Malecón 2000 as a Strategic Project for the Regeneration of Guayaquil

In the new global urban context, characterized by a fierce competition to attract urban investment and foreign capital, the urban regeneration of rundown areas in central places and waterfronts has been a frequently used strategy to introduce new urban dynamics in cities while improving their image. World-known waterfront projects have been developed to attract tourists (Inner Harbour in Baltimore, Darling Harbour in Sydney and Port Vell and Barceloneta in Barcelona), as an extension of the financial districts (Battery Park in New York and Canary Wharf in London), or as new residential areas (Battery Park and Kop van Zuid in Rotterdam).

Following this global urban trend, several cities from Latin America have made efforts to redevelop their urban waterfront. In the highly polarized cities of the developing world, however, the danger is that, to recover the large investments, these projects may develop as "urban islands", with spaces and amenities geared for the elite, tourists and (foreign) corporate groups. Instead of generating an urban dynamic for all citizens, this process may end up deepening the social and spatial differences among citizens and city areas. One of the most typical examples of this is Puerto Madero, the most famous large urban project in the Latin American region, developed with an investment of more than one billion dollars during the 1990s.

Sánchez and Beraldinelli (2004) have examined waterfront projects in Brazil (the seafront and Nitéroi in Rio de Janeiro, the riverfront in Belem do Pará), Argentina (Puerto Madero in Buenos Aires) and Uruguay (the Plan Fénix in Montevideo). They conclude that these projects reproduce the same pattern of waterfront revitalization observed at global level, characterized by the upgrading of waterfront spaces for the consumption and cultural uses of the elite. These processes have not produced the expected rescue of the cultural relationship between the citizens and the water and therefore they have failed (some have not been completed).

A different kind of process has been initiated in Guayaquil, Ecuador's port, biggest city and main economic centre. A process of urban regeneration initiated in the late 1990s has radically transformed Guayaquil. Cultural, recreational and commercial projects have been built and existing monuments have been renovated along the urban front of the River Guayas, followed by visible improvements of the urban services and the physical space. The urban actions of Malecón 2000 have produced an undeniable positive impact in the city, in spatial, social and economic aspects. They have effectively re-established the connection between the local citizens and the water, which was almost vanished due to the contamination of the river and deterioration of the waterfront.

Soon after Malecón 2000 was opened to the public it became evident that the local citizens fully embraced the project. The people's re-appropriation of the riverside as a space for promenades was accompanied by a wide support to the continuation of the process of regeneration. The city now attracts many national and international visitors, who remark the pride and care that Guayaquileños have for their city. More importantly, this strategic project has initiated a virtuous circle of integrated urban planning with the participation of the population.

In 2003, Guayaquil received a prize from the United Nations Development Program as best practice of local development and good governance. In July 2004, the UNDP organized an event, "Guayaquil Experience. Model of solutions for efficient services", to promote Guayaquil's example, showing its achievements to Latin American urban practitioners. In this context, Malecón 2000 constitutes a relevant case to present as a successful strategic urban project.

The objective of this paper is to describe the main features of the Malecón 2000 project, paying especial attention to the financial (availability of funds and financial sustainability), organizational (public-private cooperation) and urban design (spatial quality and sensitivity to socio-cultural values) issues that may be considered as key-factors of the success of the project. The final purpose is to extract lessons that can be used in the successful implementation of future urban projects.

The paper begins with a brief description of the main features of Guayaquil and its situation in the 1990s, before the process of regeneration. The second section focuses on the origin, concept and urban design considerations of the regeneration of Malecón 2000. The third section provides describes the organizational model to undertake this endeavor. The fourth section deals with the continuation of the regeneration process to the city centre, while the last one presents the final considerations ad the lessons that can be drawn from this experience.

1. Guayaquil and the River Guayas

With approximately 2.5 million inhabitants within its whole metropolitan area, Guayaquil is the main port and the largest city of Ecuador. It was founded by Spanish conquistadores in 1547 at the delta of the River Guayas, the largest delta of the South Pacific. Initially, Guayaquil was settled at the footsteps of the Santa Ana Hill, a site selected due to the firmness of its ground, in comparison with the plains below, which were mainly marshy land. It was also a strategic choice, since it provided great visibility and possibilities for the defense of the port (González, 2003). The existence of the Santa Ana hill, at the North, and of a large canal of sea water bordered by mangroves and swamps (the Estero Salado) at the West side of the initial settlement, determined Guayaquil's growth initial towards the South and parallel to the river (Bock and Deler, 1993).

In the colonial period, ships with gold, cacao and high-quality forest wood departed from Guayaquil towards Spain and other Spanish ports in America. Due to the threat of pirates two important fortifications were built towards the river, fort San Carlos and La Planchada. Despite this, Guayaquil was repeatedly attacked by English and French pirates. There are documents of 17 of these attacks, being the largest the ones in 1687 and 1709. In some cases, Guayaquil was looted or had to pay the ransoms demanded by the pirates to release the hostages and not burn the city.

On the other hand, the abundance of high-quality lumber promoted the development of a ship construction industry, which built war ships to defend the Spanish commerce against the pirates. The shipyards, located at the north of the Santa Ana Hill and later along the River Guayas, became a source of wealth and promoted the growth of the city (González, 2003).

In the XVIIth century, the historic centre -- La Ciudad Vieja -- was displaced towards the south, in land that was not under the threat of floods, to form a new center, La Ciudad Nueva. Thanks to the gradual desiccation of the *esteros* (the small tributaries of the River Guayas which produced floods in times of high tide) the new centre began to grow towards the West, but also along the river (Bock and Deler, 1993).

Due to the characteristics of the soil, all buildings – churches, hospital, civic buildings, as well as everybody's dwellings -- were made of wood, with the exception of the forts. Not surprisingly, fires were a very common occurrence in Guayaquil, and generally destroyed entire areas of the city. Thirteen large fires have been documented. The largest of all, known as the Great Fire, occurred in 1896 (González, 2003).

In the end of the XIXth century Guayaquil grew enormously, in the period when other large Latin American cities grew due to their agricultural exports to the global market. What coffee was to Sao Paulo, was cacao to Guayaquil. Guayaquil's centre is, therefore, the product of the prosperity brought about by the cacao exports. Ecuador was in this period the first cacao producer and exporter of the world, with between 20% and 25% of the world total (Bock and Deler, 1993).

In this period, the riverfront area flourished and developed as the area in which most economic activities took place. Warehouses and other commercial installations were located at the north side of the riverfront, close to the Santa Ana hill. National and international commerce thrived. People from all over the world settled on Guayaquil – Italian, Spanish, Lebanese, German and Chinese were among the largest groups -- attracted by its prosperity and the possibilities for commerce. Guayaquil's dwellings had generally two floors: the ground floor was dedicated to commercial activities while the family lived in the first floor. They also had colonnades or arcades (the so-called *soportales*)² to protect pedestrians from the tropical sun and the frequent rains (González, 2003). Different types of shops appeared, offering goods from all corners of the world. Cacao (and later banana) exports made Guayaquil an important and almost autonomous centre within the national economy (Godard, 1985).

During the flourishing period of the agricultural exports, a boulevard was opened at the riverfront, the Malecón, as a prestigious space for the financial, administrative and upscale commercial sectors. This boulevard, named the 'Paseo de las Colonias', after the foreign colonies which contributed to finance its construction, was a popular place to go due to the soft breeze coming from the river. A powerful relationship between the river and the city was established, not only based on economic activities, but also on recreation and cultural activities. 'But aside from the significance of the waterfront as the very soul and heart of this tropical port, it also contributed to another important aspect of the Guayaquil scene, becoming the stage for a tradition dear to the hearts of the population: the evening stroll. As the sun went down and the feverish activities of the day dwindled, the dockworkers would retire, to be replaced by other occupants of the riverside." (González, 2003:89).

During the 1920s, the crisis of cacao produced a large migration of cacao peasants to Guayaquil, who settled at the outskirts of the city. This rapid peripheral growth and the strong riverfront relationship determined a semi-concentric urban pattern. The centre included the area of big export-import commerce, administration, finance and residence quarters of the elite. Two half-rings surrounded the centre: the first corresponded to the residential quarters of the middle classes and the second to areas of the newcomers to the city (Godard, 1990).

Migration from other areas of Ecuador to Guayaquil intensified during the 1950s, during the crisis of the banana culture. The newcomers settled in decayed dwellings in the centre, or in public-owned marshy land at the west (the Suburbio) in continuous risk of flooding. In 1968, half of Guayaquil's population – 360,000 inhabitants -- lived in the Suburbio or in the rundown city centre (Godard, 1985).

The deterioration of the centre increased after the port was moved. Due to the advanced in maritime transport technologies during the second half of the XXth century Guayaquil's old port became obsolete. A new port, which could handle ships with greater draft, was built during the 1960s, 10 kilometers at the south of the old port (González, 2003). The relocation of the port functions decreased the attractiveness of the Malecón.

However, unlike many other Latin American cities, Guayaquil maintained its business district inside the centre. In the 1970s, during the oil boom period, Guayaquil underwent a process of renovation and rehabilitation of the centre. Buildings from the beginning of the XXth century were demolished and modern office buildings for tertiary functions were built in their place, without especial interest to maintain the few existing historic vestiges. Guayaquil's city centre concentrated most urban functions, while the most important functions were located along the Malecón (Godard, 1990).

The oil boom also attracted a new migration stream to Guayaquil. Since the centre was rehabilitated and the Suburbio area was completely occupied, new waves of invasions took over public and private land at the periphery (Godard, 1985). Gradually, the deterioration of the economy and the ineptitude of local authorities triggered a spiral of urban decay. The processes associated to the visible degradation of the centre -- the flight of the high-income groups toward the areas at the north, the transformation of old dwellings into slums, great

traffic congestion and lack of parking spaces, the wide presence of informal sellers and informal markets, and the new location choices of the largest private enterprises -- eventually led to the relative decline of the functions of the centre (Godard, 1990).

The centre lost its multifunctional character to become a place for commercial transactions, while the streets and *soportales* became open markets in which informal sellers offered goods to passers-by. At physical level, streets, *soportales* and building facades showed a great deterioration, infrastructural services were disorganized and insufficient, and there was no control of vehicular traffic and parking. All this produced an urban landscape characterized by visual chaos and decay, which in combination with the increased criminality led to the stagnation of real-estate investment (Fernández-Dávila, et. al., 2003).

At urban level, there were significant problems of environmental degradation, linked to the scarcity of green areas, insufficient garbage collection, scarcity of water and sanitation and, more importantly, deep problems of contamination of the river and esteros. Swyngedouw (2004) remarked the irony that, despite being settled along the waters of the estuary and being flooded during the rainy season, a large percentage of the people did not have access to drinking water and the rest suffered from water shortages. Furthermore, the waters of the estuary became contaminated because sewage water was dumped into the river. In 1991, a cholera epidemic affected Guayaquil deeper than any other city in Ecuador, illustrating its deep sanitation problems.³ Not surprisingly, the relationship of Guayaquil's citizens with the river substantially weakened and until the late-1990s the riverside was virtually abandoned.

2. Guayaquil's urban regeneration process

The state of urban decay described in the previous section was partly due to successive inefficient and devious administrations of the municipality of Guayaquil. In view of the chaotic and negligent management practices, when Mayor Ing. León Febres-Cordero -- a former president of Ecuador -- took office in 1992, he undertook a radical reorganization of the municipality's finances and administration. The first actions were directed to restore the order in the local finances, decreasing the large existing bureaucracy and setting up better management practices (Jacobs, et al., 2003).

To tackle the city's profound urban decay, the municipality of Guayaquil requested the UN-Habitat to provide technical assistance for the formulation and implementation of a Plan of Urban Development and Public Works. UN-Habitat's support to the municipality began in 1994, assisting the Municipality to modernize and update its urban planning tools. The planning activities were carried out by the technical staff of the municipality, with the support of national and international consultants, as well as staff from local universities and selected local NGOs (UN-Habitat, 2005a).

To improve the efficiency of the public services, many of them were subcontracted to the private sector. This made possible the change of the proportions of the local government expenditures, to allocate most part of the total budget to urban investments, and less to wages and management expenses. The new public investments were assigned to the construction of several vehicular by-passes, the tunnels towards the north of the city, and the reorganization of the system of markets (Jacobs, et al., 2003).

2.1 The origin and main concept of Malecón 2000

In 1996, while the local urban management reforms were gaining momentum, a private bank decided to offer a civic contribution -- on the occasion of its 75th anniversary -- to the city of Guayaquil. An urban team of the Oxford Brookes University (OBU) in England was invited to make a proposal to renovate Guayaquil's deteriorated riverfront as a large public space, following the idea of similar urban projects known in Guayaquil, as Barceloneta in Barcelona and Bay Side in Miami.

To prepare the proposal, the urban team researched the situation of the malecón and the city, interviewing the main stakeholders of Guayaquil. From this, it became clear that the

malecón was a place of great cultural significance, in which a careful and well-planned urban intervention could serve to improve the surroundings. Instead of focusing exclusively on the malecón project, the OBU team developed a vision in which Malecón 2000 would be a symbolic and powerful project, of enough dimensions to initiate a virtuous circle of urban development in the surrounding areas. In this vision the renovated riverfront would re-direct the urban investments to the city centre.

The first proposal to redevelop the 2.5 km. long urban front of the River Guayas was elaborated between August and November 1996. The proposal included the establishment of a foundation to manage the whole regeneration process. The Oxford-Brookes team stated as main goal "to create a large public space addressed to all the inhabitants of Guayaquil, without any distinction, which could re-establish the relationship of the city with the river, endure and serve as trigger to initiate a process of urban regeneration of the city centre." (Carbajal, et al., 2003:20).

The preliminary proposal and the proposed management of the project – based on studies of the management models of Barcelona, Bay Side and Puerto Madero -- were presented to Mayor Febres-Cordero in November 1996. He enthusiastically welcomed the project and provided his full support to the initiative. In January of 1997 the Malecón 2000 Foundation was established, as a private organization chaired by the Mayor and conformed by representatives the public and private institutions of the city, with the intention to plan, develop, construct, administer, finance and maintain the malecón and other areas of the city. Later the same month, the preliminary proposal for the urban regeneration of the malecón was presented to the public of the whole country, through written media, radio and television (Malecón 2000, 2007).

2.2 The development of the project

In April 1997, the Malecón 2000 Foundation officially hired the Oxford-Brookes team, which in turn selected a group of local professionals through a public call. Soon after, they began to develop the programme of functions, based on the objectives and guidelines of the initial proposal. These were (a) to tackle the urban problems of the centre; (b) to generate enough resources to maintain Malecón 2000 without depending on public funds; (c) to make a project of enough dimension to have a positive impact in the centre; (d) to highlight the historic monuments; and (d) to revitalize the relationship of the city with the river (Carbajal, et al., 2003).

As in other large urban waterfront redevelopments, Malecón 2000 would have a strong accent on recreation activities, but in such way that they would be profitable enough to generate funds for the self-maintenance of the project. On the other hand, the existence of cultural and civic monuments along the riverside, such as the monument to commemorate the meeting of Bolivar and San Martin, the Moorish Tower and the old South Market, was highlighted to increase the project's cultural significance.

To re-establish the lost link with the water, Malecón 2000 would have the character of a large urban park, in which buildings would not exceed the 20% of the total area,⁴ a proportion which was incorporated into the urban norms. A long boardwalk for promenades was designed as a grid of red and yellow bricks, combined with urban furniture, water fountains, sculptures, gardens and trees. This boardwalk, partly built on piles over the river, would provide unity to the whole riverside (see Figure 1). To link the malecón with the city, the designers decided to make a large plaza -- Plaza Olmedo -- located at the south part of the malecón, at the intersection with Olmedo Avenue.



Figure 1 Malecón 2000, with the Moorish tower at the right (Source: Malecón 2000, 2007)

To tackle the deficit of green areas in the centre, it was planned to create an area for gardens, whose objective was the conservation of local species, the culture of native species and foreign species, and the preservation of some trees in danger of extinction. The project also included the restoration of the historic landmarks, a museum and a commercial centre, articulated through a series of paths, terraces and children playgrounds. In order to not disturb the view of the existing buildings along the riverside, the new buildings would not exceed the height of the existing trees of the riverside while their roofs could be used as part of the promenade routes. To diminish the lack of parking places in the centre, 3500 of them were projected in underground spaces.

The municipality had to reorganize and relocate the street sellers of the Bahía informal market, located at the riverside, which was highly contaminated. With the objective to increase the security of the whole area, avoiding informal street sellers and criminality, it was decided to close the malecón area with eight gates which open from 7:00 a.m. to 12:00 p.m., a fact which has been constantly criticized by Guayaquil's artistic community (Kronfle, 2007).

2.3 The project and its execution

To facilitate the design and execution, the project was divided in three differentiated sectors, South, Centre and North, following the existing local dynamics: popular at the south, administrative at the centre and more residential at the north. To have a public space of appropriate dimensions to receive large flows of people, the new malecón had to extend itself towards the river. The most efficient way to do it, to protect the environment, was to construct the boardwalk and buildings on concrete labs resting on piles into the river. Since this engineering solution represented very high costs, the amount of area expanded towards the river had to be thoroughly studied and effectively designed. The total area of the project is 20 hectares, which represents three times the area of the old Malecón. The total built area is 130,000 m2 (Fernández-Dávila, 2003).

The South sector has a commercial, recreational and tourist-friendly character, extending itself around two historic buildings, the South Market (reconverted for events) (see Figure 2) and the Club de la Union, a very selective club of the bourgeoisie of Guayaquil. This also includes the area in which the Bahia market was settled, transformed into a Commercial

Centre constituted by four galleries of 238 commercial spaces and 8 cafés, with 17 restaurants with a view to the river in the upper level. This is complemented by a place to hire boats, children playgrounds, a handicrafts market and spaces for selling flowers.



Figure 2 The South Market and surroundings (Source: Malecón 2000, 2007)

The Centre Sector was conceived as a Civic Plaza, because it has an institutional character since it is developed around the Bolivar and San Martin monument and the Moorish Tower. The buildings of the Municipality and the Guayas Government are also located in front of this sector of the malecón. This sector also includes small open-air amphitheaters and exhibition spaces. Its total area is 24,500 m², from which 10,800 m² are built over the river.

The north side of the malecón, heading to the Santa Ana hill, is dedicated to recreational and cultural uses. The great attraction here is the Museum of Anthropology and Contemporary Art (MAAC), an important landmark in the city. It includes an auditory, theater, gardens with didactic orientation, a maritime museum, and kiosks and cafeterias (see Figure 3).



Figure 3 Museum of Anthropology and Contemporary Art (MAAC) (Source: Malecón 2000, 2007)

To gain the confidence of the citizens, it was decided to have most part of the Malecón 2000 finished by the year 2000, what would constitute the first phase of the project. The second reason was that Mayor Febres-Cordero finished his mandate in 2000 and had decided not to run for another period. Such a short deadline required a very careful planning and flexible coordination. Originally, the idea was to begin with the commercial area at the south, expecting that they would generate rent to continue with the rest of the project. With the change of financial model, in which donations would finance the open areas, it was decided to begin with the central part of the malecón, which had no commerce but did have a great symbolic connotation. The first sector to be opened to the public was the Civic Plaza, inaugurated the 9th of October of 1999.

According to the plans, the works continued advancing towards the south. The 25th of July 2000, the Commercial Center and the surrounding zone with the old train wagon opened their doors. This sector counts with many small plazas for snacks and meals and with sufficient covered parking. The Museum of Anthropology and Contemporary Art was the next project to be inaugurated, the 15th of December 2000. With the inauguration of the museum, the first phase of the project was finished, with a total cost of 75 million dollars. The works had developed according to the plans.

During 2001, the works extended towards the extreme south of the malecón. The Olmedo Plaza was delivered to the public the 16th of April, with new small spaces for meals at borders of the Guayas. The 30th of October of the same year, the gardens of the Malecón were opened to the public, offering a high diversity of green areas and native plants that complement the existing urban projects.

The completion of Malecón 2000 was achieved the 26th of February of 2002, with the inauguration of the recovered South Market, a beautiful construction of high historical value, which was almost destroyed due to the lack of maintenance and negligence. The reallocation of the retailers of the market proceeded according to the Market Plan, previously conceived and executed by the municipality. The market has been renovated to become a modern center of exhibitions and place for events. Its public space is complemented with the Plaza of the Craftsmen, where the former retailers have been located.

After the completion of the project, it was decided to build an IMAX theater, in order to complement the cultural and recreation facilities of the Malecón. It was inaugurated in October 2003, in area of the gardens of the Malecón at the north. The ground floor of the IMAX will become the maritime museum of Guayaquil. It is used now as for the exhibition of dioramas with the history of Guayaquil. This project, which was not included in the original proposal, has received critics because it distorts the view towards the north part of the malecón.

2.4 Results of the regeneration of the waterfront

Evaluating the regeneration of the malecón according to the objectives of the project, the results have been exceptionally positive. The project has fulfilled all the main objectives, effectively re-establishing the relationship of the city with the river, providing a wide space for all the inhabitants to develop recreational, commercial and cultural activities, a mix of uses which has been fundamental for the success of the project. The malecón has been restored as the centre of gravity of Guayaquil, providing the city centre with a new urban dynamic. Attracting national and international tourism, it has generated new jobs (more than 4000) and reactivated the local economy. Additionally, it has helped to solve part of Guayaquil's parking problems, in at least five blocks adjacent to the project area.

The satisfaction of the local residents with the project has been outstanding. Successive surveys show that more than 95% of the citizens are very satisfied with the regeneration of the malecón. This can be observed in the re-appropriation of the riverfront as a space for promenades and in the great success of the commercial activities. Guayaquil, which used to have a very bad city image, has completely reversed its image and now projects the image of

a modern and vibrant city. The national and international visitors remark the pride and care of Guayaquileños of their city centre.

The most important of all is that Malecón 2000 has succeeded in initiating a virtuous cycle for the regeneration of Guayaquil, as it was intended. This is not an easy undertaking. The enormous impact of Malecón 2000 has promoted citizens' confidence to extend the process of urban regeneration to other areas of the city (see section 4).

At international level, Malecón 2000 has received great recognition. The World Health Organization (WHO) and the Pan-American Health Organization (OPS) have declared Guayaquil's Malecón 2000 as "Healthy Public Space". Additionally, the design of Malecón 2000 won a Regeneration Award 2005, in the category best international regeneration project, organized by Building, BD and Property Week magazines in the United Kingdom.

3. The organizational model of Malecón 2000

The management of Malecón 2000 is in the hands of the Malecón 2000 Foundation, a non-profit private organization in which the most important public and private stakeholders of Guayaquil participate. The initiative of the foundation as well as for the initial project for the regeneration of the Malecón came from Alvaro Guerrero Ferber, the executive president of La Previsora Bank, an economist specialized in public management. The stakeholders of the foundations include:

- Municipality of Guayaquil
- Government of Guayas
- First Naval Zone
- Polytechnic High School of the Coast
- Catholic University of Santiago de Guayaquil
- State University of Guayaquil
- Association of Private Banks of Ecuador
- Chamber of Construction
- Chamber of industry
- Chamber of the Small Industry
- Chamber of Commerce
- Chamber of Tourism
- Natura Foundation
- Civic Board of Guayaguil
- Ecuador Foundation

To develop and administer the project, an agreement was signed between the municipality and the Malecón 2000 Foundation in 1997, by which the malecón area was transferred to the foundation in concession for 99 years. This institution counts with a Board of Directors, with representative of the involved institutions and with an Executive Committee, appointed by the former. To operate in a fast and efficient way, the Executive Committee has enough decision power to develop, execute and administer the project through weekly meetings (Fernández-Dávila, 2003). During the first two years, the Committee was chaired by the initiator of the project, Alvaro Guerrero.

The foundation's procedures and decisions to hire personnel and sign contracts were established by the Executive Board, which allowed the indispensable flexibility and speed. This was especially useful for the acquisition of building materials under the standard market prices, something difficult to achieve under the norms for public acquisition. The activities and finances of the Foundation are audited by the Office of the State Comptroller General (Controlaría General del Estado) and by specialized private firms.

Several other foundations have been created in Guayaquil after 2001 following the management logic of the Malecón 2000 foundation to solve other urban problems. These follow a certain civic tradition in Guayaquil, the economic engine of Ecuador, but traditionally

relegated to a second place after Quito, the capital city. Guayaquil's citizens are used to organize themselves to solve problems that are not tackled at central level. Several institutions of Guayaquil have been created for these purposes, as the Fire Brigade, the Welfare Board and other aid foundations.

Besides the flexibility that the Foundation offered, to execute the project in such a short term also required to count with a reduced and competent professional team. After a careful process of selection, the Foundation Malecón 2000 hired a team of young professionals who developed the entire project in close coordination with the Oxford-Brookes consultants. The design team included architects, landscape architects, urban designers and engineers of different disciplines. To improve efficiency, their offices were located within the building facilities of the Foundation, which allowed saving precious time in the process of coordination among the different professionals.

Since the works had a high level of complexity, the selection of the construction companies was made between the most reputed and reliable firms of Ecuador. For each stage, a call for tenders was organized among the members of a previously selected group. During the first round of the tenders, national and international firms were invited to participate. Eventually, the proposals of the international firms were up to 40% higher than the national ones. The construction works were also divided according to their level of specialization, especially for the laying of foundations and piles over the water.

To be able to conceive, design, approve and execute a project of such scale in such a short time -- between August 1996 and February 2002 -- it was indispensable to count with first-level political support. The two successive municipal administrations of Guayaquil between the conception and completion of the project have provided an enormous political and institutional support during the different phases of the project.

Originally, it was expected that the necessary investment to build the project would be financed with the income generated by renting the commercial and service areas. However, the acceleration of the economic crisis affecting Ecuador during 1997-1998 forced to change the initial financial model. A special law for donations was launched for this purpose, which would be addressed to finance the construction of the open spaces. This law allows addressing up to 25% of the income tax of individuals or firms to specific works of urban regeneration chosen by the donors. Malecón 2000 enjoyed a strong economic support from the local population. A "Monument to the donors" located at the centre of the gardens of the Malecón acknowledges the donations of more than 50.000 firms and individuals which voluntarily donated part of their taxes to Malecón 2000.

Considering that a project that does not generate appropriate resources for its self-maintenance is condemned to fail, both the funds for the construction works and those for the maintenance of the project were taken into consideration. For the works, in those buildings which pay the costs of their realization, the financing was through credits of the financial system – as in the Malecón Commercial Centre – or through concessions – as in the Museum of the Central Bank or the (future) Hotel and Recreation Center.

In the areas that do not generate resources, such as the public open spaces, the works were financed through private donations and through the funds coming from the special Law. The costs of realization of the first phase of the project, 75 million US dollars, were very low according to international standards. In many cases the Foundation Malecón 2000 provided the finishing materials of these spaces, which helped to lower the costs (Fernández-Dávila, 2003).

Finally, to obtain the resources to maintain the public space of Malecon 2000 in optimal conditions the project's programme of functions was shaped in such way to have enough commercial and parking areas for that purpose.

4. The regeneration of the city center

Mayor Jaime Nebot, who took office in 2001, concluded the works of Malecón 2000 and extended the process of urban regeneration towards the city centre (Jacobs et al., 2003). Under the motto 'more city, more regeneration', Nebot asked the citizens not to talk about what has been done, but about what was still necessary to do for the regeneration of Guayaquil (González, 2003). The extension of the regeneration process was facilitated by the fact that the actions of the previous administration had given the citizens the confidence that the actions announced by the Municipality would be carried out efficiently.

The institution in charge of the actions was the Siglo XXI (21st Century) Foundation, especially created for that purpose. A special law for administrative simplification was launched, to allow the private foundations manage the municipal funds for public works -- approximately 85% of the budget of the municipality plus the money from the donations of the 27 Law -- without the usual restrictions of the public sector. Several other foundations have been created since then for other city projects, as the Airport Authority, the Terrestrial Terminal, the Popular Insurance system, the Public Transport System, the Civil Registry and the Corporation for Civil Security (Municipality of Guayaquil, 2007). Each of them establishes their own parameters for organization and functioning, but is controlled by public auditory.

To undertake the physical, socio-economic and environmental rescue of 96 hectares of the centre of Guayaquil,⁷ the Siglo XXI Foundation worked with the assessment of the Malecón 2000 Foundation for the design and technical support. The technical team recommended to carry out the works through the main road axis and selected sectors of the centre (see Figure 3), and not in the adjacent blocks to the regenerated riverfront, as it was thought in the beginning by the municipal authorities.

The works included the retirement of electric and telephone lines into the underground, public illumination, the re-paving of roads, new urban furniture, the painting of buildings, and assistance to residents for improving the facades of their property along important vehicular axes of the city centre. These are the 9 de Octubre Avenue, converted into a boulevard, the Olmedo Avenue, and the Boyacá, Portete and Rocafuerte streets. It also involved the regeneration of the San Francisco Plaza, the Administration Plaza, La Merced and Columbus Plazas, as well as the Forest Park. The works also included the physical regeneration of three historic neighbourhoods: Centenario, Orellana and Urdesa (Malecón, 2000).

One of the most visible actions of the regeneration of the centre was the upgrading of the Santa Ana Hill, which was one of the promises of Nebot's political campaign. This area now has a 310 meters corridor with cafés, art galleries, and handicraft shops (Municipality of Guayaquil, 2007), run by the residents, which generally live in the back or upper part of the business space. Attracting tourists by the wonderful view of Guayaquil at the top, the area has become an important landmark in Guayaquil, generating income for the local residents. The regeneration of the historic Las Peñas neighbourhood followed, located at the footstep of the Santa Ana hill. This was subject to a careful process of restoration and upgrading, made possible by an agreement between the National Institute of Cultural Patrimony, the Municipality de Guayaquil, and the Malecón 2000 and Siglo XXI Foundations.

The subsequent grand project of Guayaquil's upgrading plan was the regeneration of the Malecón del Estero Salado. This consists of the waterfront of the sea-water *estero*, which had been used by citizens of Guayaquil as a recreational resort for bathing and nautical activities since the end of the XIX century. However, due to the contamination of the water – due to the discharge of industries at the north side, of the sewage of the Suburbio and of garbage disposal on the water – it had been completely abandoned for recreational purposes.

The Malecón del Estero Salado shares several characteristics with the riverfront. It was a historical space that was neglected and degraded. The once enjoyable relationship of the citizens with the water of the *estero* had been broken. To recuperate this significant space

the Siglo XXI Foundation asked the Malecón 2000 Foundation to design, execute and administer the physical works. Another enterprise was contracted to decontaminate the water of the *estero*.

The most logic course of action was to follow the same strategy used for the regeneration of the riverfront. The main objectives of the Malecón 2000 project, as well as the urban design and architectural guidelines were adapted for the new project. A similar strategy was used, in which the urban actions would improve the physical, economic and environmental aspects of the project area and its surroundings, in order to attract real-estate investment. The Malecón del Estero Salado was also conceived as a large public space for all citizens without distinction, seeking the reconnection of the people with the *estero*. The old historic landmarks were also used as part of the process of regeneration and economic sustainability was also sought through commercial and service activities.

The whole project consists of the regeneration of the 4 km-long fronts of the Estero Salado. The first stage extends itself over one kilometer long over an area of 5.6 hectares, with an investment of almost 20 million US dollars. The works were initiated in January 2002 and the first part was inaugurated in October 2003. Most users of the first part are students of the universities located in the area: the State university (50,000 students) and the Catholic University (12,000 students). ¹¹ Figure 4 shows the location of the different phases of the regeneration in Guayaquil in dotted lines, illustrating the Malecón del Estero Salado's project total area and first phase.

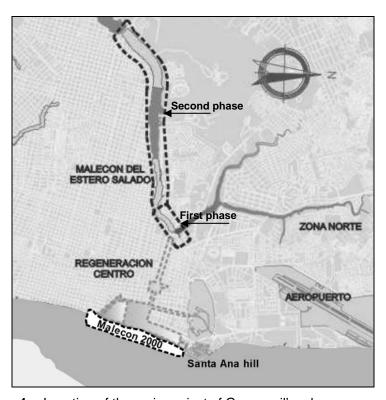


Figure 4 Location of the main project of Guayaquil's urban regeneration

In the meantime, and according to the Development Plan for the city, other important projects were being implemented. These include the upgrading and extension of the Simon Bolivar Airport, the Terrestrial Transport Terminal and the development of the Metrovia Bus Rapid Transit system. The studies for the latter were developed after Mayor Nabot asked the help of the UNDP and UN–Habitat to organize the public transport system in Guayaquil (UN-Habitat, 2005b) used by 85% of its population. Professionals with experience in similar projects in Curitiba, Bogotá (Transmilenio), Argentina and Quito took part of the planning and implementation of the Metrovia system (Von Buchwald, 2007).

After the initial studies an agreement was signed with Federation of Public Transport Drivers of Guayas (Federación de Transportistas Urbanos del Guayas) to undertake the task to transform the transport system into a profitable and efficient business, while offering better transportation to the public. A regulatory body to control and regulate the operations of the system was established, the Metrovia Foundation. The system consists of articulated buses that will run on special lanes along seven trunk routes, with stops every 400 meters. The system began to function in January 2006 along the 31 km-long Guasmo–Río Daule trunk route, while the second trunk route will be operating in the second half of 2007. Metrovia has improved the traffic flow and the mobility of users, which according to the surveys are satisfied with the new system ¹² (Von Buchwald, 2007).

Additionally, the municipality has launched a series of programmes and measures to make urban management more efficient by privatizing the services or to help poorer households, and which have been received with different levels of approval by the citizens. The programmes include the Plan 'Más Seguridad' (More Security), which has contracted out private security for the city; the 'Mucho Lote' Social Housing Plan which will provide 15,000 lots for low-income households; and a system of mobile clinics and day-care hospitals. Other measures include the concession of the Civil Registry to the private sector and the provision of school texts to poor students by the municipality.

The last of the grand projects is a spectacular extension of the malecón, at the north side of the Santa Ana hill, the so-called Puerto Santa Ana. Unlike previous regeneration projects, this time the design consultant for the master plan was an international architectural office from Baltimore, the Development Design Group. The idea was to build a mixed-functions development similar to CocoWalk or Coconut Grove in Miami, with a marina, a pier for nautical sports, ten mixed-use buildings, offices, restaurants, a casino, a hotel for 250 beds, and three museums. It will also have a light house completely built in glass, as well as a Hollywood-style sign on the upper side of the Cerro Santa Ana that will read 'Puerto Santa Ana' (Bird, 2005).

The Siglo XXI Foundation manages the operation and the Malecón 2000 Foundation assesses the works, initiated in March 2005, which will have a total area of 30,000 m2 and a cost of 15 million US\$. The site was donated by the local beer brewery to the city. Some of the old factory buildings have been recuperated for commercial, residential and office functions (Malecón 2000). Mayor Nabot opened the first phase of Puerto Santa Ana to the public in June 2007.

This has been the most controversial of all the recent projects. Due to the upscale character of the project it is considered an ultra luxurious project along the river (El Comercio, 2007), while the 'Miami-inspired' character of the project has provoked firm criticisms. The project completely breaks with the concept of previous projects to develop public spaces open to all people in Guayaquil. On the contrary, it only has 20% of public open space, while the rest is targeted to the very high-income groups. The real-estate firm in charge of project justifies the high costs of the apartments arguing that it is an exclusive place, targeted to people who earn between 8 and 10 thousand dollars per month (El Comercio, 2007).

5. Factors that promoted the success of Malecón 2000

A successful process, similar to a successful new product or service, is the product of a complex interaction between three elements or 'pillars': (a) a societal or social one; (b) a technical or technological one; and (c) an economic-legal one (Drewe, 2000). The first determines what is desirable; the second determines what is possible; and the third what is feasible. Evidently, the products of these three elements do not intersect completely. It is precisely their inter-section what determines the success of a process or product, as illustrated in Figure 5. A good communication and interaction between the three elements helps to make this intersection the broader possible, increasing the probabilities for success.

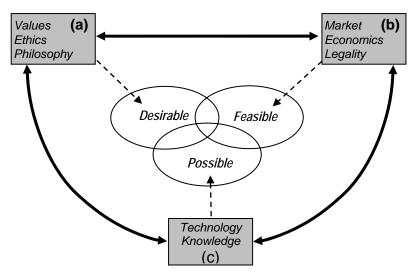


Figure 5 Scheme of the factors that determine the success of a new process or product (Adapted from Drewe, 2000)

According to this scheme, the factors that came together in the Malecón 2000 project and determined its success were: (a) the social need to rescue Guayaquil after decades of physical and economic decay (high social desirability); (b) the elaboration and implementation of a high-quality urban project (high technical efficiency); and (c) the strong political commitment to overcome all economic and legal obstacles to realize the project (commitment to economic-legal feasibility). Figure 6 summarizes the origin and development of the Malecón 2000 project, identifying the three factors that came together for its success.

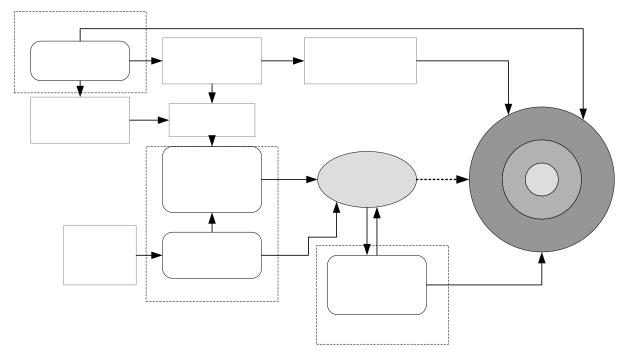


Figure 6 Process of development of Malecón 2000

Along the process, the close interaction between (a), (b) and (c) increased the possibilities for success. Regarding (a) and (b), the urban team studied the urban situation and consulted the main stakeholders to get a good picture of what was at stake regarding the social situation. The designers were very sensitive to take care of both the functional and the formal aspects, which were crucial for the positive reception of the project. Regarding the first, they conceived the project as a large public space, open to all people of Guayaquil without

distinction. In a city tropical city as Guayaquil, with an average temperature of 26 degrees Celsius, and in which most people live in small and precarious dwellings, the possibility to use a large public space which provides better thermal comfort due to the water breeze is a great improvement. This re-established the relationship between the citizens and the water, departing from exclusively functional and economic considerations, to become a real improvement of their quality of life.

On the other hand, the designers knew that the formal aspects had to be respectful of the local culture. From the consultations with stakeholders, verified by surveys among the citizens, the designers were aware that the waterfront was considered the 'heart' of the city (by 80% of the population), and contained landmarks and monuments concerning the cultural identity of Guayaquil's residents. This demanded taking great care and consideration of the architectural language of this large public space. ¹³ This was also a matter of consultations (stakeholders and citizens through surveys), from which a contemporary approach, respecting the local cultural symbolism, appeared as the most suitable option.

According to this, Malecón 2000 was conceived as neutral architectural frame; as a large balcony in which the river is the central figure. References to naval activities and spaces were accommodated in the zone that used to be the port, as a tribute to its essential role in the city. In the south part of the malecón along the commercial centre, the boardwalk was treated as the deck of a large transatlantic, as a nostalgic reference to the thousands of foreign migrants that arrived to Guayaquil and helped to build the city during its golden age.

In this way, the elusive socio-cultural component, so difficult to tackle by urban designers, was properly dealt with in Malecón 2000. The careful treatment of this socio-cultural component led to the successful appropriation of the project by the users. Malecón 2000 has produced such a high impact, that it has given back its citizens the pride that they used to have for their city, lost after decades of urban decay.

The interaction between the technical (b) and political (c) was also very close; the latter being directly controlled by the Mayor. The political influence of the Mayor was, and is, very high in Guayaquil. Since the presentation of the proposal to the Mayor in December 1996, he embraced the initiative and provided his full support for its execution in the shortest time possible, since his period as Mayor was ending in 2000. The rush to execute the project made possible to establish the foundation with the participation of representatives of the most important institutions of the civil society in a record time. During its functioning, the foundation's technical team was in continuous contact with the Mayor and close collaboration with the technical staff of the municipality. The strong commitment of the Mayor to make this project come true is illustrated by the introduction of the special law to get funds for the execution of the works from part of the income tax, or the relocation of the street sellers of the Bahia market in front of the river.

The interaction between the technical staff in charge of the elaboration and implementation of the project, and the politicians who solved the financial and legal bottlenecks that threatened to stop or delay the project, was outstanding. In no other place it can be seen that a project of such magnitude and complexity was conceived and realized in such a short time, from August 1996 until December 2000 -- for its first and largest phase – and until February 2002, for its completion. This achievement becomes even more remarkable in the context of the deep political, economic and financial crisis that affected Ecuador since 1997, which changed three presidents in a short time and forced a great amount of Ecuadorians to emigrate to other countries to get a better future.

Finally, the satisfactory contact between the Mayor and the civil society was also helpful for the success of the project. On the one hand, the reforms of the management and finances of the municipality helped to set the stage to begin to tackle the physical decay of Guayaquil with the Malecón 2000 project. Most people considered that, after so many years of political negligence, the decisions taken by the Mayor and his team were the most adequate decisions for the city's future. There were no strong voices against the project as to produce

a conflict that would affect the project's implementation. On the contrary, the local environment has been mostly favourable, and even celebratory of the regeneration.

As a result of the fruitful communication and interaction between the social, technical and political 'pillars', the population has massively supported the continuation of the process of regeneration from Malecón 2000 to other urban areas and urban sectors.

6. Conclusion

The process of urban regeneration that has radically transformed Guayaquil during the last years was triggered by Malecón 2000, the regeneration of the riverfront of the River Guayas, considered the heart of the city. The analysis of the previous section leads to conclude that the success of Malecón 2000 was based on:

- a high-quality design, able to change the city image, generating feelings of identity and belonging, while projecting an image of innovation and vibrancy for the city as a whole;
- a well-organized and efficient process of execution of the project, able to realize the project in an incredible short period;
- the strong commitment of the (two successive) mayors to remove all the legal and economic obstacles to carry on with the regeneration actions; and
- a good level of communication and interaction between the main actors of the process: the municipality, the project's technical team and the users.

However, the social support that the regeneration process acquired during the first years of 2000 has partially decreased. The more recent projects, and especially Puerto Santa Ana, have produced criticisms due to its exclusive character, which goes against the initial spirit of the regeneration actions. On the other hand, there are growing voices from the civil society demanding more transparent and less authoritarian public policies and programmes. Flores (2007) has recently denounced the anti-democratic character of the local authorities, which reacted harshly to the public demonstrations against the Metrovia system. He asserts the need to propitiate the critical debate about the public policies and actions.

These recent trends suggest that the complex interaction of the social, technical and political that functioned so effectively during the first years may be weakening. The increasing tension between the long-term technical considerations and short term political decisions may eventually threaten the continuation of the urban regeneration process.

References

Bird, M. (2005) "Escape to Ecuador. The planned Puerto Santa Ana aspires to be a tourist hot spot" In: *Shopping Centers Today. The Magazine for the Retail Real-estate Industry*, October 2005.

Bock, M.S. and Deler, J. P. (1993) "Guayaquil 1900-1940: Agro-exportation et structuration de l'espace urbain" In: *Mappe Monde*, 3/1993.

Carbajal, N., Fernández-Dávila, T., Florez, R. and Zubiate, M. (2003) "Regeneración Urbana en Guayaquil" In: *Medio de Construcción*, Informe Especial, N° 173/174, Febrero/Marzo 2003.

Collin Delavaud, A. (1996) "Guayaquil au temps du choléra" In: *Bulletin de l'Institute Français d'Études Andines*, Vol. 25, No. 3, pp. 509-527.

Drewe, P. (2000) *ICT and urban form. Urban planning and design – Off the beaten track.* Design Studio "The Network City", Faculty of Architecture, Delft University of Technology.

El Comercio (2007) "Puerto Santa Ana. Ultralujo junto al rio" In: *El Comercio. Construir.* Quito, Ecuador http://www.elcomercio.com/noticiaEC.asp?id_noticia=109898&id_seccion=15 (June 2007)

Fernández-Dávila, A. (2003) Regeneración urbana en Guayaquil, Ecuador, Guayaquil, Unpublished Report.

Flores, X. (2007) "Criminalización de la libertad de expresión: protesta social y administración local en Guayaquil" In: *Iconos, Revista de Ciencias Sociales. FLACSO,* enero, No. 027. Quito, Ecuador, pp. 65-75.

Godard, H. R. (1985) "Approche comparative des mécanismes d'évolution et de consolidation des quartiers populaires a Quito et a Guayaquil" In: *Bulletin de l'Institute Français d'Études Andines*, Vol. 14, No. 3-4, pp. 19-41

Godard, H. R. (1990) "Dynamique de la centralité urbaine en Equateur : les cas de Quito et de Guayaquil" In: *Mappe Monde*, 1/1990.

González, C. J. (2003) *Guayaquil Siglo XXI, imágenes de una nueva urbe.* Guayaquil, Tropical Books.

Jacobs, G., Fernández-Dávila, T., Florez, R. and Zubiate, M. (2003) "Regeneración Urbana en Guayaquil" In: *Medio de Construcción*, Informe Especial, N° 175, Abril 2003.

Kronfle, R. (2007) "Reflexión y resistencia. Diálogos del arte con la regeneración urbana en Guayaquil" In: *Iconos, Revista de Ciencias Sociales.* FLACSO, enero, No. 027. Quito, Ecuador, pp. 77-89.

Malecón 2000 (2007) Proyecto Malecón 2000. Información detallada. http://www.malecon2000.org/servicios/pdf-proyectos/malecon2000.pdf (May 2007).

Metrovia (2007) Fundación Municipal Transporte Masivo Urbano de Guayaquil. http://www.metrovia-gye.com/start.htm (May 2007).

Municipality of Guayaguil (2007) http://www.guayaguil.gov.ec/1.gye (May 2007)

Sánchez, F. and Beraldinelli, R. (2004) *Waterfront Revitalization projects in Latin America:* cultural rescue or global planning model? Paper for the 11th International Conference Planning History Society, Barcelona.

Swyngedouw, E. (2004) Social Power and the Urbanization of Water: Flows of Power. Oxford University Press.

UN-Habitat (2005a) Support to the Municipality of Guayaquil, First Phase. http://www.unhabitat.org/content.asp?cid=715&catid=149&typeid=13&subMenuId=0 (May 2007)

UN-Habitat (2005b) Support to the Municipality of Guayaquil, Second Phase. http://www.unhabitat.org/content.asp?cid=4882&catid=149&typeid=13&subMenuId=0 (May 2007)

Von Buchwald, F. (2007) "Metrovía Guayaquil operating a new public transport concept" In: PTI, May/June 2007, pp. 72-74.

¹ There is no official figure about the number of inhabitants of Greater Guayaquil, although most sources give between two and three million inhabitants.

³ Remarkably, residents of the informal settlements were less affected by cholera than the people living in the overcrowded city centre (Collin Delavaud, 1996).

² Soportales are private property corridors for public use, still common in the city centre. In a city of competitive merchants, *soportales* developed to facilitate commerce in the middle of a tropical climate.

- ⁸ This was crucial to promote de image of a regenerated centre. Guayaquil had many external cables (telephone, electricity, cable TV) crossing the streets, producing high visual disorder and propitiating the theft of these services. The technical team Malecón 2000 decided to let these cables pass through a common underground duct, deployed in the places of high density, owned by the municipality. The corresponding enterprises would pay a rent to the municipality for the use of this duct.
- ⁹ Centenario was the expansion out of the city centre, built in 1920 (for the 100th anniversary of Guayaquil's independence), where the elite of Guayaquil flew. Orellano is a middle-class area for public employees -- adjacent to the centre towards the Estero Salado. Urdesa is 1960 modern development.
- ¹⁰ Again, the first intention was to make a cosmetic intervention. But thanks to the increasing awareness of the need of an integrated approach for the regeneration, the social welfare office of the municipality and the Chamber of Commerce began to intervene in the area. The local residents received training courses for tourism-related economic activities, anticipating the affluence of tourists that the renovation of this space would attract.
- ¹¹ The second phase of the Estero Salado was initially conceived as an urban edge for the Suburb area. The Suburb is an informal area invaded in the 1960s the shore of the *estero*, where the traditional countryside stilt houses raised on piles (*palafitos*) over the surface of the water have been built. To be able to have ground to legalize their property, people generally fill up the *estero* under their dwellings using any type of material, mainly rubbish, which is the cheapest solution. An urban edge open to the public would stop this process of contamination. Unluckily, the final decision was to build a 4-meter broad walkway on the *estero*, at 7 meters from the shore; a design solution which does not contribute to the environmental quality of the area.
- ¹² In January 2007, Mayor Jaime Nebot received the 2007 Sustainable Transport Award of the Institute for Transportation & Development Policy (ITDP) (Metrovia, 2007), given annually to a city that improves public transportation in a environmentally friendly way.
- ¹³ During the phase of design of the project, the architectural trend was still a post-modernistic approach, materialized through 'revival' spatial forms.

⁴ Those building whose roofs are used by the public are not counted within this 20%

⁵ It opens at 5:30 am for runners, strollers and sportsmen.

⁶ This Law was later extended to all other municipalities of Ecuador. Most of the works of urban regeneration have been made with the funds coming from it. The recently elected national government has guestioned this Law and announced that it will revoke it.

⁷ In the beginning, the municipal authorities only wanted to embark on the improvement of the public space. But gradually, they became aware of the need of an integrated approach to include social, economic, environmental, administrative and participative aspects.