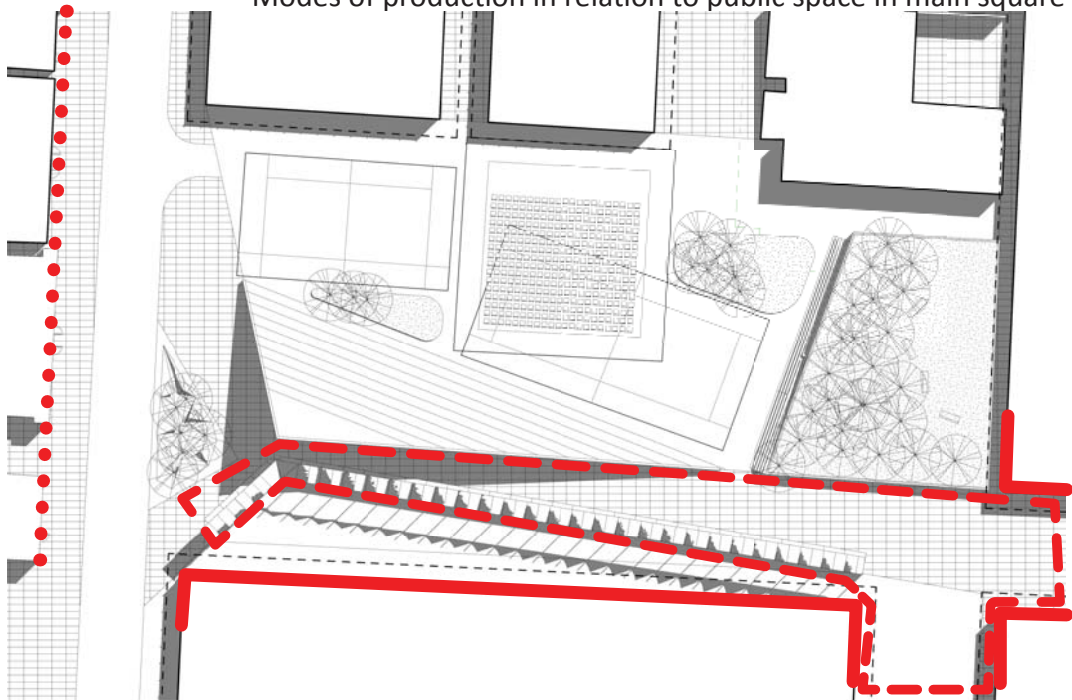
Firstly, based on potentialities and general strategies it became possible to create some certainty along the borders, where projects are the most urgent ones. The subsequent transformations

depend highly on these, therefore the most objective way of defining these interventions is to describe as potentialities highly dependant on success or failure of first generator projects along the railway and Pan American highway. Morphology allows to establish commercial perimeters along Calle Nueva, nevertheless it does not aim to specify the exact solution. Main square (5) is extremely important when talking about Local Production as it incorporates market and other facilities such as community centre. Low-rise dwelling along Anita Lizana street do not have to comply with the strategy, because the typology and land ownership scheme already allows any kind of activities. It is worth pointing out the case of kindergarten who's plot extended to the other side of a street (8) in relation to notion, that more space means better education quality.

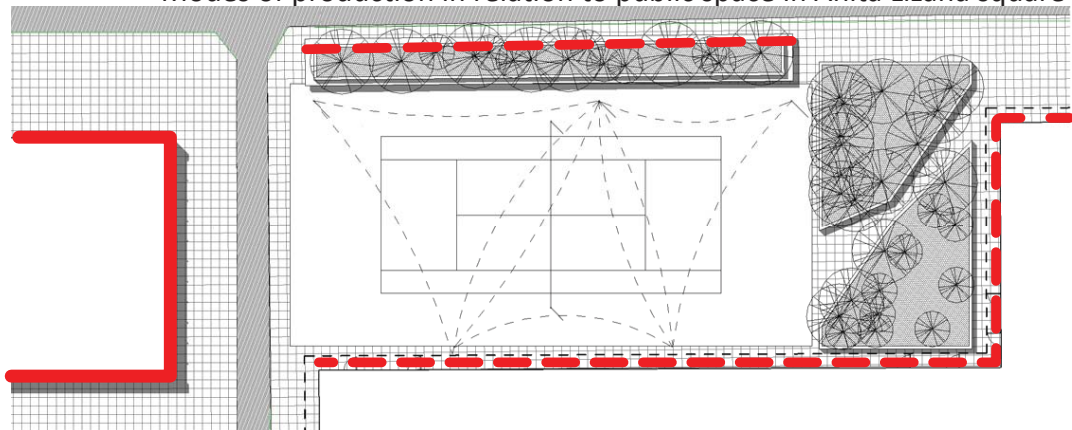
Modes of production in relation to public space in Calle Nueva



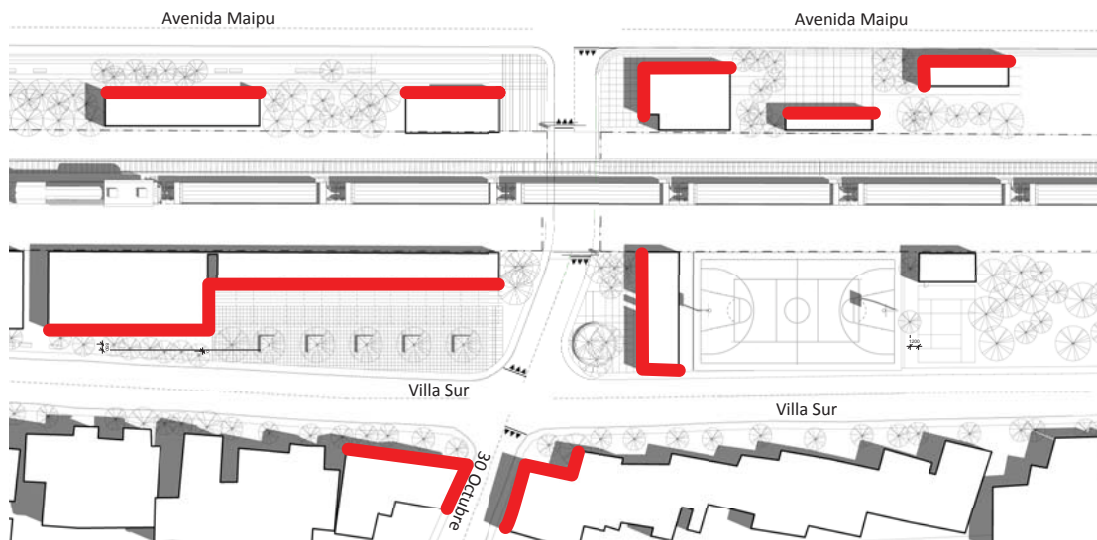
Modes of production in relation to public space in main square



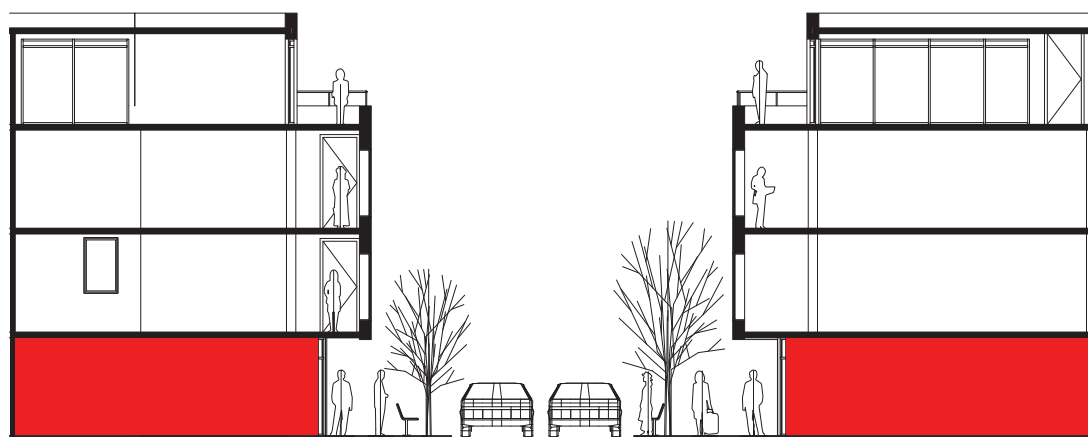
Modes of production in relation to public space in Anita Lizana square



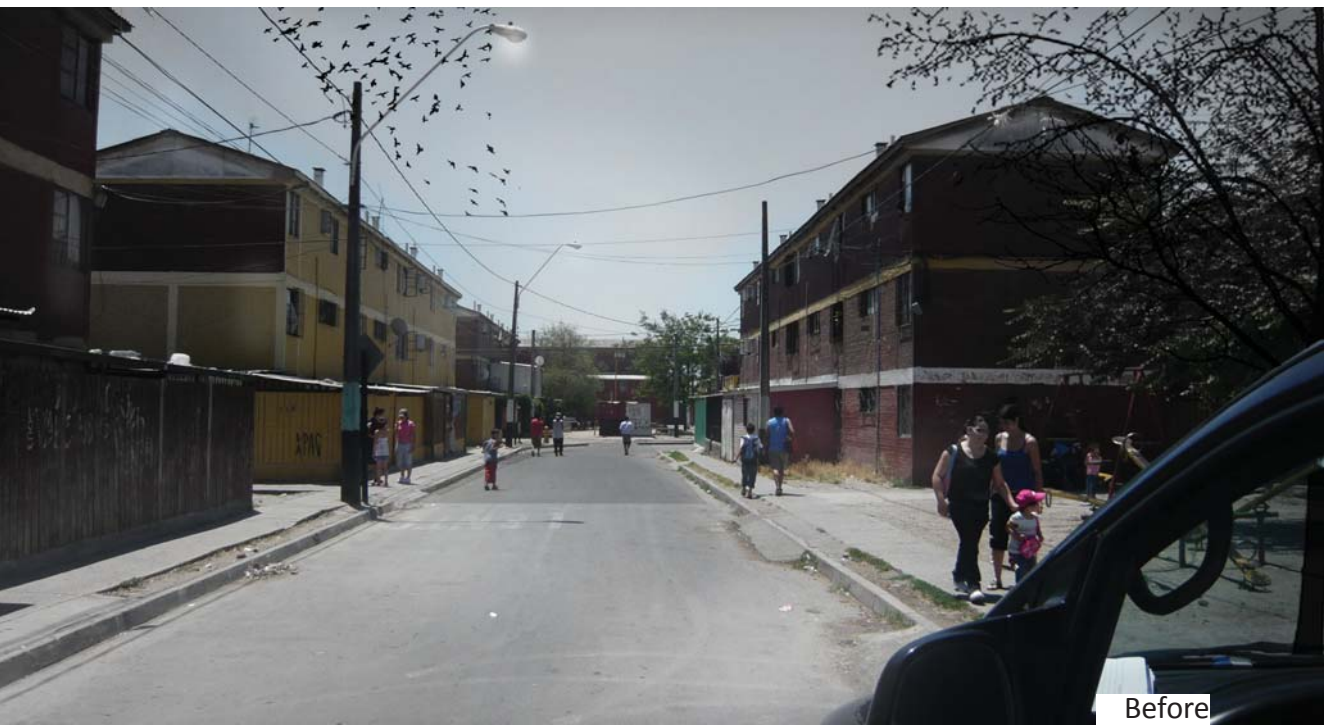
Modes of production along the railway , near railway crossing Av. 30 Octubre



Modes of production in relation to morphology & public space

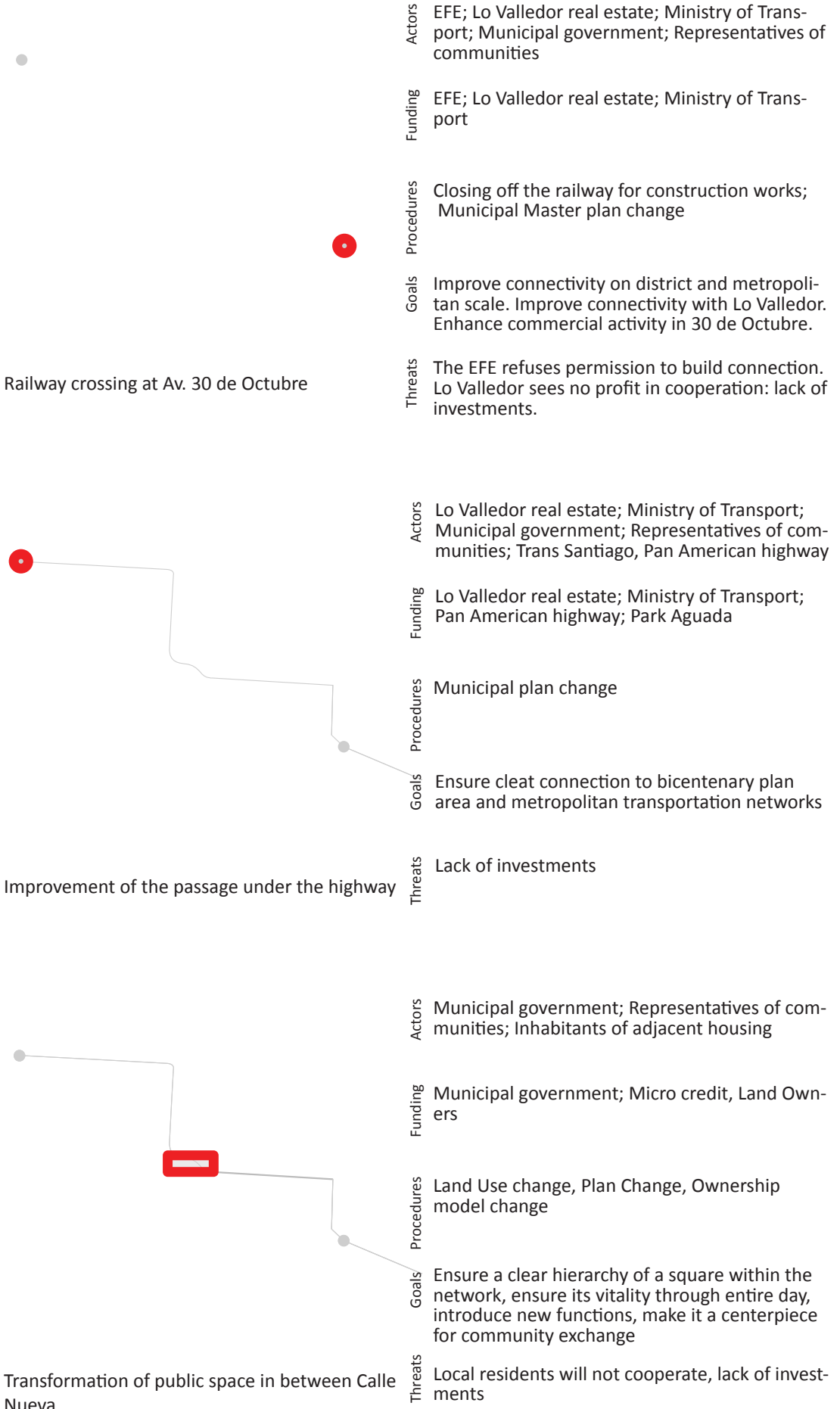


Section showing location of possible areas for local modes of productions



# 5. Phasing

## Phase 1 2001-2016



Phase 2 2017-2023

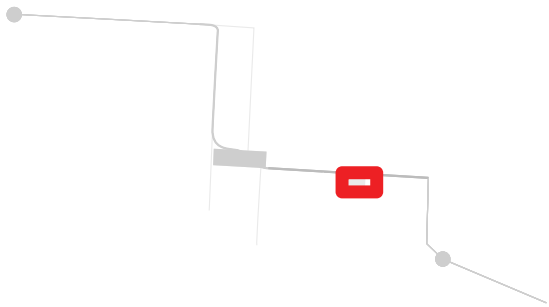
**Actors** Municipal government; Representatives of communities; Inhabitants of adjacent housing

**Funding** Municipal government; Micro credit, Land Owners, Entrepreneurs

**Procedures** Land Use change, Plan Change, Ownership model change

**Goals** Ensure a clear hierarchy of a square within the network, ensure its vitality through entire day, introduce new functions, make it a centerpiece for community exchange

**Threats** Local residents will not cooperate, lack of investments



New square in Calle Nueva

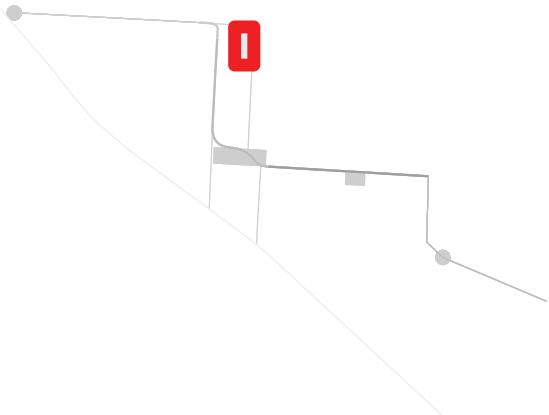
**Actors** Municipal government; Representatives of communities; Inhabitants of adjacent housing

**Funding** Municipal government; Micro credit, Land Owners, Entrepreneurs, New sports relate businesses, Social wellbeing organizations

**Procedures** Land Use change, Plan Change, Ownership model change

**Goals** Ensure a clear hierarchy of a square within the network, ensure its vitality through entire day, introduce new functions, make it a centerpiece for community exchange

**Threats** Local residents will not cooperate, lack of investments



New Sports Square in Anita Lizana street

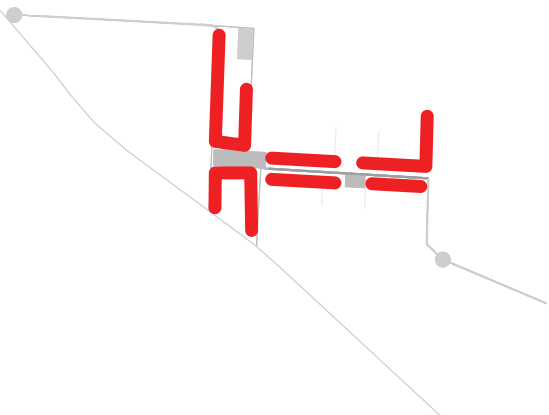
**Actors** Municipal government; Representatives of communities; Inhabitants of adjacent housing

**Funding** Municipal government; Micro credit, Land Owners, Entrepreneurs

**Procedures** Land Use change, Plan Change, Ownership model change

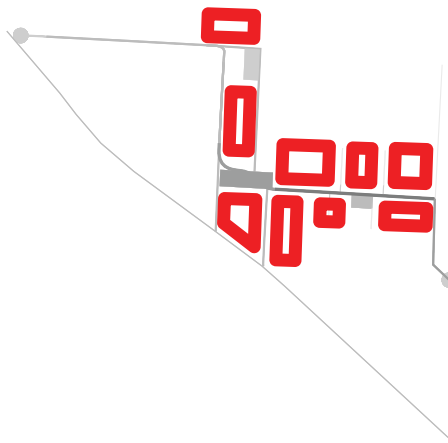
**Goals** Diminish the amount of informal adaptations, extend the apartments and provide space for commercial activity

**Threats** Local residents will not cooperate, lack of investments



Morphological adjustments to facilitate modes of productions

## Phase 2 2017-2023



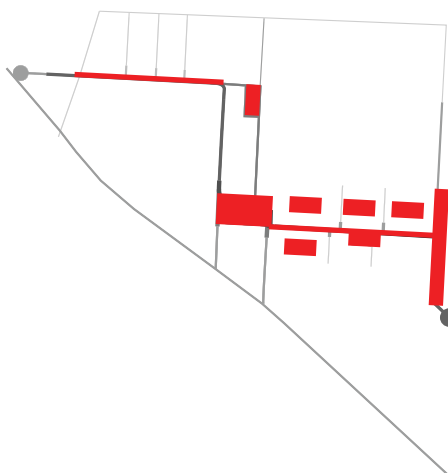
Transformation of the morphology to maximize the potentialities of space

- Actors: Municipal government; Representatives of communities; Inhabitants of adjacent housing
- Funding: Municipal government; Micro credit, Land Owners, Entrepreneurs
- Procedures: Land Use change, Plan Change, Ownership model change
- Goals: Diminish the amount of derelict space, extend the apartments and provide space for commercial activity, create public space of a better quality
- Threats: Local residents will not cooperate, lack of investments



Transformation of function along the axis

- Actors: Municipal government; Representatives of communities; Inhabitants of adjacent housing, New entrepreneurs, Ministry of Housing
- Funding: Municipal government; Micro credit, Land Owners, Entrepreneurs
- Procedures: Land Use change, Plan Change, Ownership model change
- Goals: Diversify the perimeters, introduce complexity of functions
- Threats: Local residents will not cooperate, lack of investments



Diversification of non-built space

- Actors: Municipal government; Representatives of communities; Inhabitants of adjacent housing, New entrepreneurs, Ministry of Housing
- Funding: Municipal government; Micro credit, Land Owners, Entrepreneurs, Pan American, Railway company, Ministry of Transportation
- Procedures: Land Use change, Plan Change
- Goals: Diversify the perimeters, introduce complexity of functions
- Threats: Local residents will not cooperate, lack of investments



Phase 3 2024-2033

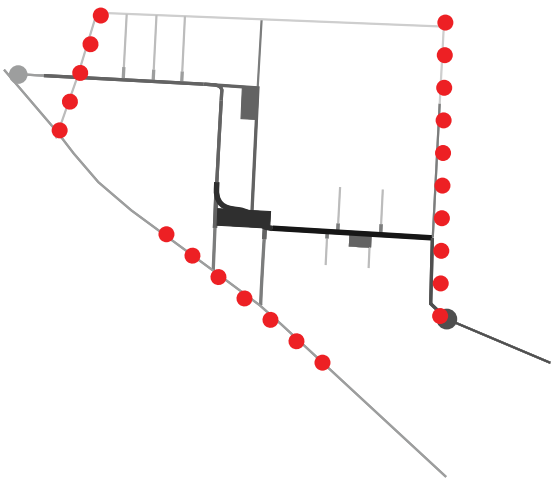
**Actors** Municipal government; Representatives of communities; Inhabitants of adjacent housing, New entrepreneurs, Ministry of Housing, Railway, Pan-American

**Funding** Municipal government; Micro credit, Land Owners, Entrepreneurs, Pan American, Railway company, Ministry of Transportation

**Procedures** Land Use change, Plan Change

**Goals** Diversify the perimeters, introduce complexity of functions, provide space for community related businesses

**Threats** Local residents will not cooperate, lack of investments



Integration of the area through permeating borders

**Actors** Municipal government; Representatives of communities; Inhabitants of adjacent housing, New entrepreneurs, Ministry of Housing, Railway, Pan-American

**Funding** Municipal government; Micro credit, Land Owners, Entrepreneurs, Pan American, Railway company, Ministry of Transportation

**Procedures** Plan Change, Plan adjustments to desirable outcome within the network

**Goals** Diversify the perimeters, introduce complexity of functions, provide space for community related businesses, Diminish the amounts of derelict

**Threats** Local residents will not cooperate, lack of investments



Spreading the sustainability of a network

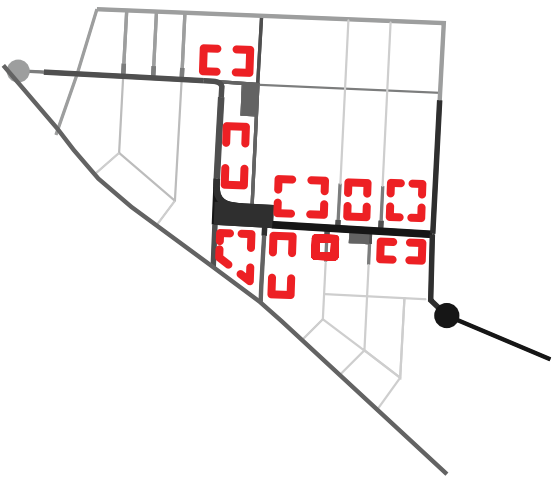
**Actors** Municipal government; Representatives of communities; Inhabitants of adjacent housing, New entrepreneurs, Ministry of Housing, Railway,

**Funding** Municipal government; Micro credit, Land Owners, Entrepreneurs

**Procedures** Land Use change, Plan Change, Ownership model change

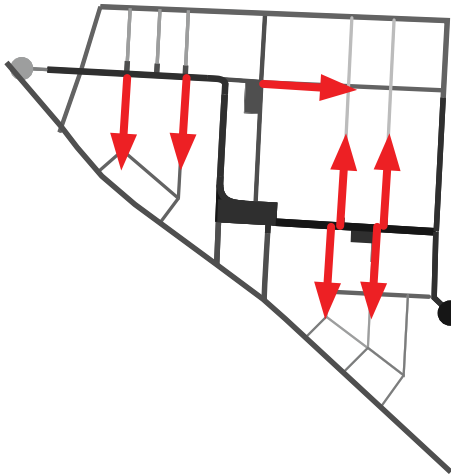
**Goals** Diminish the amount of derelict space, extend the apartments and provide space for commercial activity, create public space of a better quality

**Threats** Local residents will not cooperate, lack of investments



Continuing morphological alterations

Phase 4 2024 onwards



- Actors: Municipal government; Representatives of communities; Inhabitants of adjacent housing, New entrepreneurs, Ministry of Housing, Railway, Pan-American
- Funding: Municipal government; Micro credit, Land Owners, Entrepreneurs, Pan American, Railway company, Ministry of Transportation, Bicentenary plan developers, Park Aquada
- Procedures: Plan Change, Plan adjustments to desirable outcome within the network
- Goals: Diversify the perimeters, introduce complexity of functions, provide space for community related businesses, Diminish the amounts of derelict space, maximize the use of public space
- Threats: Local residents will not cooperate, lack of investments

Spreading commercial and social activity along the network





**Evaluation**

**[9]**

# 1. Evaluation

## Did I answer the research questions?

### Economic:

1. Which of the factors-at-work causes the most threats for a success of design?
2. What funding sources can be applied in the selected context?

### Spatial:

3. How to prevent decay of public space?
4. What spatial construction means are applicable for the specific urbanity?
5. What criteria and its parameters are essential to prevent the model from failure?
6. What are possible strategies to reverse physical deterioration of housing estates?

### Social:

7. What are the positive and negative characteristics of community in the area (in a sense of ability and willingness to integrate, and up unto what sacrifices they could go for common good)?
8. What aspects of are limiting and what new aspects are apt to be farfetched from different contexts?

## Answers in strategies

1. The strategy is trying to counter the negative effects of gentrification process by empowering the community to climb social steps hand in hand with rising land values and economic pressures. By integrating into potential urban networks in order to prevent segregation and further decay.

2. The municipality of Pedro Aquire Cerda together with surrounding developments can contribute a lot to improvement of Lo Valledor area, strategy is highly dependant not only governmental support but also smooth negotiations with major stakeholders.

3. From empirical research it became obvious that public space is really hard to prevent from decay unless the space changes its ownership model. Privatizing public space is one of the most reliable means to stop degradation, however there are certain ways to minimize the such threat by minimizing and concentrating it.

4. Answer can be found in interrelated strategy that functions on multiple scales and layers, in this sense no simple and homogenous solution can be found capable of integrating the area ant retaining its population.

5. The answer is described in scenario planning, and suggests that if presumably the most unlikely scenario occurs - area is not segregated and joins to newly developed urban fabrics.

6. One of the most important steps to prevent housing from deterioration is by improving social cohesion in order to minimize the costs of refurbishment.

7. Social cohesion is absent and community can be describer only as a group of individuals, however it is possible to increase sense of belonging and develop tighter networks os trust reciprocity by changing current land ownership scheme. Privatizing and empowering the community to make certain decisions for their personal interests and goals can change current social climate.

8. One of the most prominent constrains is poverty of the dwellers, secondly - the fact that area is completely segregated despite its excellent connectivity to the city centre. High criminality, surrounding pressures and awkward spatial configuration without doubt ad up to to the complexity of the matter, nevertheless certain examples can be found in somewhat similar spatial configurations , with only different levels of social interaction. Consequently, in order to apply any kind of urban models they most certainly must have been taken from vernacular contexts.

## Evaluation of Physical Changes

The connectivity strategy and plan ensures a sustainable urbanization by maintaining certain corridors for potential future developments which serves as a backbone to construct new public space network. The strategy of transforming and refurbishing current typology reveals a possibility to tackle multiple issues at the same time. Presumably, concentration of good quality open public space and diminishing derelict one building it up can indeed reshape the current situation.

Analyzing the evaluation of the morphological intervention reveals that unbuilt space can be diminished more than 3 times whereas Gross Floor Area increases more than 5. As a result decaying space is minimized and apartment sizes increase respectively.

Introduction of complexity within monotonous context can enhance individual identity of single communities, adding up to higher sense of belonging.

Bigger apartments should relieve overstressed housing stock and diminish friction within families. More good quality space can serve as a fertile ground in order to reconstruct networks of trust and reciprocity.

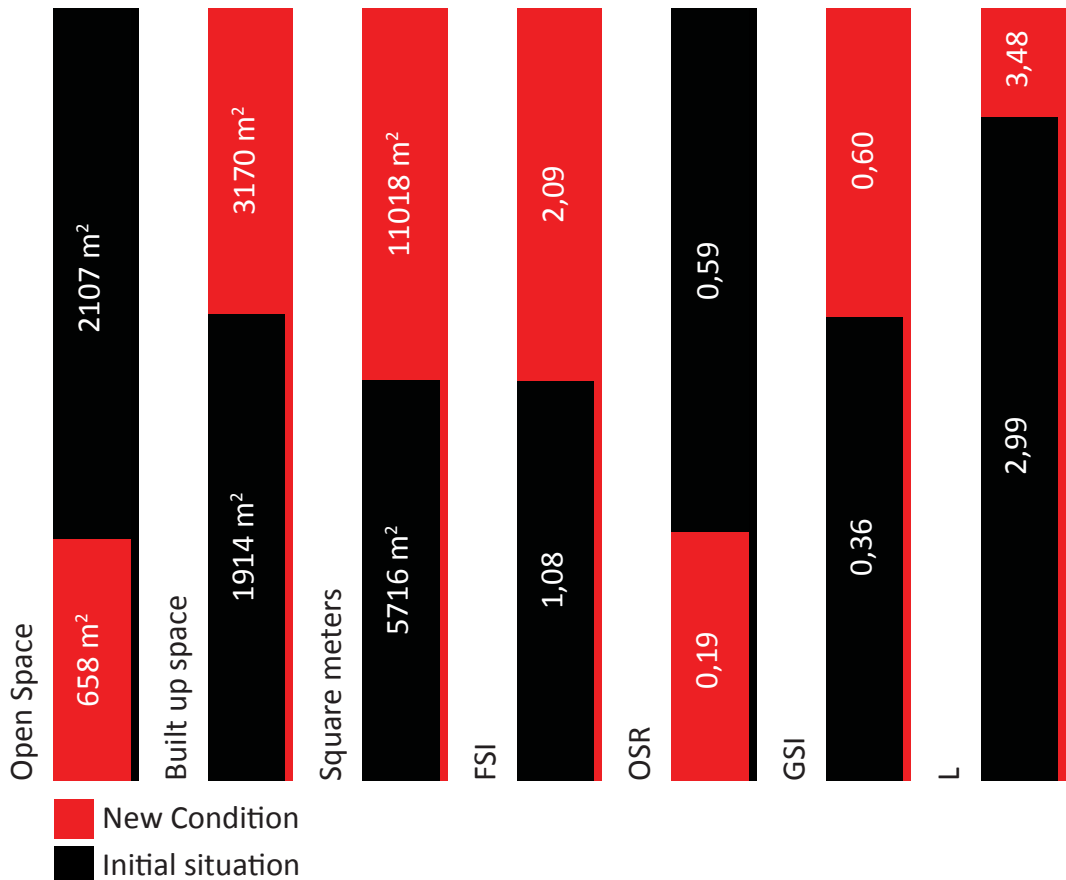
Newly created spaces on the ground floor can facilitate new local mode of production this way empowering the community to strive for common goals, to create different identities and maintain certain amount of privacy. New surplus spaces can serve as a profit generators in order to sustain public amenities.

## Reflection On Hypothesis

### Hypothesis

*Integration of social capital assets in the area can reverse physical decay of the urban environment and minimize the negative factors of inevitable gentrification process. Strengthening the networks inside the local context will give the possibility to develop a stronger position on metropolitan level.*

My answer towards a question: what can be done in order to prevent physical decay in a context with so many constrains? Would be first to de-complexify the area by analyzing it in all scales and layers to a level of an individual in order to propose a solution that does not exclude any of the existing threats but reverses them and empowers the individual through more trustworthy interactions within the community.



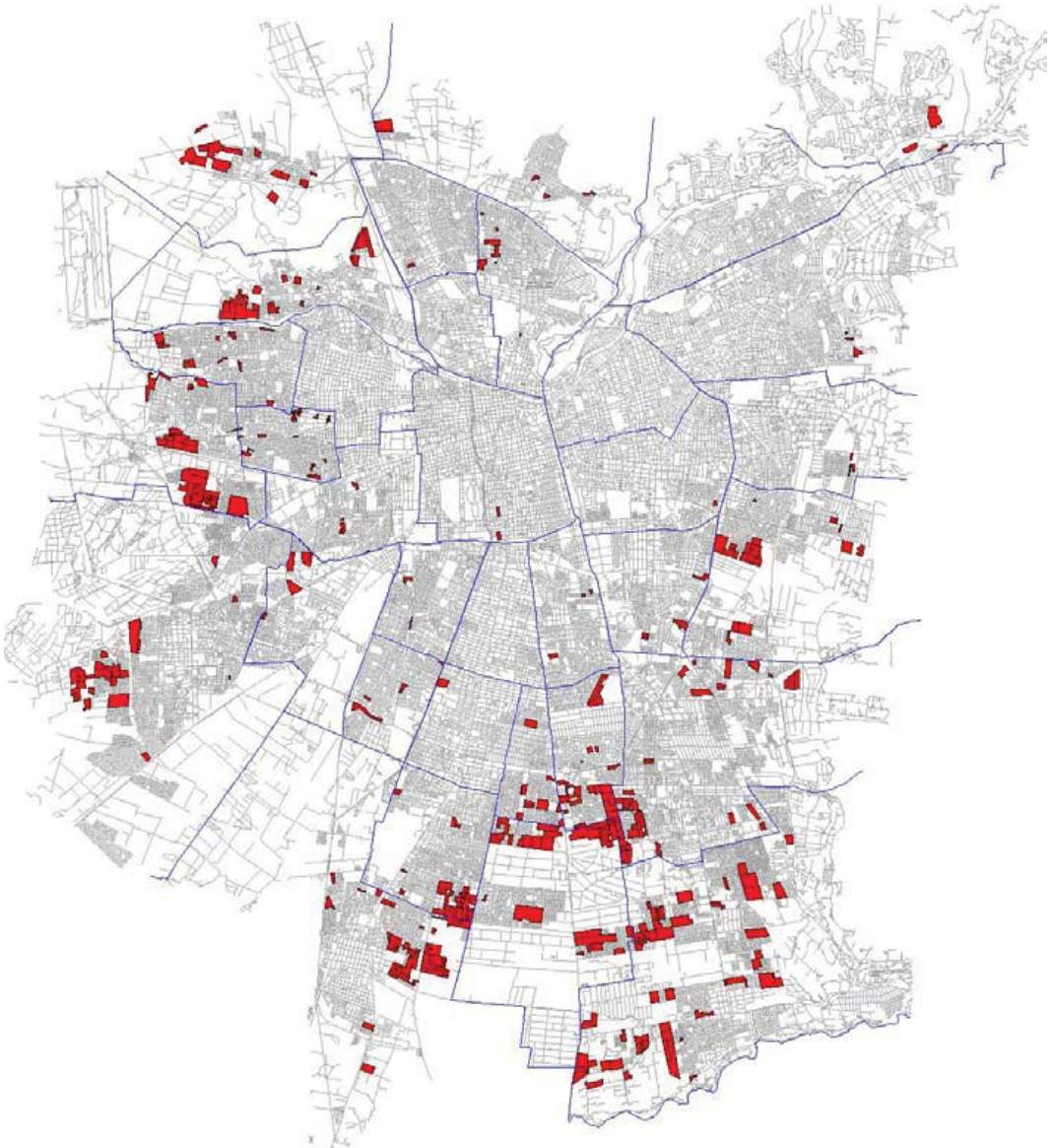
## 2. Societal and Scientific Relevance

### Societal relevance

The Lo Valledor area is only one among other sites in Santiago sharing rather similar problematic. Numerous areas in the outskirts of the city are even more complex, if it is possible to create a sustainable network - it is also possible to make use of the existing potentialities, no matter how small or gloomy they might look. The morphological proposal can be easily applied to many of the context as it basically covers all possible configurations of how building relate to one another. A simple change of land ownership model can give somewhat similar outcomes, nonetheless each and every one of cases bring different amount of complexity.

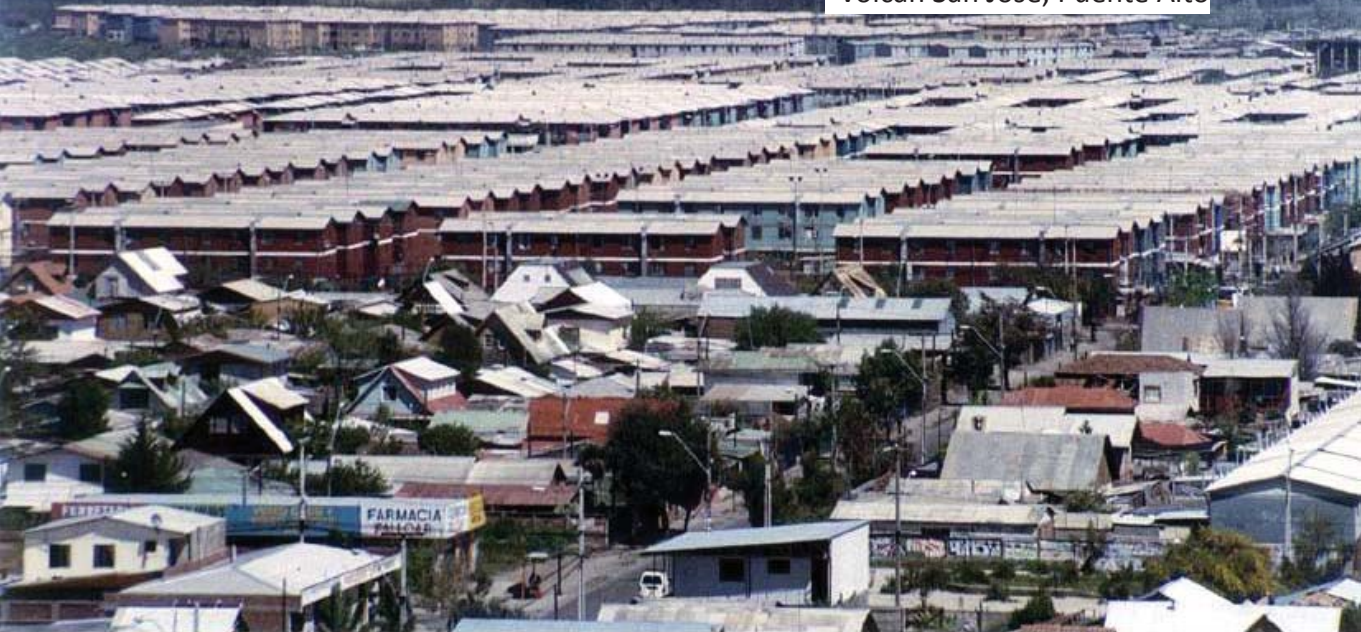
Environmental degradation of public space is a widely discussed issue, not only in Latin America. Creation of strategy to battle the problems in these environments can be far-fetched to different contexts.

### Social Housing Areas of Santiago





Volcán San José, Puente Alto



Volcán San José, Puente Alto



Appropriation of Space



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**Appendixes**

**[11]**

# 1. Summary of interview with Antonio Lipthay

about participation of inhabitants

Universidad Catolica Santiago, November 26 2008

**CURIOSITY** Inhabitants are probably even more curious about us than we are about them! So: show them your own projects: plant seeds>gain enthusiasm among the community

**MAIL** People will ask if you will come back or what is really doing to be build >We ask things, have to give something back> Ideas: send pictures/postcard (you will find out if they have an address? Is there a mailman?)

**DOMESTIC QUESTIONS** People's view is narrow. Ask questions to their own environment: Good=how and where do you spend your holidays? Bad=what is the largest problem in your neighborhood?

**APPROACH** inhabitants with plans/maps/photo's and sketch on it in front of them

**APPROACH** politicians with more conceptual plans. They themselves also like to speak general, abstract conceptual. Show examples of European way of planning: in Santiago they are not used to combine plans for infrastructure, public space, housing etc.

**POLITICIANS** You should not rely on everything politicians say. They are not necessarily the cornerstone of the community, probably the one that screamed the loudest about 'safety and 'practical plans'.

## 2. Questionnaire from participatory workshop in La Victoria

### Questionnaire workshop La Victoria, 3<sup>rd</sup> Dec.2008 participant #

**LIVING** Do you live in this neighbourhood? ●Where? ● (locate on map).

**SHOPPING** Where do you buy food? ● Markets or grocery stores? ● Where are the stores located?

**EMPLOYMENT** Where do you work? ● How much time does it take to get to and from work? ●How do you travel to and from work?

**LEISURE** What do you do in your spare time when you aren't working? ●Where do you go to do these things?

**BOUNDARIES** What do you think of adjacent areas: Lo Valledor? ●Other areas of PAC? San Miguel? Lo Espejo? Cerrillos? Estacion Central?

**HOUSING** Do you own your own house? ●Who built it? ●What materials is it made of? ●How many people live there? ●How many bedrooms does it have? ●Does it have a garden/patio? In the front or back? ●Would you like to extend your house? ●Would you rather sacrifice your outdoor space or add an extra floor to your house? Which of these can you afford? ● Would you prefer to move to a house in another area if it was larger, or stay in La Victoria and improve your existing house?

**PARKS** Do you use the parks? ●Which ones do you use? ● When do you use them? ● Which parts of the parks do you use - open areas? Skateboard facilities? Football pitch/soccer field? Other?

**SAFETY** Which streets of La Victoria are more dangerous? ● Which streets are the safest? ●What is on these streets? Shops? Parks? Are they full of people or quiet?

**COMMUNITY ART** Who paints the murals? ●Who decides where they can be painted? ●Are old murals covered by new murals?

**SANTIAGO CENTRE** Is it easy to get to the centre of Santiago? ●Do you like to go there? ● Would you like to live closer to a shopping mall or not? Why?



### 3. Some Answers of the Participants

#### Questionnaire workshop La Victoria, 3rd Dec.2008 participant # 1

LIVING Do you live in this neighborhood? #Where? # (locate on map).

#1: La Victoria, Calle Buenaventura (close to railway park)

#2: La Victoria, very central in the neighborhood on Calle 30 de Octubre

#3: Sant Joaquin, (neighboring area at the north of La Victoria) Calle Pascual Ortega 3525 Poblacion Sant Joaquin. she lived more or less to the left of the upper left corner of the private sport complex that is located on the east side of Sant Joaquin.

#4: La Victoria, Calle Galo González 4942, poblacion La Victoria

SHOPPING Where do you buy food? # Markets or grocery stores? ☐ Where are the stores located?

#1: shopping at Lo Valledor for fruits and vegetables, because it's cheaper. But she is also using feria libre.

#3: People organize to buy their food collective in Lo Valledor, since it's mainly based on buying larger amounts and cheaper than the feria libre. People buy for example a big amount of tomatoes together with neighbors or family.

#3: In the past people used the neighboring area 'Estacion Central' ("un barrio economico") a lot to buy things, but these days it's made very difficult for them to reach the area since there is no proper connection with public transport. The way how people still try to benefit from the good prices of that neighborhood is to share a van with others, or to take a taxi, which is of course harder to set up and more expensive. (note: we suspect that this is result of the changes caused by the new transantiago system, but do not remember (anymore) whether she said this or not)

In general\_by Luuk & Nicola: Everybody we spoke to uses the feria libre of La Victoria often as a place to buy their groceries (note: we were interviewing at that particular point). Mainly for fruits and vegetables. The prices of the feria are very low, and therefore a lot of people make use of them, also people from neighboring areas.

The market of Lo Valledor is really cheap ("muy barato", "super barato") and probably one of the cheapest places in Santiago. People say that they use it as well for doing their groceries, but mainly for buying larger amounts of goods. For example: for a bag of potatoes people go to Lo Valledor, but for just some potatoes or smaller amount of fruits and vegetables people tend to use the feria libre. People did not really mention a super market as a option although there is one, but it's of the map so it can be considered as quite far. But we suspect that the main reason for not using the super market is the fact that they are more expensive, especially because everybody was really addressing the fact that the other markets (feria libre & Lo Valledor) are really cheap.

EMPLOYMENT Where do you work? ☐ How much time does it take to get to and from work? ☐ How do you travel to and from work?

1#: Husband was working on a truck of Lo Valledor

2#: Most people do not work inside 'la comuna' (probably she meant P.A.C.) because there is little work available. Husband worked in Cerillo, half an hour traveling time. She worked as housewife.

5#: Brother of some of the children does 'pololo' which means somebody who does little jobs inside houses etc. like a handyman. (note: other lady explained us that there are quite some people who do this job)

In general\_by Luuk & Nicola: Out of different chats with people in and outside the area (including for example politicians and taxi drivers) we can conclude that a lot of people in the community of La Victoria do not have jobs on fixed contract basis. They work for example for a while on construction projects. In general we heard quite often that a lot of people in La Victoria work in the construction industry. (Note: the moment that we were doing the interviews was during a week day between 11h00 and 13h00, so the people that follow normal Chilean working schedule were not present at the market. The people we were speaking with were mainly woman, children and elderly)

LEISURE What do you do in your spare time when you aren't working? ☐ Where do you go to do these things?

#2: Was going to some gym classes in the 'Junta de Vecinos' of La Victoria. Her daughter (around 9) was using the streets to play on.

#4: Was giving dancing lessons in La Victoria and other neighboring areas like Lo Valledor. The big difference between these areas was according to her that in La Victoria it was very easy to just occupy a part of the street or a park to practice music and dance, (also #3) but that in the other areas the neighbors would complain and that it was not possible to do these things on the streets. In

the other areas they have to use something like a communitarian center for activities like this, but there are not that much in the Sant Joaquin (also according to #3).

#3: As with the previous point, the same goes up for celebrating events (like throwing birthday parties etc.). In La Victoria it is very normal to use the street as an extension of your living room (#4), while in the neighborhoods next to it this would or could not happen (although they have more free space) because there is not a strong relation between neighbors or sense of community, In order to throw a party one needs to rent of the community center or something like that, which is really expensive for the people and there is not much choice. The houses are in most cases too small, so there is not really an option to use for this.

#3 & #4: There is a difference in the Juntas de Vecinos and their community centers between La Victoria and the one of Sant Joaquin. In La Victoria the centers organize a lot of events and are really working to serve the community that lives there (according to both #3 & #4). While in the case of Sant Joaquin (#3) the center is a group of people that is not really caring about the needs and demands of the neighborhood and they are asking a lot of money for some basic services (like the rental of the center for parties or meetings). Shocking points were for example that the children have to pay a lot of money to use the (very basic) football courts in the area (10.000 – 20.000 pesos for just ca. 3 hours).

#5 go out of La Victoria to play soccer, which can be quite expensive if they decide to use a regular soccer field (up to 5000 pesos); some of them have tennis classes for free and, during the summer go to swim, up to 5 times a week, which costs 1500 pesos each time. What is also common is stroll around by bike with friends, which is something that older guys do as well.

**BOUNDARIES** What do you think of adjacent areas: Lo Valledor? Other areas of PAC? San Miguel? Lo Espejo? Cerrillos? Estacion Central?

**HOUSING** Do you own your own house? Who built it? What materials is it made of? How many people live there? How many bedrooms does it have? Does it have a garden/patio? In the front or back? Would you like to extend your house? Would you rather sacrifice your outdoor space or add an extra floor to your house? Which of these can you afford? Would you prefer to move to a house in another area if it was larger, or stay in La Victoria and improve your existing house?

**PARKS** Do you use the parks? Which ones do you use? When do you use them? Which parts of the parks do you use - open areas? Skateboard facilities? Football pitch/soccer field? Other? There is a certain discrepancy of opinions regarding the park next to the railway between #1, who sees the park as a place used by everybody and #2, who considers it a place where children do not like to play and which is not maintained well enough to be used constantly.

**SAFETY** Which streets of La Victoria are more dangerous? Which streets are the safest? What is on these streets? Shops? Parks? Are they full of people or quiet?

#3 states that some safety issues are related with the impossibility of reaching some areas of the P.A.C. by micro bus: walking from the bus stop to home can be very dangerous during the night, especially for women.

#5 do not use the park next to railway because it is not a safe place: the fence that separates it from the rails is missing in several parts and people run into the risk of being hit by the train; it is also a place where guys go there to smoke marijuana. Both #2 and #5 consider park Andres Jarlan – open from Tuesday to Sunday - better maintained and a safer place.

#5 recognize Calle 1 de Mayo as a dangerous area of La Victoria.

**COMMUNITY ART** Who paints the murals? Who decides where they can be painted? Are old murals covered by new murals?

There is an organized group that is realizing murals in La Victoria.

**SANTIAGO CENTRE** Is it easy to get to the center of Santiago? Do you like to go there? Would you like to live closer to a shopping mall or not? Why?

#5 do not go to shopping malls, since they are far and expensive: you need money to go there.

// Additional topics added during the post-administration //

**TRANSPORT** How do you go outside La Victoria? Do you have your own car?

#3: to go working people usually take collective taxi or micro bus, in order to share the costs, although she has her own car. Families usually have at least one bike, but these ones are not really used, in most of cases, as transport, since it is still quite dangerous to use it: cars and micro buses don't respect cyclists; it is also common to have the bike robbed, even while cycling. The result is

that bikes are mostly used for short movements or by children for fun. She also has her own car but is not that common: her daughter already has to use micro buses to move.

COMMUNITY GARDENING Is it something that you would like to have?

#3 states that is not a feasible option for communitarian areas unless their planned as fenced areas, since otherwise all the crops would be stolen

### **Questionnaire workshop La Victoria, 3rd Dec.2008 participant # 2**

Man, one of the first occupants of L aVic

Couple , middle-aged

woman, middle aged

High school kid

Man, +- 35 yrs, graphic designer

LIVING Do you live in this neighbourhood? ☑ Where? ☑ (locate on map).

In La Vic,

In la vic, corner of sidestreet with 30th octubre

La Vic, with 7 persons

At the edge of La Vic

SHOPPING Where do you buy food? ☑ Markets or grocery stores? ☑ Where are the stores located?

Lo Valledor (its cheap), market (everyday day there is one in another place)

In la Victoria, and at the market (over there)

Not in lo Valledor, only in la Victoria on markets no supermarket. Mall is too expensive

At the market (la Victoria).

EMPLOYMENT Where do you work? ☑ How much time does it take to get to and from work? ☑ How do you travel to and from work?

Retired, but used to be engineer/constructor

She, pastrycook? He, commerciant in Lo valledor

Furniture store, in centre

High school student, to the city takes 20 minutes, goes with a friend, sometimes by bus.

Graphic designer; the travel to the city takes 20 min. he works in caracal and lives in calle mapocho.

LEISURE What do you do in your spare time when you aren't working? ☑ Where do you go to do these things?

Don't go out that much; (seems like however spends time around the house (see next point)).

No time for leisure, mother (she) has Alzheimer plus all the workload.

Spend leisure time at home

Likes to play soccer, and athletics

No much leisure, the park is good for children. There are/should become (more) soccerfields in the park.

BOUNDARIES What do you think of adjacent areas: Lo Valledor? ☑ Other areas of PAC? San Miguel? Lo Espejo? Cerrilos? Estacion Central?

Some friends live in the neighbourhoods; since he is living on the edge, he spends a lot of time in the neighbourhood north of La Vic

HOUSING Do you own your own house? ☑ Who built it? ☑ What materials is it made of? ☑ How many people live there? ☑ How many bedrooms does it have? ☑ Does it have a garden/patio? In the front or back? ☑ Would you like to extend your house? ☑ Would you rather sacrifice your outdoor space or add an extra floor to your house? Which of these can you afford? ☑ Would you prefer to move to a house in another area if it was larger, or stay in La Victoria and improve your existing house? House build by himself (assuming since he was there during the occupation). Used to live 6 children (so + 2 parents). There is a patio in the back of the house and one in the middle. The former is used a lot by the man himself , among which as a workshop place. It's the best thing they have. There is no wish for extension and absolutely not by sacrificing the patio.

The construction of the house is always in progress. In the case of extension they would only like to add by constructing a 2nd floor, don't want to sacrifice patio

Don't know who constructed the house. The house got a patio, constructed from brick & concrete ground floor with wooden 2nd floor.

He lives in a 2 storey house

**PARKS** Do you use the parks? Which ones do you use? When do you use them? Which parts of the parks do you use - open areas? Skateboard facilities? Football pitch/soccer field? Other?

Yes, the big one is used. Mainly for picknick, to sit in the grass, watch children play.

No time to use the parks, but more soccer pitches are needed.

Facilities for children and youth is missing, cultural houses., park

Yes mostly for playing football (soccer) and other type of sports, like athletics. Therefore he also uses the running track a little bit more to the south. There is also a swimming pool next to it; one private and one of the municipality as well, but it is not used very often.

**SAFETY** Which streets of La Victoria are more dangerous? Which streets are the safest? What is on these streets? Shops? Parks? Are they full of people or quiet?

Some streets are insecure

There is no !

No much danger, because the people all know each other. When he walks in the street people recognize who he is, so he feels safe.

Less drugs would be good.

**COMMUNITY ART** Who paints the murals? Who decides where they can be painted? Are old murals covered by new murals?

Only on c/30th octubre. Every year they are renewed, everyone can paint everywhere basically.

Youngsters, artists who paint them. If the people (proprietors of the house concerned) give permission to paint, than they can. Every year more or less they are renewed.

Youths at la Vic, organization

**SANTIAGO CENTRE** Is it easy to get to the centre of Santiago? Do you like to go there? Would you like to live closer to a shopping mall or not? Why?

He only goes to the mall to watch

Travel to the centre takes 45 min.

It is easy to get to the centre of Santiago, but it would be better if there would be a metro, because its faster (it seemed as if he saw metro as a connection to the outside world). Doesn't use the mall so much, because its expensive.



## Acknowledgement

This work would not be complete without the support of my dear mentors and the great effort of whole UA Santiago team. I am grateful in particular to Diego Sepulveda, Heidi Sohn, Gerhard Bruyns, and Miguel Robles Duran.

