

The objective of this chapter is to succinctly describe case studies of urban operations in São Paulo, seeking to facilitate the comparative analysis with land readjustment projects. Two urban operations were chosen, Faria Lima and Água Branca, both instituted in 1995. The first one introduces two very relevant study attributes: it was the operation that had the best financial and urban results (important in an urban development policy context through a public-private partnership) and it underwent an evaluation and revision process, which permits an analysis of the instrument's institutional evolution.

Água Branca, on the other hand, showed few financial and urban results, but it was chosen to be studied because its territory presents very favorable conditions for exploring urban development LR method elements. These conditions can be summarized as follows: land problems, infrastructure improvement needs, real estate potential, low occupation density, broad buildable and transformable land offer (industrial and underutilized sections), among others. This condition will be addressed later on in Chapter 5, which deals with the comparative analysis of LR and OUC.

### 1. Urban Operation Faria Lima

**Promoter:** City Hall of São Paulo

**Total area:** 450 ha

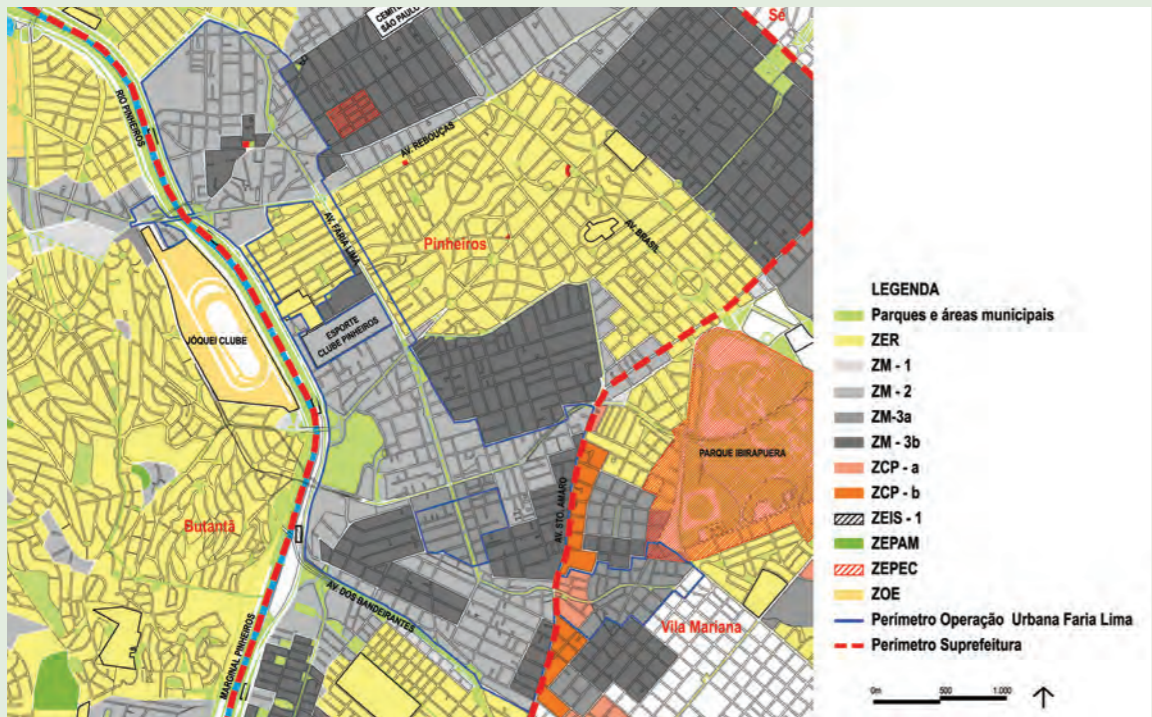
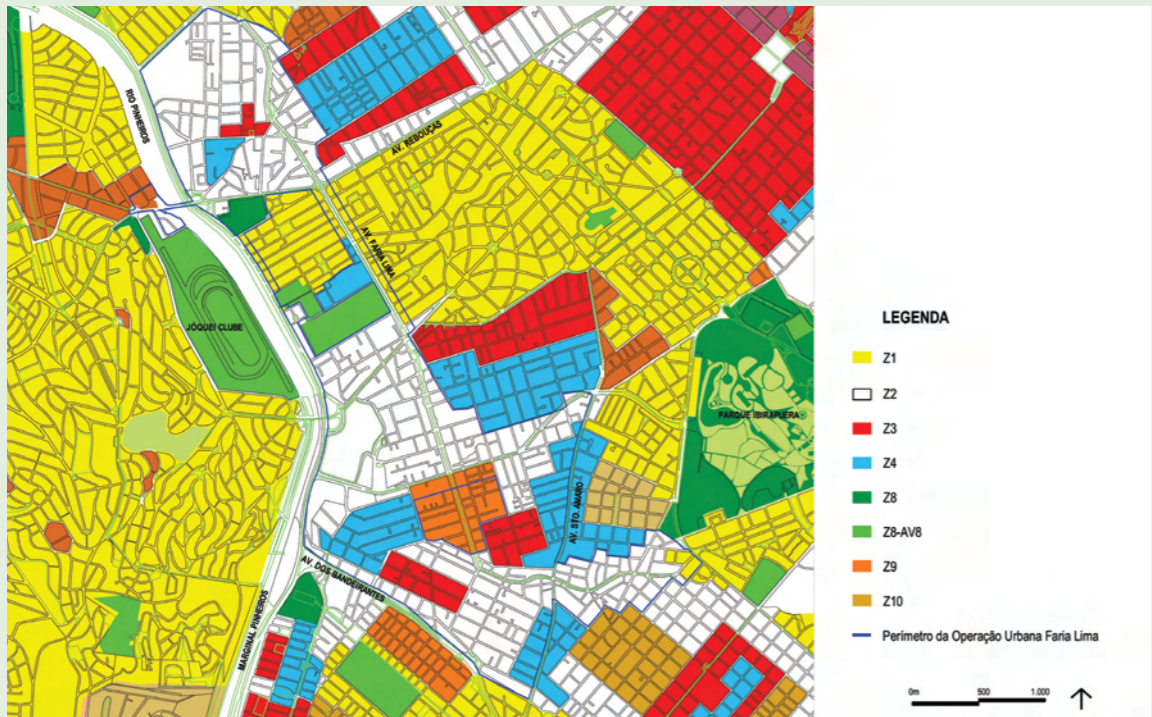
#### Objective

The Faria Lima Urban Operation was instituted by Law 11.732, of March 14, 1995. Its general objective was to optimize the use of the capacity of improved infrastructure as a result of previously implemented investments in road and the gathering of funds to finance projected and installed works. This optimization would be reached through density and land use intensification in the areas near the implemented improvements. Funds would be obtained with the concession of urban incentives through legislation, with the most important one being the concession of additional construction potential, mediated through contribution payments.

#### General characteristics of the area

The Faria Lima Urban Operation is partially distributed over the districts of Itaim Bibi, Moema and Pinheiros, in southwest São Paulo. It is a consolidated urbanization region surrounded by high standard residential districts – Jardins –, densely occupied districts – Itaim Bibi and Pinheiros – and low density, “beyond the river” residential districts – Butantã. The operation area has urban equipment equipped with green and leisure areas (although private), including the Pinheiros and Hebraica clubs. It has large, high standard commercial centers such as the Iguatemi and Eldorado shopping malls, both inserted in the urban operation's perimeter. The Jockey Club, Cidade Universitária and Alfredo Volpi Park, on the other side of the Pinheiros River, and further away, Ibirapuera park, are external to the perimeter in study. Accessibility is facilitated by the avenues that ran like radii to the downtown section such as Rebouças, Cidade Jardim and Nove de Julho; the Pinheiros River Marginal Road, which permits access to all the city's roads; and several inter-district connections, including Juscelino Kubitschek, Hélio Pellegrino, Bandeirantes, Santo Amaro, Pedroso de Mo-





rais and Teodoro Sampaio Avenues. Mobility and internal circulation are facilitated by the extension of the abovementioned roads and mainly by Faria Lima Avenue, the main intervention of the urban operation, which configures a parallel and alternative road to the Pinheiros River Marginal Road. The abovementioned avenues offer public transit, and train access is provided over CPTM's line C (Osasco-Jurubatuba), which has four stations (Pinheiros, Hebraica-Rebouças, Cidade Jardim and Vila Olímpia). In the future, line 4 of the subway will also be available at the Pinheiros and Faria Lima stations (in implementation phase). It is therefore possible to see that this is a well-equipped territory in terms of infrastructure, with a high urbanization standard.

The zoning in effect at the time the urban operation was institutionalized dated back to the 1970s, with adjustments and adaptations made over the years, but without a revision truly worthy of the dynamics that had taken place in the city due to the accelerated urban space production process. A main characteristic was the predominance of Z2 zones inside the urban operation perimeter. Its profile showed greater restriction to the elevated utilization of land for commercial and service uses, and these activities are the most requested by the real estate market during the exploration and expansion period of "new tertiary centralities".

**Population involved**

The Faria Lima Urban Operation area is estimated to have about 40 thousand inhabitants, according to the IBGE Census of 2000.<sup>1</sup>

**Urban operation conception**

An urban operation action perimeter was established excluding Z1 (which guarantee the protection of the low-density districts), Z9 and Z8-av8 zones therein. It can be observed that portions of perimeter adapted to the zoning contours, seeking inclusion of Z2 zones in the operation area, such as the incorporation of the blocks along Helio Pellegrino Avenue.

As a result of the extension of Faria Lima Avenue to the north, which connects to Pedroso de Morais Avenue, and to the south, which connects to Helio Pellegrino Avenue, the urban operation perimeter was divided into an ADB – Directly Benefited Area – and an AIB – Indirectly Benefited Area. The ADB was comprised of five sub-perimeters, Pinheiros, Itaim, Vila Olímpia, Funchal and Uberaba, encompassing the blocks that delimit the Faria Lima Avenue extension sections. For this set of five sub-perimeters an additional construction potential stock of 1,250,000 m<sup>2</sup> was established and the issuance of Certificates for Additional Construction Potential – Cepac was enabled. This issuance would permit an automatic approval procedure in granting additional construction potential through the conversion of deeds in m<sup>2</sup>, where the contribution would be paid beforehand, when the deed is purchased. For the AIB, an additional construction potential stock of 1,000,000 m<sup>2</sup> was established, and development approval and contribution calculations would be made on a case by case analysis.

**Zoning in effect in 1995 in the Faria Lima Urban Operation area.**

Source: Law 8.001/73 and subsequent updates until 2004.

**Zoning in effect in 2004 in the Faria Lima Urban Operation area.**

Source: Strategic Regional Plan for the Sub-City Hall of Pinheiros - Law 13.885/04

The urban guidelines contemplated, among other measures, carrying out road improvements, opening public spaces, intensifying land use and its diversification, producing social interest housing units, and above all, density, where a maximum utilization coefficient equal to 4 could be reached.

Among other items, the investment program foresaw the implementation of road improvements, paying for expropriations, producing social interest housing units and the acquisition of land for future social equipment.

Several urban incentives were instituted, obtained through contributions, such as the alteration of urban parameters (occupancy rates, setbacks and changes in use, as per the zones), as well as the rejoining of lots and cession of air and underground space.

Emurb – Municipal Urbanization Company was responsible for urban operation management with regard to the promotion of projects and works as well as payment for expropriations, fund management and definition of priorities. It is important to underscore that all of the resources from the contributions should be applied to projects, studies and works defined in the urban operation law, and therefore, exclusive to its perimeter.

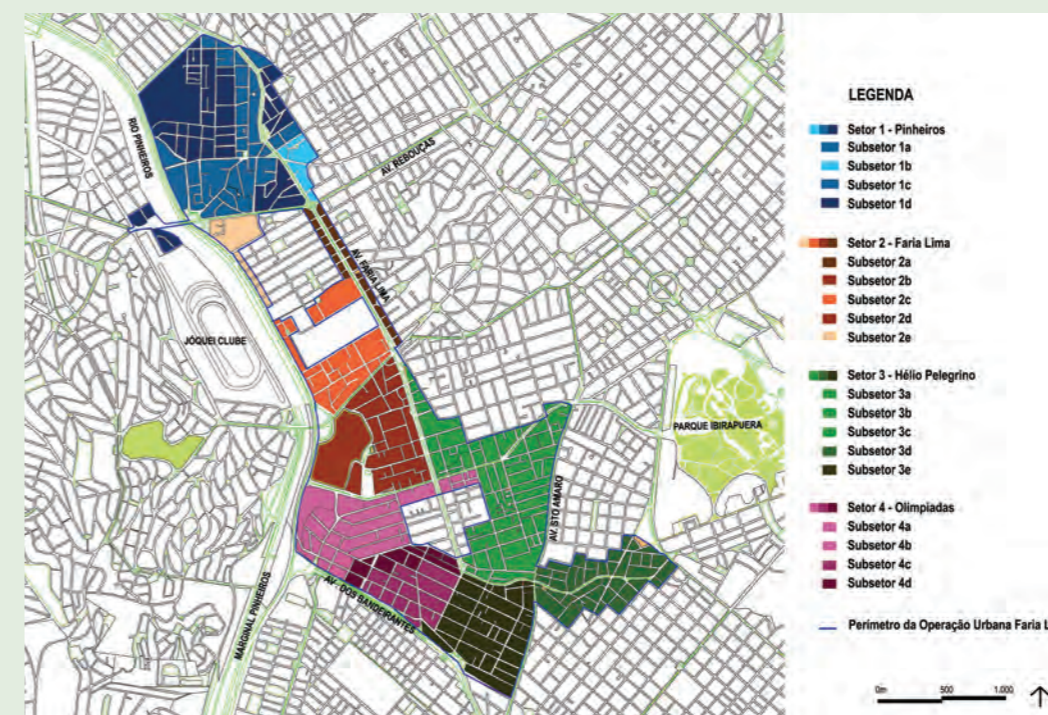
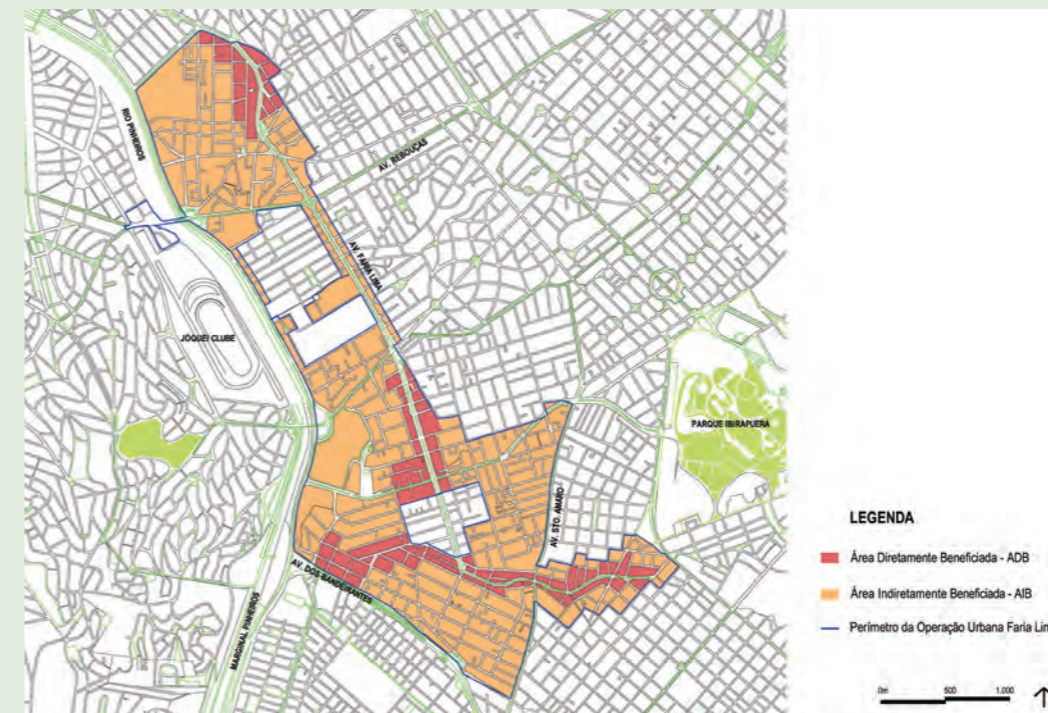
As you can see, the conception adopted in the Faria Lima Urban Operation began from the principle of adjusting urban transformations as a result of road improvements. It is important to underscore that the resources obtained through contributions would only occur as a result of urban incentives granted through legislation, with the city not recovering real estate appreciation resulting from the public works.

In 2004, Faria Lima underwent a revision. Before that, Sempla had promoted a critical evaluation study for normative revision that besides recognizing the instrument's application problem, established revision lines related to operation procedures and control of urban transformations. The problem setting could be resumed as follows:

“Nonexistence of articulated and integrated urban projects; homogenous treatment (therefore abstract) of clearly unequal urban parts; [...] lack of a vision as a whole and control of the cumulative effects of infrastructure overload and the impact on [...] the forms of land use and occupation; arbitrary, but overestimated establishing of additional construction potential stock and the non-existence of mechanisms to control the appreciation of land prices.”<sup>2</sup>

From the issues presented, public investment guidelines were proposed directed towards the conclusion of road improvements already foreseen in the 1995 law and the urban reconversion of Largo da Batata, which was the object of national public bid held in 2002. Guidelines to readjust additional construction potential stock was also suggested, according to urban sectors with different characteristics of urban structure and real estate dynamics, from criteria related to infrastructure support capacity, compatibility of typologies and uses and the differentiated charging for the contribution.<sup>3</sup> The latter one was a way to encourage and restrict certain activities.

Due to the concepts presented, but without following them in detail, the Faria Lima Urban Operation was revised by Law 13.769/04. The Cepac ended up being instituted as the main means of payment for contributions worth a minimum of R\$ 1,100.00. The conversion table in m<sup>2</sup> for uses and sectors was established and readjusted in relation to the original format established by Law 11.732/95. The urban operation perimeter was compartmentalized in sectors, and the additional construction potential stock still available was subdivided in these sectors and the conversion in m<sup>2</sup> established by sub-sectors.



**Map of the Faria Lima Urban Operation.**

Source: Law 11.732/95

**Map of sectors and sub sectors of the Faria Lima Urban Operation.**

Source: Law 13.871/04

#### Duration of the project

Year the urban operation was instituted: 1995

Projected period it will be in effect: not established

Estimated time to carry out the public projects and consume the stock: in 1995, estimated at about 20 years. In the revision of the urban operation law, in 2004, another 15 years was estimated, or until the entire additional construction potential stock had been consumed.

#### Incentives granted

The Faria Lima Law established benefits to be granted through the payment of contributions and urban incentives that would be promoted by conditioning developments on certain urban rules. The main benefits are "the granting of additional construction potential and the alteration of urban parameters established in current legislation for land use and occupation."<sup>4</sup>

There were several urban incentives, such as the free granting of construction areas of around 20% of the area of the lot resulting from the assembling, with this area measuring a minimum of 2,500 m<sup>2</sup>.<sup>5</sup> There was also the possibility of reaching the maximum utilization coefficient of 4, by following the specific rules according to the sector being studied.

#### Contributions obtained

As mentioned before, the Faria Lima Urban Operation had the greatest financial success in obtaining contributions from the concession of additional construction potential. From 1995 to 2004, R\$ 306 million<sup>6</sup> were obtained, R\$ 174 million that refer to the AIB and R\$ 132 million that refer to the ADB. This sum was paid in money (financial contribution)<sup>7</sup>. In a document<sup>8</sup> that analyzed the feasibility of Cepac issuance after revision of the urban operation in 2004, it was possible to ascertain a favorable expectation with regard to the issuance of the security worth R\$ 1,100.00 to cover the cost of works estimated at R\$ 715 million. The capacity to absorb the real estate market over time, as a result of both pessimistic and optimistic settings, was pondered to be between seven and 16 years.

#### Success and failure: balance of results obtained

**a) Adherence by private initiative.** In its nine year history, the Faria Lima Urban Operation received strong adherence from private investments. There was greater consumption of stock in the AIB (59.61%) than in the ADB (29.76%)<sup>9</sup>. This demonstrates that the ADB, although having less availability of lots in relation to the AIB and with greater additional construction potential (1,250,000 m<sup>2</sup>), was unable to concentrate density along the new sections where Faria Lima Avenue was extended. To the contrary, the area that saw the greatest search for new developments was the district of Vila Olímpia (AIB sector), which did not receive direct investment in road improvements. According to TPCL<sup>10</sup> register data, from 1995 to 2000 the Olimpiada Street region saw a 20% increase in constructed area, followed by the other sectors of Vila Olímpia, with 10% increases<sup>11</sup>. This transformation occurred by replacing average standard residential housing (Rhmp)<sup>12</sup> with office buildings (SCV)<sup>13</sup>, where the increase in constructed office area was around 56%, whereas the reduction in constructed area of average standard single family housing was around 24% for the period from 1995 to 2000<sup>14</sup>.

This transformation resulted in new high quality, high construction standard buildings with little diversity for use on a same lot. The developments proposed between 1995 and 2004 generated a concentration and functional specialization. For example, in the district of Vila Olímpia, the predominating urban standard includes narrow streets and new office buildings alongside homes and



parking lots that remained from recent developments. The use of these homes was transformed as a means to adapt to the demand generated by the new activities. In sectors such as those around Helio Pellegrino Avenue, there was a concentration of tall, high standard residential buildings, taking advantage of the view of surrounding residential neighborhoods, including Ibirapuera Park.

**b) Public investments.** The main public investments were made in extending Faria Lima Avenue (carried out before the urban operation was instituted). The resources obtained from contributions were greatly destined to cover expropriation costs.<sup>15</sup> Besides the set of works, there is also the landscaping treatment for the central islands along Faria Lima and Helio Pellegrino Avenues and other lower-scale road improvements.

**c) Internal and external impacts to the urban operation.** There was intense appreciation of land in the urban operation area. The m<sup>2</sup> value for land in the development and greater density areas practically doubled in all analyzed sectors, where in some of these areas this amount increased threefold, considering the variation in lots located in old Z2 as well as Z4 zones.<sup>16</sup>

The increase in the described constructed area should be analyzed by comparing it to population density. We also use data from the Moema, Itaim Bibi and Pinheiros districts, because although the perimeter of the urban operation is partially inserted in these districts, the external dynamics to the urban operation area are also relevant for analysis. The Moema, Pinheiros and Itaim Bibi districts lost population from 1991 to 2000: 6,064, 15,647 and 26,041 inhabitants respectively. At the same time, they saw a strong increase in high standard residential and non-residential constructed area, where Moema stands out, with a 78% increase in residential constructed area, and Itaim Bibi, with a 65% increase in commercial constructed area. These districts also saw significant increases in income.<sup>17</sup>

For comparison purposes, we suggest selecting the districts that saw the greatest increases in resident population in the city. The districts of Grajaú, Cidade Tiradentes and Jardim Ângela, located in the periphery of the city, saw strong population growth: 139,682, 94,376 and 67,432 inhabitants, respectively, for the period from 1991 to 2000<sup>18</sup>. We underscore that this population growth was accompanied by a reduction in average income.

If carefully analyzed, the data clearly demonstrate the disparities between urbanization standards in different regions of the city and their contradictory effects. While one sector of the city loses population and simultaneously renews its standard, considerably increasing constructed area and average income and continuously receiving public investment from the Municipal Treasury or an urban operation, other sectors (periphery and needy) of the city also gain constructed area, but with low construction standards and significant population growth. Their average income is also reduced and they have few public investments in proportion to the lack of urban equipment and infrastructure.

**d) Performance as a public-private partnership urban instrument in urban development.** From these considerations, we can say that Faria Lima's success is in the improvement of the technical aspects of the urban operation instrument. The measures that contributed to this include the creation of the Cepac, which permits greater transparency and "social control" over resource man-



agement and contribution calculations, and the distribution of the additional construction potential stock by sectors, which permits better balance in density in relation to the infrastructure support capacity.

Another success was the obtaining of more than R\$ 300 million in contributions. This sum of funds catalyzed real estate activity, but did not obtain equivalent urban, much less social, success. If we evaluate the described setting only in relation to the objectives established in the Faria Lima Urban Operation Law, we will see there was partial compliance with goals. As we compare the dynamics that occurred on a large scale throughout the city during the same period (including disorderly growth, illegal occupation of areas inappropriate for urbanization, lack of infrastructure in peripheral areas and increased poverty and inappropriate housing), we understand that the Faria Lima Urban Operation fulfilled a role of reinforcing segregation and elitism of this noble sector of the city. Therefore, that could be considered its great failure.

## 2. Água Branca Urban Operation

**Promoter:** City Hall of São Paulo

**Total area:** 487 ha

### Objective

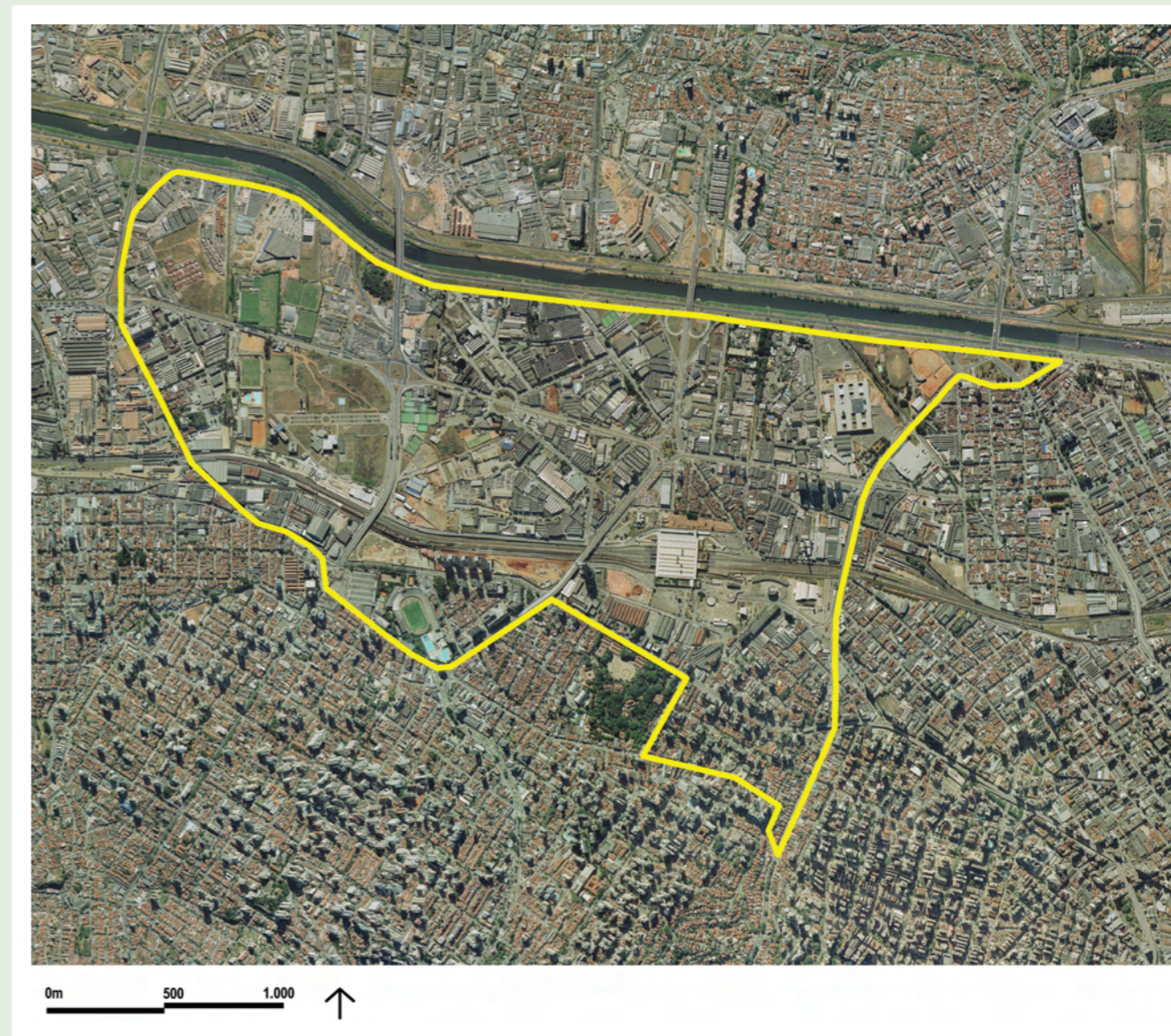
The Água Branca Urban Operation was instituted by Law 11.774 of May 18, 1995, with the general objective of improving the region's standard of urbanization allocating reduced public resources. For such, it established specific objectives founded on the expansion of the road system, improvement of the drainage system and expansion and implementation of public space, green areas and urban equipment.

The desired transformation of the urbanization standard would be based on density and diversified uses capable of inducing the occupation of predominantly empty lots in the region. Road interventions foreseen to improve area articulation and the overcoming of physical barriers, plus the production of social interest housing units, complement the set of general guidelines for this urban operation.

### General characteristics of the area

A quick panoramic look over the study area reveals the significant condition of underutilized land and the need to adjust infrastructure in the Água Branca region. To better understand this setting, we suggest addressing the urban operation area on two scales: the urban tissue that comprises the instrument's action perimeter (1) and the urban equipment and infrastructure for articulation of this area with the rest of the city (2).

(1) The Água Branca perimeter is delimited to the north by the Tietê River Marginal Road, to the east by Pacaembu and Abraão Ribeiro Avenues, to the south by Turiassu Street and Francisco Matarazzo Avenue and to the west by Santa Marina Avenue. It can be said that a large part of this urban operation area is located along the low grasslands of the Tietê River. The railroad (old Santos-Jundiaí, today CPTM's A line, and CPTM's Júlio Prestes-Itapevi B line) is along the edge of the grasslands and at the limit of the



areas with the greatest declivities, which define the borders of the urban operation to the south. The south sector can be considered transition territory between the large industrial sections, located on flat topography, and the regular urban tissue over the more accentuated relief in the Barra Funda district. In this sector, we find large CPTM properties along the railroad, the Barra Funda Intermodal Terminal (subway, train and bus), the Latin American Memorial, Parque Antarctica and the old Matarazzo industry property. The northern sector, or the property that extends along the low grasslands, is cut by Avenida Marquês de São Vicente Avenue from east to west, and the Antarctica and Nicolas Bôer Avenues from north to south. These are the main internal and external road articulation and structures for the urban operation area, and they are also the roads that delimit its perimeter. This portion of urban operation territory has large industrial warehouses and deposits, some still active, others idle. There are also reference buildings, such as the Ministro Mário Guimarães Criminal Court House, and other large horizontal buildings. Underutilization can be evidenced by the broad empty or partially constructed areas, such as the Pompéia and Telefônica sections, which, together with the land problems, outline the main characteristic of the Água Branca Urban Operation. In this section the discontinuity and disarticulation of the road system are still visible. Zoning, at the time the operation's law was institutionalized, was comprised of the Z6 and Z8 zone perimeters (industrial and special regulation, respectively) in the flat sector that extends from the railroad to the Tietê River Marginal Road. It also had a sequence of Z3 and Z4 zones (greater densities and diversified uses) in the southeast of the operation and with Z2 zone perimeters (restricted for high density, non-residential uses) in the rest of the perimeter, especially the southwest. Zoning revision, through Law 13.885/04, instituted the Regional Strategic Plans, with the Água Branca Urban Operation inserted in the Lapa Regional Strategic Plan. All Z2, Z3, Z4, Z6 and Z8 zones in the urban perimeter were transformed into ZM-3a and ZM-3b mixed zones (mid and high density with mixed uses)<sup>19</sup> and in some perimeters Zeis (special social interest zones) and Zepcs (special cultural preservation zones).

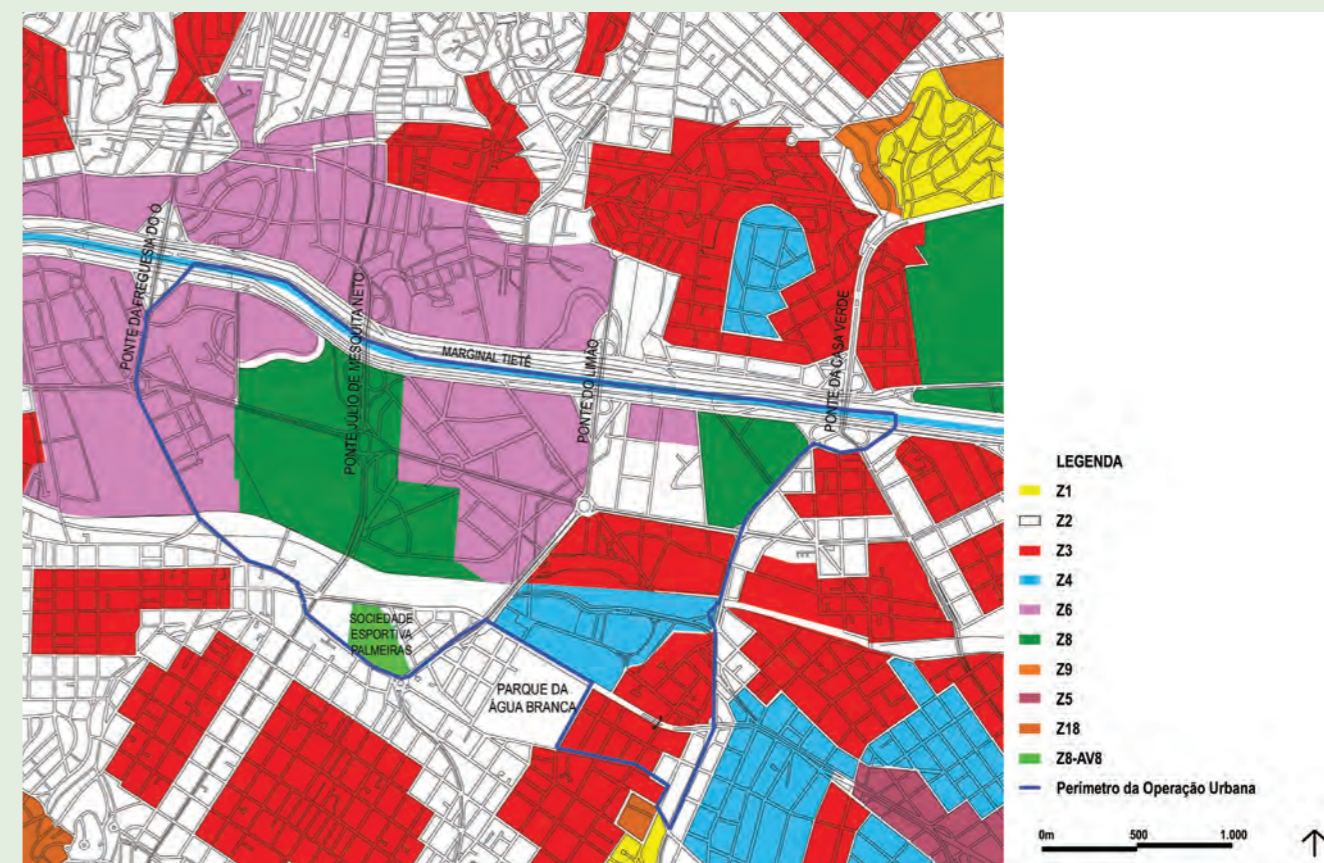
(2) Analyzing the Água Branca location in the general context of the city, we observe its proximity to the downtown area and its potential articulation with other regions of the city, made easier by the road and transportation infrastructure. The Tietê River Marginal Road permits access to highways, the closest being Castelo Branco, Bandeirantes and Anhangüera, to the west, and Dutra, Fernão Dias and Ayrton Senna, to the east. The previously described avenues permit articulation of neighboring districts with the urban operation area, and most especially the city's downtown. The transportation system includes the subway's red line, whose final station is the Barra Funda Terminal, permitting access to the east zone and the other regions through integration with the other lines (blue, green and the future yellow line). CPTM's A and B lines cross the urban operation area from east to west, with the Barra Funda station (Intermodal Terminal) as a connection and integration point for both with the subway and highway and municipal bus lines.

#### Population involved

The Água Branca Urban Operation area is estimated to have about 3,800 inhabitants, according to the IBGE Census of 2000<sup>20</sup>.

#### Urban operation conception

As we saw before, the Água Branca perimeter incorporated the urban tissue that had the greatest conditions for transformation, whether the section comprised mostly of underutilized and empty portions or the area that consisted of industrial zones in the restoration process.



An additional construction potential stock was foreseen for different uses, destining 900,000 m<sup>2</sup> for non-residential use and 300,000 m<sup>2</sup> for residential use, for a total of 1,200,000 m<sup>2</sup>. This stock would be divided into sub areas in the urban operation perimeter, established at the time of the convocation notice. In a technical document elaborated by Emurb that refers to the Água Branca<sup>21</sup> law, the indication of the following sub areas was noticed: Cingapura, Santa Maria, Cetet, Telefônica, Marquês de São Vicente, Gleba Pompéia, Matarazzo/CPTM, Santa Casa, Memorial Sul and Memorial Norte.

Like Faria Lima, the Água Branca Urban Operation established a work program that foresaw, among other projects: opening of new avenues running parallel to the railroad; paving, improving and extending several roads; new crossing of the railroad; revision of the drainage system; widening of sidewalks and planting trees; implementation of parking areas and construction and financing of social interest housing units in the perimeter.<sup>22</sup>

An important characteristic is the possibility to pay for the contribution, related to urban incentives, through public works necessary to fulfill the urban operation's objectives and granting of real estate, where cash payments are not obligatory. The Água Branca law established that the requested urban benefits and the corresponding contributions would be analyzed case by case by the inter secretary group to be instituted and by the CNLU – Normative Commission for Urban Legislation.

As with Faria Lima, Emurb was responsible for management of Água Branca's urban operation fund as well as for carrying out public works and attracting private investments.

#### Duration of the project

Year the urban operation was instituted: 1995

Projected period it will be in effect: not established

Estimated time to carry out the public projects and consume the stock: about 20 years or until the entire stock of additional construction potential is negotiated.

#### Incentives granted

The urban incentives to be granted through payment for the contribution are as follows:

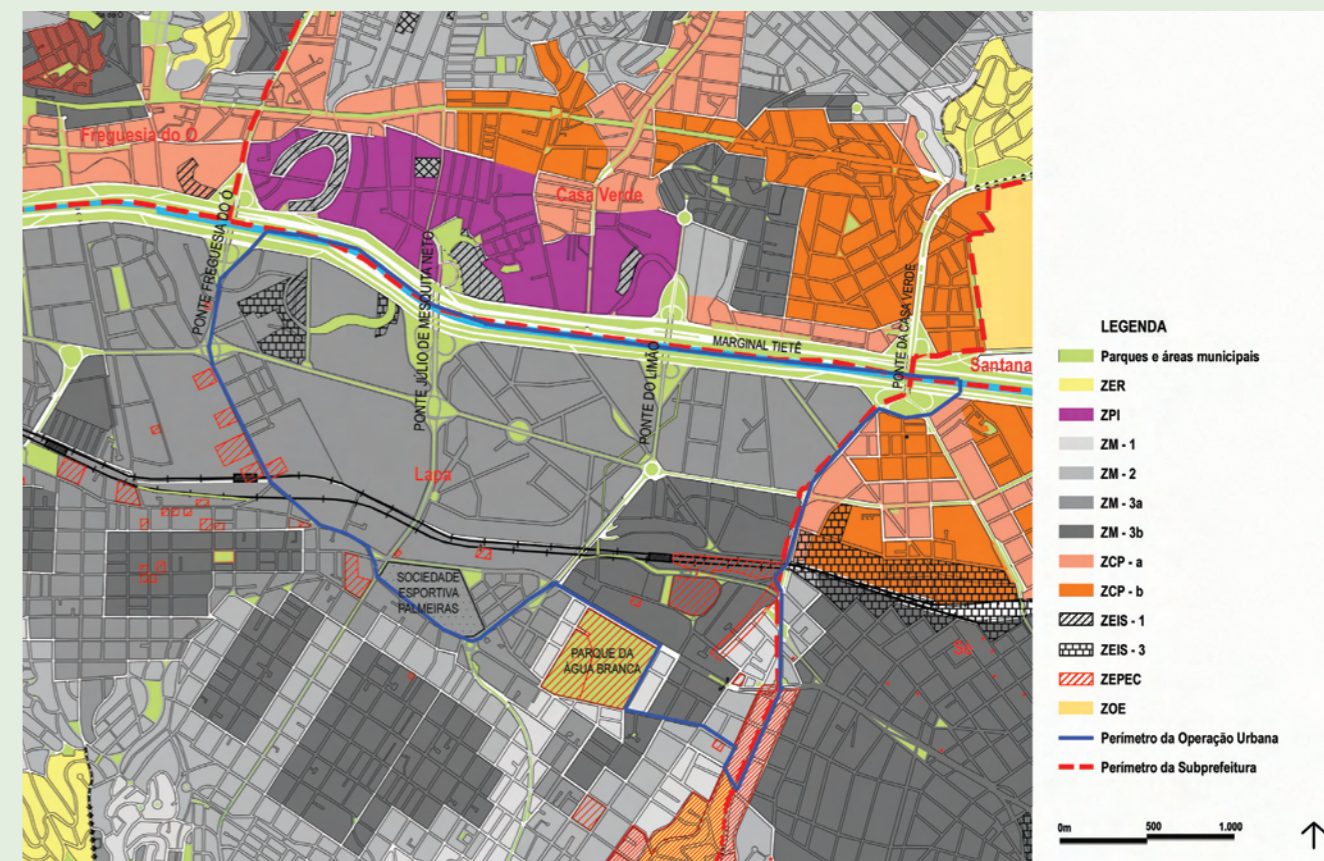
- alteration of rates and uses foreseen in the Zoning Law and in the Building and Works Code.
- granting of public air and underground space.
- transfer of unused construction potential from buildings that are part of the Historical Heritage in exchange for the commitment to maintain and preserve this cultural wealth.
- regularization of constructions, renovations and expansions carried out in disagreement with legislation.<sup>23</sup>

#### Contributions obtained

About R\$ 19 million<sup>24</sup> were obtained for a large office building development, and this sum was paid for through works: extension of Auro Soares de Moura Andrade Avenue and restoration of the Casa das Caldeiras<sup>25</sup>.

#### Success and failure

As can be observed, the Água Branca Urban Operation was instituted with the objective of inducing occupation and density in the



Zoning in effect in 2004 in the Água Branca Urban Operation area. Source: Strategic Regional Plan for the Sub-City Hall of Lapa - Law 13.885/04



Barra Funda region of São Paulo, transforming the underutilization of the area using a new urban standard with better quality for future residents. Relevant results were not obtained in relation to this goal. Only one great development was made, which the extension of an avenue that enabled access and appreciation of the development itself.<sup>26</sup> The reduced performance of this urban operation as an urban instrument for a public-private partnership to promote urban development becomes clear.

If on one hand the scant results do not permit consistent evaluations of this urban operation, on the other hand the land occupation condition, together with recent attempts by public authorities to promote urban projects, provides us with an analysis of the strategic potential, and perhaps, its fate regarding transformation.

In 2002, São Paulo's bid to receive the 2012 Olympic Games resulted in an intervention plan based on the "Olympic Village" concept, proposing the insertion of sports equipment in the urban city and maximizing the transforming effects<sup>27</sup>. The Olympic stadium and Olympic Village was proposed to be installed in the Barra Funda region and within the Água Branca Urban Operation perimeter, along with other "Olympic" program installations.

In 2004, São Paulo City Hall promoted a national contest for projects in the blocks and sections in the Água Branca area, called the "New District" (Bairro Novo). This initiative permitted reflection of the scale of necessary intervention to reverse the situation of underutilization and the appropriate program for this intervention in face of the dynamics that occurred in the city practically one decade after the urban operation had been institutionalized. The studies developed and the results obtained permitted a test for the Água Branca revision, especially with regard to the definition of an urban plan with greater additional construction potential stock, better definition of public works and greater urban control of the blocks' typological standard.

It is not our intention to evaluate the institutional aspects related to the unfolding of these projects, but merely demonstrate how the public authority initiatives formatted projects, programs and scales of intervention.

That same year, Law 13.885/04 was approved, establishing the Strategic Regional Plans by Sub-City Halls and the norms that refer to the plotting discipline and land use and occupation. In the case of Água Branca, as mentioned before, the industrial zones, once restricted to high density and residential use, were transformed into mixed zones, more permissive to mixed use and greater densities. From a zoning point of view, this also liberated the urban operation area for real estate market activity.

In 2006, the works to lower the bed of the Tietê River by 2.5 m were concluded as was the widening of the margins with lined banks, increasing river flow capacity. This measure eliminated the possibilities of overflowing, minimizing the drainage problems in the urban operation region.

According to an analysis, Água Branca is a sector of the city inserted in a favorable setting for transformation. Its territory offers the elements that are evidence to this potential, however the greatest obstacles lie with land problems and the limitations of urban legislation to interfere in those problems. The greatest challenge may be a result of the scale of intervention, which requires full and temporary transformation of this considerable piece of underutilized land in the city.



**Panoramic view of the underutilized lands.** Source (photo): Sempla/Atou

**Panoramic view of railroad: To the right is the large Água Branca Urban Operation area along the low grasslands of the Tietê and to the left is the south sector - the transition area between the low grasslands and the denser urban fabric and borders of the Barra Funda district.** Source (photo): Sempla/Atou