BARCELONA

THE WATERFRONT REDEVELOPMENT STRATEGIES UTILIZED IN BARCELONA BUILD OFF THE CITY'S RICH HISTORY, UNIQUE CHALLENGES, AND DEFINING CHARACTERISTICS.



Barcelona Waterfront (Source: The Sound Clique.com)

Introduction

Barcelona's contemporary, vibrant waterfront was largely influenced by the 1992 Olympics and changing economic activities. This worldwide event provided the momentum and resources the city needed to revitalize the distressed industrial waterfront. Old warehouses were demolished for commercial uses and tourism. Barcelona is facing many climatic and social challenges but city officials have been aggressive in response to making the city more resilient.

Urban Design Analysis

In the 1980s, the waterfront revitalization projects Moll de la Fusta and PERI focused on the neighborhood of Barceloneta, which today includes the popular tourist destination Port Vell. The public realm of Barceloneta's waterfront was re-imaged according to the following objectives (1):

- 1. Harmonize the building heights and façades facing the waterfront
- 2. Increase average size of flats
- Create better urban environment with rehab of buildings

4. Recover degraded squares with tree planting

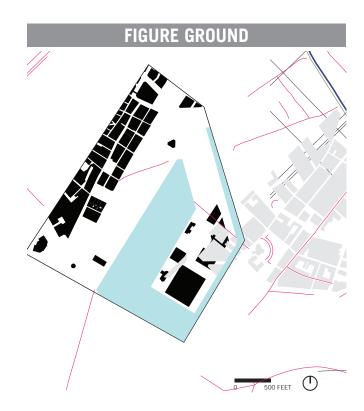
These objectives were used to retain and enhance the character of the city's existing urban design framework in order to improve the quality of life for Barcelona residents as well as attract tourists to the area.

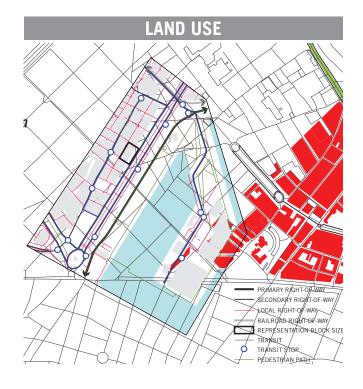
Historical/Cultural/Social Analysis

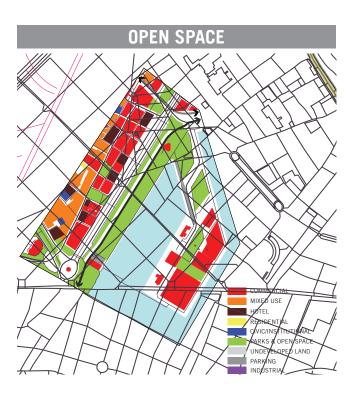
Barcelona was cut off from the waterfront by a wall that surrounded the city up until its demolition in the 1870s. The new access to the waterfront in conjunction with the creation of the B-10 highway lead to development of the waterfront during the late 1800s. Industrial infrastructure, such as docks and warehouses, were built along the waterfront to accommodate the increasing amount of sea trade and freight in and out of Barcelona.

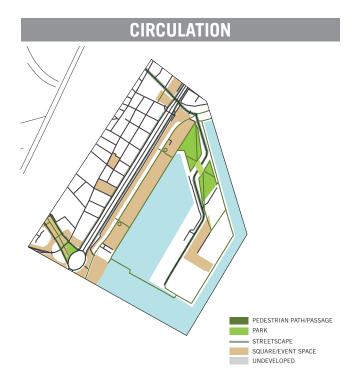
The rapid growth following WWII was largely focused around suburbanization. The lack of focus on city and waterfront development, coupled with the widening of the B-10 highway, further isolated Barcelona's waterfront and caused a large decline in population. While Barcelona's population as a whole increased between 1950 and 1980, the population of the waterfront region declined (2).

In attempts to increase population, city officials invested in two projects that focused on waterfront revitalization,

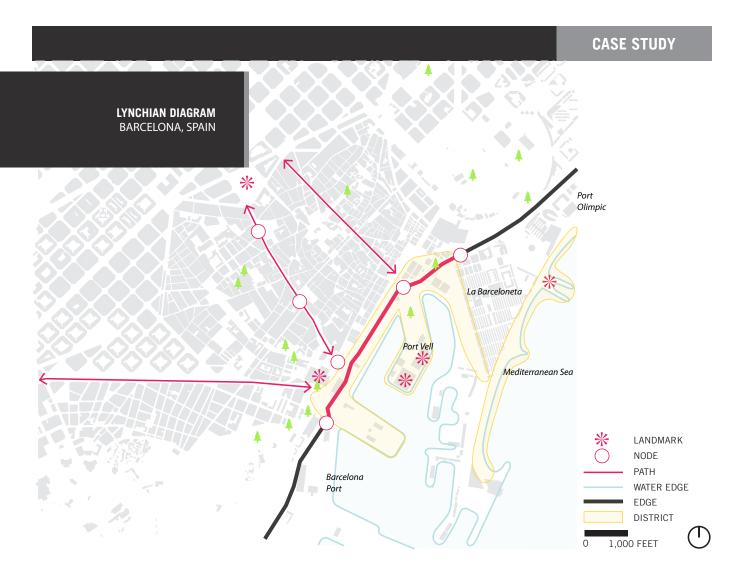








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Moll de la Fusta and PERI. The main objectives were to increase attractiveness of Barcelona's waterfront and attract residents, businesses, and tourists. This included narrowing and burying the B-10 highway in order to increase access to the waterfronts new developments, including Port Vell. Existing industrial warehouses and other infrastructure were demolished to make room for commercial and residential focused land use. These projects altered the land uses on the waterfront to accommodate for recreational and entertainment uses.

Barcelona transformed in order to prepare for the influx of spectators, athletes, and tourists for the 1992 Olympics. The Olympic Village was constructed along the waterfront and was located north of the center city. The waterfront was further developed into a walkable park system for access between the Olympic Village and the district of Ciutat Vella. Port Vell was redeveloped from industrial uses to a commercial and tourist hub.

Climate Change/Resiliency Analysis

The city faces several resilience challenges like high and increasing unemployment which has had a strong impact on social structures, putting stress on traditional family cohesion (3). Barcelona also faces challenges of flooding, heat waves, lack of affordable housing and social inequity. The city has begun to address pollution

challenges, renewable energy potentials, reducing fossil fuel use at the port, maximizing public transit, and lessening the air and noise pollution. In the last decade, Barcelona has addressed and reacted to these challenges.

One of the key organizations working to improve climate conditions in Barcelona is the Area Metropolitana de Barcelona (AMB). AMB is a public administration that deals with a variety of social and environmental topics relating to the city's future, including mitigating the effects of climate change (4).

The Metropolitan Climate Change Observatory (METROBS) is an environmental organization that conducts studies and provides advice regarding



Port Vell Barcelona Waterfront (Source: PortDeBarcelona.com

climate change policies and planning practices. It is currently conducting a study that "examines the effects of climate change on coastal metropolitan and assesses their potential effects on one of the largest regional systems in the metropolitan area of Barcelona from the standpoint of economic, ecological and social" (5).

A third advocate for climate resiliency in Barcelona is the Catalan Office for Climate Change. This office is primarily in charge of "promoting and coordinating in Catalonia the establishment of strategies and plans on the subject of mitigation and adaptation to the climatic change, on the

basis of the commitments adopted by the State and the European Union." (6)

Economic Overview

The waterfront's historic economy revolved around industrial uses. The restructuring of the manufacturing industry in Barcelona relocated many of the waterfront's industrial activities, leaving the existing infrastructure abandoned.

The 1992 Olympics stimulated redevelopment of the waterfront to accommodate tourism. The Nova Icaria district began reconstruction in 1987. The existing industrial buildings were cleared and replaced with apartment buildings,

green space, office buildings, a shopping mall, a marina and a university (7).

Port Vell is another major economic hub. Like other areas of Barcelona's waterfront, this area was largely occupied by industrial sea uses. Today this area houses commercial, retail, and recreational spaces such as office buildings, an aquarium, a marina, restaurants and clubs, a shopping mall with over 100 retail spaces, and 80,000 acres of green space (8).

Lessons Learned

The waterfront redevelopment strategies utilized in Barcelona build off the City's rich history, unique challenges, and defining characteristics. The urban design standards used during the waterfront revitalization helped the City form a specific identity and maintain the urban form that is unique to Barcelona. Various agencies are working to adapt to climate change and other resiliency measures. Finally, redeveloping the waterfront with respect to the City's growing tourist economy and evolving port activities helped create an economy that represents Barcelona's economic needs and will continue to thrive into the future. Addressing all aspects of the waterfront while incorporating a City's unique values, styles, and characteristics will enable planners to form a vibrant waterfront that will thrive for many years to come.

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