INTRODUCTION TO THE CITY

Beirut (Arabic: بيروت Bayrūt, Greek: Βηρυτός, Latin: Berytus, Aramaic: Birot بيروت, French: Beyrouth) is the capital & most populated city of Lebanon. According to “Encyclopedia Britannica”: its antiquity is indicated by its name, derived from the Canaanite be‘erōt (“wells”), referring to the underground water table that is still tapped by the local inhabitants for general use. Beirut represents a site embedded in the shoreline (approximately 11Km) forming somewhat a natural harbor. Its morphology has evolved into a much more developed quay during the last decades. Beirut is characterized by two hills: Ashrafieh (east 100a.s.l) & Ras Beirut (west 80a.s.l). Beirut city encompasses the most religious diversity in the middle east (ref: Elections List): 45% Sunni, 14 % Shite, 11% Armenian orthodox, 10% Greek orthodox, 6% Maronite, 4% Catholics, 2% Armenian Catholics, 1% Protestants, 5% Minority Christians, 1% Jews, 1% Druze & minority of Alawis. Before the 1975 civil war, Beirut quarters were heterogeneous and multi-confessional, but during the war Beirut witnessed a religious segregation that is still existent till today.

According to a survey conducted by World Bank in 2010: 87% of the Lebanese live in cities. The urban area in Lebanon increased from 260sqkm in 1960 to 649sqm in 1998 & is estimated to reach 884sqKm in 2030 (ref: “YEF”). A study conducted by CDR shows that more than 50% of the Lebanese population lives in Beirut city (Fig 3) & that the population density is estimated to increase from 406 to 453persons/km² by 2030. Beirut is considered among the most populated cities in the world with one of the lowest public green space ratio (0.8m²/person) & with a complicated road network (approximately 25% of city mass). According to the W.H.O. standards: Beirut is considered an unhealthy, unlivable & unsustainable city (W.H.O defines that a healthy city should include 10sqm/person of public green space & 40sqm/person of private green space).

Beirut is divided into 12 quarters.

Ashrafieh  Rmeil  Medawar  Saifi
Mazraa  Bachoura  Port  Zkak el Blat
Minat el Hosn  Moussaitbeh  Ras Beirut  Aiin Mreisse
Beirut's history goes back to more than 5000 years of various cultures & accumulations of civilizations raising its times of yore. Historians record that Beirut City has been demolished & reconstructed seven times. Until the beginning of the 18th century, Beirut was a walled small city built around the Phoenician port.

Between 1846 and 1876, the old city wall was destroyed and the city began expanding further from the old core towards the east and west.

At the beginning of the 20th century, around 1925, Beirut witnessed a rapid expansion due to the French mandate and oil boom in the region; it grew 3 times bigger than the city of 1875 city and 100 times bigger than the walled city.

During the 1975 Civil War, the city expanded uncontrollably creating social segregated suburbs alienated by the demarcation line.

In 1990, after the end of Civil War, Beirut city center was reconstructed and its centrality was reinforced, while the urban development of greater Beirut continues to sprawl in all directions.

**URBAN FABRIC EVOLUTION - SUMMARY**

- **The Roman city:**
  - The archeological excavations show that the Roman city was constructed around 332 B.C.
  - Beirut was built according to the Roman city grid with its two main axes; Cardo Maximus on a north-south axis, & Decumanus from east to west. The Forum, the “public space” of the city, was created at the intersection of two axes.

- **The Byzantine period:**
  - Beirut turned out to be a residential-commercial city.
  - The most prestigious monumental building was the law school.

- **The Arab city:**
  - Beirut became under Arab control in 635.
  - Beirut had developed inside the Roman remaining walls & evolved its urban fabric into a “Traditional Arab city.”

- **The Ottoman city-(1823-1918)**
  - Beirut passes to the Ottoman Empire & starts to expand.
  - The small town developed into a cosmopolitan city (junction between Europe & the East).
  - Until 1863 Beirut continued to grow naturally.
  - From 1863 to 1918 Beirut encounters an economic prosperity with the development of the port into an active trade nucleus.
• The French Mandate (1918 – 1945)
  ➢ Beirut expanded more by the added radio-centric rings
  ➢ Beirut became the country capital
  ➢ Beirut & its port flourished
  ➢ The city center became the commercial heart of the country
  ➢ The Martyrs' square was converted to a rectangular French garden
  ➢ A maritime promenade was created & called the “French Avenue”

• From independence to Civil War (1943-1975)
  ➢ Beirut witnessed its golden age & became the country capital
  ➢ Beirut had a massive & rapid urban growth during this period
  ➢ Major Urban strategy & study: Ecochard II 1963 - IAURIF 1963

• Civil War (1975-1990)
  ➢ Beirut’s city center was a battlefield & was severely ruined
  ➢ Beirut’s city center infrastructure & around 2/3 of its buildings were destroyed
  ➢ Beirut & its suburbs were separated into two divisions: West & East Beirut (“Green Line”)
  ➢ The suburbs of Beirut witnessed a fast urban growth & religious socio-urban segregation
  ➢ Major Urban strategy & study: IAURIF 1983

• After War Reconstruction - Nowadays
  ➢ Reconstruction of BCD by a private company: Solidere
  ➢ Beirut suburbs continue their chaotic urban sprawl
At the end of the 18th century, Beirut city was a fortified, small-walled city overlooking the Mediterranean sea (~200m of coast), surrounded by two hills (Achrafieh & Mousseitbeh) & bordered at the north by Beirut River.

The city landscape developed through years reflecting the political and urban historical progress of the city. “The walled city was structured with a main coastal axis with promenade reaching different quarters,... private gardens were cultivated and boarded with lemons and orange trees planted in alleys with profusion of flowers in the middle” (Lenoble 1996, Kassir 2003).

During the last century, Beirut city witnessed a fast urban development reaching up to the two hills by the 19th century. At the beginning of the 19th century, Beirut grew 100 times bigger than the walled city. Due to this fast urban expansion, Beirut developed at the sake of the green forest & the agricultural spaces from north to east to south. Beirut expanded chaotically above the two hills and invaded the northern suburbs above Beirut river & left no room for greenery.

In general, Beirut lacked the concretization of a master plan to organize its public spaces, except during the last epoch of the Ottoman occupation & during the French mandate which integrated some public spaces & squares (especially in BCD and the coastal zone of Beirut). The city public spaces were gradually and randomly created through time by the local government, the municipalities, the private sector &/or appropriated by citizens (except BCD). During the civil war the country lost a lot of its public spaces and green spots were left in shameful negligence.

Due to the fast urbanization, guided by the esthetic and lack of sustainability awareness, the majority of plant species in public and private landscapes were ornamental exotic and “alien” plants to annual species that replaced our endemic and native plantation.

Beirut green public spaces ratio is among the lowest in the world (around 0.8m²/person). A study, held by YEF, calculated the required public and green spaces for Beirut city (According to WHO healthy city criteria) showed that: 45% of Beirut city must be green public spaces.

Beirut contains road networks which cover around 25% of the city mass (11400Km), which is among the highest in the region (approximately 111Km/100Km²) (CDR/NLUMP2004).

The ratio of green area in public spaces in Beirut is around 11%. These public spaces can be divided into two major categories: managed landscapes dominated in general by introduced plantation, and abandoned landscapes & vacant lots of spontaneous vegetation colonized by naturalized plants. These public spaces are in general neglected and need conservation (except IN BCD). The largest Beirut public green space (Pine forest) is closed to the public.

Beirut is a dense city with inflated vehicular network (“car dedicated city”) and limited public and green spaces (“unhealthy living city”).
**PS: Selection Criteria**

The criteria that have been taken into consideration to select those public spaces (pinned on the side map), can be summarized as follows:

- National & local social public core; country & city public spaces
- Historical significance
- Geographical & ecological importance; natural public spaces
- Political & symbolic; squares & memorials
- Archeological value
- Touristic magnitude
<table>
<thead>
<tr>
<th>Location</th>
<th>Label</th>
<th>Identity</th>
<th>User</th>
<th>Usage</th>
<th>Typology</th>
<th>Visual Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Neighborhood</td>
<td>City</td>
<td>National</td>
<td>Recreational</td>
<td>Landscape</td>
</tr>
</tbody>
</table>
| BCD      | Place de l’étoile      | X        | X    | X      | X        | X         |        |        | Situated in BCD  
|          | Nejmeh Square          |          |      |        |          |           |        |        | Is the beating center of BCD  
|          |                        |          |      |        |          |           |        |        | National recreational public space  
|          |                        |          |      |        |          |           |        |        | Has the famous clock tower of Beirut (1930 a gift from Michel Abed)  
|          |                        |          |      |        |          |           |        |        | Surrounded by a tremendous number of restaurants, the parliament, religious buildings… |
| BCD      | Martyr’s Square        | X        | X    | X      | X        | X         |        |        | Built by the Ottoman during their occupation (19th century): “Cannons Square”. It was reformed into a rectangular plaza during the French mandate  
|          |                        |          |      |        |          |           |        |        | Historically it was the hub of the city center  
|          |                        |          |      |        |          |           |        |        | Has the famous statue of Martyrs  
|          |                        |          |      |        |          |           |        |        | Today it is a large empty space  
|          |                        |          |      |        |          |           |        |        | The type of activity differs according to circumstances: cultural, musical, political, religious,… manifestations |
| Achrafieh| Sassine Square         | X        | X    | X      | X        | X         |        |        | One of the biggest & oldest squares in Lebanon  
|          |                        |          |      |        |          |           |        |        | Named after the Sassine Family  
|          |                        |          |      |        |          |           |        |        | It attracts a large number of visitors & tourists  
<p>|          |                        |          |      |        |          |           |        |        | It hosts several political, social &amp; cultural events such as “The yearly Music Festival” |</p>
<table>
<thead>
<tr>
<th>Public Squares - Memorial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BCD</strong></td>
</tr>
</tbody>
</table>
| Martyr Memorial           | X | X | X | X | X | - In memory of Martyrs of 19 May 1916  
|                           |   |   |   |   |   | - Has the famous statue of the Martyrs |
| **Mathaf**                |
| Mathaf Square             | X | X | X |   | X | - Facing the National museum  
|                           |   |   |   |   |   | - A symbolic square with five columns & the independence symbolic flame  
|                           |   |   |   |   |   | - It hosts several public activities especially those with religious aspects |
| **BCD**                  |
| Bechara El Khoury         | X |   |   |   |   | - Named for the memory of President Bechara El Khoury  
|                           |   |   |   |   |   | - Under renovation |
| **Marfa’**                |
| Place Riad El Solh        | X |   |   |   |   | - Named after Lebanese ex-prime minister Riad el Solh’s after his assassination.  
|                           |   |   |   |   |   | - Witnessed & hosted a lot of public political manifestations during the last decade |
| **Minat El Hosn**         |
| Rafic El Hariri Memorial  | X |   |   |   |   | - Located at Minat el Hosn facing St. Georges Bay  
<p>|                           |   |   |   |   |   | - It was created as a memory of the Prime Minister Hariri after his assassination in 2005 &amp; located near the bombing site |</p>
<table>
<thead>
<tr>
<th>Location</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beirut - 9 of 30 BCD</td>
<td><strong>Gebran Tweiny Square</strong></td>
</tr>
<tr>
<td></td>
<td>• In the memory of Gebran Tweiny after his assassination in 2005</td>
</tr>
<tr>
<td></td>
<td>• Located at southern entrance of BCD</td>
</tr>
<tr>
<td></td>
<td>• Facing SIP/ Al Nahar Building</td>
</tr>
<tr>
<td></td>
<td><strong>Samir Kassir Square</strong></td>
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<tr>
<td></td>
<td>• Located at the North entrance of BCD, “Rue Weigend”</td>
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<tr>
<td></td>
<td>• It is a part of the SIP / Al Nahar newspaper building where S. Kassir</td>
</tr>
<tr>
<td></td>
<td>used to work &amp; was named in his memory after his assassination</td>
</tr>
<tr>
<td></td>
<td>• The garden won the Aga-Khan awards in 2007</td>
</tr>
<tr>
<td></td>
<td><strong>Sami el Soleh Avenue</strong></td>
</tr>
<tr>
<td></td>
<td>• In the memory of prime minister Sami El Soleh.</td>
</tr>
<tr>
<td></td>
<td><strong>Mazraa Pine Forest</strong></td>
</tr>
<tr>
<td></td>
<td>• Nominally it was a public property since the Ottoman times</td>
</tr>
<tr>
<td></td>
<td>• Emir Fakher El Dine had planted pine trees to transform the city</td>
</tr>
<tr>
<td></td>
<td>landscape from mere sand dunes</td>
</tr>
<tr>
<td></td>
<td>• The pine park was a part of Beirut pine forest: 1250000m² in 1969 to</td>
</tr>
<tr>
<td></td>
<td>800000m² in 1967; today it’s a triangular shape around 300000m²</td>
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<tr>
<td></td>
<td>• The park was a battle field during the civil war</td>
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<td>• During the 1990s, its greenest &amp; most attractive section was remodeled,</td>
</tr>
<tr>
<td></td>
<td>replanted &amp; sealed by fences</td>
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<tr>
<td></td>
<td>• The largest part of the park is closed to public; only a few people</td>
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<tr>
<td></td>
<td>with special permit can access it.</td>
</tr>
</tbody>
</table>

**Public Garden**
Mseitbeh
Hippodrome of Beirut
- The Hippodrome occupies 35000m² near – part of pine forest.
- The Hippodrome of Beirut is a 90m long race track
- “Hippodrome du parc de Beyrouth” is a horse-racing arena. In the 1960s, Beirut Hippodrome became one of the busiest race tracks in the world, holding races twice a week, 52 weeks a year
- During the French mandate the casinos (built by A. Sursouk in 1915) was used as the residence of French high commission office & nowadays as the residence of the French ambassador
- It hosts the Garden Show & several cultural, musical, & social events, as well as the Spring Festival
- It is managed by a private organization (SPARCA)

BCD
Khalil Gibran Garden
- It is located near the Martyr’s square in front of the ESQA headquarters in BCD
- It was named so after the Lebanese philosopher Gibran Khalil Gibran
- It constituted of a 6000m² green landscaped area with a water fountain, a six stone stele & a sculpture

Achrafieh
Sioufi Garden
- It is situated in Achrafieh (Around 20000m²)
- It was a part of Sioufy furniture factory built in 1910
- The owner of the factory maintained the garden as it was open for the public
- The garden is mostly visited by neighborhood citizen and by couples for calm seats: called “Lover’s Garden”

BCD
Debbas Garden
- It is located in BCD facing the Martyr’s square
- It is open for public but supervised by security
<table>
<thead>
<tr>
<th>Location</th>
<th>Garden Name</th>
<th>Features</th>
</tr>
</thead>
</table>
| Achrafieh| Jesuits Garden              | • It is located in “Rmeil” near the Greek Orthodox & Jeatawi Hospitals (Around 44000m²).  
• It is a public park mostly used by hospital visitors.  
• It contains a public library.                                                                                   |
| Meitbeh  | Sanayeh Garden              | • The oldest garden in Beirut, called “The Hamidi Public Garden” in 1907(when it was first opened), then became known as the “Sanayeh Garden” (around 22000m2 of open city park).  
• It was renamed in honor of President René Moawad who was assassinated in 1989  
• It is highly visited by neighborhoods citizens  
• It is a touristic attraction.  
• It lacks car parking.  
• It is under renovation.                                                                                         |
| Jnah     | Jnah Garden                 | • Public Garden situated between Beirut & Jnah  
• Managed by the Municipality of Gboueiry (under renovation)                                                        |
| Achrafieh| Nicholas Garden             | • It is located at Tabaris facing St Nicholas Church (around 2200m² in 1964)  
• It is a public city park  
• It was named after St. Nicholas to honor him                                                                            |
| BCD      | Garden of Forgiveness       | • It is located in BCD  
• It is known as “Hadiquat El Samah”.  
• The design is complete but not implemented yet.  
• This garden is conceived to be a place of contemplation.  
• It symbolizes the great human conflict to forgive & tolerate in the aftermath of the violence of the civil war |
## Archeological Park

| BCD | Roman Bath Garden | It is located in BCD facing the governmental palace  
|     |                  | It contains a set of uncovered ruins of the ancient roman bath  
|     |                  | The garden design attempts to retrace the ancient Mediterranean slope-shaped garden in a terrace form  
|     |                  | The venue hosts several cultural & musical events  |
| BCD | El Tell | It is situated near the oldest archeological site in BCD: the “Tell” archeological site (Phoenician Wall)  
|     |        | The design of the square was finished in 2005 by Machado & Silveltii but is still pending  |
| BCD | Zawyatt Iben Irak Square | It is a part of Beirut souks project in BCD. The square is tiled with black marble stone  
|     |           | It is an artistic outdoor exhibition hub  |

## “Corniche” and Beaches

| Mediterranean Sea - Beirut | Seaside Corniche | The “Corniche” of Beirut is a 5km linear sea promenade (around 6000m² of paved walkway)  
|                           |                  | It initiates from the St. Georges Bay up to Paris Avenue (The pigeon Rock) in Raouche, to the Avenue of General De Gaule, ending with a public sand beach at Ramleh El Baida  
<p>|                           |                  | The “Corniche” is the main public space of Beirut that hosts different types of activities from sports, to kids play, lovers’ meetings, elderly rest, family relaxation, biking, eating, etc…  |</p>
<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Features</th>
<th>Image</th>
</tr>
</thead>
</table>
| Raamleh El Baida                | Public Sand Beach       | • It is a public sand beach
• It covers an area of around 85000m² | ![Image](image1.jpg) |
| Manara                          | Dallieh                 | • It is a public beach
• It is an open neglected unsecure public space
• It serves as a fishing port & recreational beach | ![Image](image2.jpg) |
| Mediterranean Sea - Beirut      | Zaytuna Bay             | • An active private property recognized as a vigorous public space
• It is divided into two parts:
  1. The Lower parts (Semi Public) is a combination of a bay, restaurants, coffee shops & pedestrian courts
  2. The upper part (public) serves as an extension to the existing sea “corniche”
• Zeituna Bay is converting into a public melting city core, despite the fact that it is a private property and oriented clearly to a specific audience | ![Image](image3.jpg) |
| Streets and Souks               |                         |                                                                          |       |
| Beirut                          | Public street           | • It is the mixed used pedestrian & public streets of Beirut
• They form a lake of pedestrian walkways especially in secondary roads
• They lacks plantation & maintenance, expect in BCD
• They lack public car parking; the streets are overrun by private parking, road meter parks, & in some streets cars are parked on pedestrian walkways
• They lack safety & accessibility for the disabled | ![Image](image4.jpg) |
| BCD  | Beirut Souks |  |  |  |  | X | • It is a network of small urban spaces built over the ruins of the old souk  
• It is a combination of multi-purpose courts attached by linear urban corridors  
• It is an active shopping-entertainment venue  
• Despite the will for reviving the memory of the old souk of Beirut & reusing the old street name, the souk design fails to revive the historical memory & identity of the city |
|-----|--------------|  |  |  |  | X | • Beirut souks are for pedestrian access only & its roads are occupied by a lot of restaurants & coffee shops that relatively accelerate the public activity of the space |
| BCD | Beirut Souk Pedestrian Road | X | X | X | X | X | X | • It is a vehicular & pedestrian road  
• It serves as a commercial & business hub  
• It is considered a recreational spot (Hotels, restaurants, pubs, coffee shops, etc…)  
• It also encompasses many residential buildings |
| Hamra | Hamra Street | X | X | X | X | X | X | • It is a vehicular road  
• The importance of this road is that it has the American University of Beirut (AUB) main gate  
• It is a commercial, recreational & residential street |
<p>| Bliss | Bliss Street | X | X |  |  |  | X | • It is a popular momentary (weekend) market. |
| Naher | Souk El Ahad | X | X | X | X |  | X |</p>
<table>
<thead>
<tr>
<th>Location</th>
<th>Street Name</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| Monot                  | Monot Street         | • It is a low-speed car road. For a short period of time, cars were banned in this venue & the street was tiled with stone for pedestrians  
                           • The street contains a lot of restaurants & pubs attaining the reputation of a nightlife hub |
| Ashrafieh              | Gemayzeh Street      | • It is a historical pedestrian & vehicular street  
                           • It is at once a residential, commercial & recreational street  
                           • The asphalted road is boarded by a lot of restaurants, pubs & nightclubs.  
                           • It contains the famous flight of the wide lively stairs “Daraj Al Fann” that hosts diverse cultural & musical events  
                           • Cars are forbidden in some occasions & during some events |
| Natural Mediterranean Sea | Mediterranean Sea     | • It is the natural limit of Beirut City  
                           • The obtained Beirut Seashore Length is approximately 12km  
                           • It attracts several public & semi-private activities: promenades, sports, gastronomic, touristic, etc…  
                           • It contains several marinas & the country’s main seaport  
                           • Some of its areas are privatized by military or other private functions |
| Beirut Natural Limit   | Nahr Beirut          | • The natural Limit of Beirut city from the east  
                           • The river of Beirut is a coastal river  
                           • This river is highly polluted because of Beirut’s sewer that gradually joined its flowing water  
                           • The river is completely dry in summer with total length of 29km |
When we destroy something created by man we call it vandalism, but when we destroy something created by nature we call it progress.

-Ed. Begley Jr.
With the closing off of the Pine Forest Park, Beirut city lost a major social public space. The sea promenade walkway becomes the most important public meeting core for the entire country, regardless of religion or social status.

Despite the extensiveness of the Lebanese seashore, Ramleh El Bayda beach is among the rare public beaches left along the Lebanese seacoast.

Ramleh El Bayda beach faces an actual & a futuristic threat; The actual threat resides in the negligence & lack of development of this area by the government & the municipality. As for the future threat, it is in the type of ownership which part of them are private property.

The aim of this study is to highlight the major threats affecting this public space & try to note some recommendations which could help in saving one of the last precious urban public spaces existing in the overcrowded Beirut City.

Those Recommendations could be the guidelines for future project management.

Area Identification – Ramleh El Bayda – Public Beach:
The land between the road & the sea was classified by the law as a public space of approximately 1km (in the 1940s by the French during the Mandate). In the 1950s, the Lebanese government divided this sector into two parts: a private property (road-side) & public property (sea side). The private area was classified as “Non-Aedificandi”: 10/Zone III (non-constructible area except for temporary light wood construction – Low exploitation Ratio). The public sector was classified as public beach (any type of construction is restricted). The entire area is dedicated to public use under the management & supervision of Beirut municipality.
Beirut Seashore is divided, according to its functions and activities into different sections. (as shown on the side map)

<table>
<thead>
<tr>
<th>Section</th>
<th>Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>Private</td>
</tr>
<tr>
<td>Solidere</td>
<td>Private</td>
</tr>
<tr>
<td>Zaytouna Bay</td>
<td>Semi-Private</td>
</tr>
<tr>
<td>Restaurant Area</td>
<td>Semi-Private</td>
</tr>
<tr>
<td>Beach Resort</td>
<td>Private</td>
</tr>
<tr>
<td>Manara</td>
<td>Public</td>
</tr>
<tr>
<td>Military</td>
<td>Private</td>
</tr>
<tr>
<td>Rawche</td>
<td>Semi-Private &amp; Public</td>
</tr>
<tr>
<td>Ramleh ElBayda</td>
<td>Public</td>
</tr>
</tbody>
</table>

Those sectors are connected with a public linear sea promenade walkway: the “Beirut Corniche”.

The ownership of the adjacent lands to the “Beirut Corniche” differs from private, to privatized (by Decree), to public properties (governmental or municipality of Beirut).
## AREA IDENTIFICATION – COASTAL PROMENADE AREA

### The coastal area / Landscape components major categories

<table>
<thead>
<tr>
<th>Location</th>
<th>Approx Area Sqm</th>
<th>Landscape Nature</th>
<th>Note / Remarks</th>
<th>Landscape characters – Land Use</th>
</tr>
</thead>
</table>
| **1 Ramlet El Baida Beach** | 85000           | Sand             | Public Beach   | Sandy Beach  
**Land Use:** Recreational – Public Beach - Promenade                                             |
| **2 Corniche Sidewalks A. Mreisseh – R.Bayda** | 60000           | Hard-scape Exotic Plants | Public Sea Corniche | Public sidewalks: width varies from 5m to less than 2m.  
Landscape Character: Tropical.  
**Land Use:** Promenade – “Linear Urban Park”                                           |
| **3 Road median**         | 80000           | Imported plantation | Semi-public | Managed landscape in some section.  
Spontaneous & neglected vegetation in some sections.  
**Land Use:** Visual. Contains two public WC.  
Landscape Characters: Tropical.                                                             |
| **4 Public garden & squares** | 10000         | Designed Landscape | Public - Memorial | Public square & garden  
**Land Use:** Memorial landscaped garden (Nasser Garden). Neglected public garden such as Ain el Mraisseh - Orthodox public garden. |
| **5 Rocky Beach**         | 150000          | Rocky            | Public ~30000 sqm Private | Rocks.  
**Land Use:** Swimming, Fishing. Private area: Restaurants, café,… Private Area: AUB. Military restricted area: Military Bath. |
| **6 Coastal Cliffs**      | 200000          | Natural (rocks, earth, sand) | Public ~60000sqm Private | Spontaneous vegetation & sharp slopes.  
**Land Use:** Swimming, Fishing, tourist sightseeing (view the pigeon rock).               |
| **7 Empty Lots**          | 40000           | Natural Soil     | Private property | Empty neglected property.  
**Land Use:** Empty private plot.                                                            |

According to an assessment conducted by H. Abdelwahab Chmeitlly, 29% of Beirut sea shore area is a managed public space while 71% is a neglected area.
INTRODUCTION & METHODOLOGY

Introduction:

On a period of six month, a visual & analytic assessment was conducted by Beirut Team on: Beirut seashore promenade & Ain el Mreisseh Sand Beach. The assessment was conducted on visual and analytic bases: by the student that collaborated in the public space study of Beirut city.

The survey was divided into two phase:
- In the first phase they were asked to visit those space as normal citizen do. They were asked to live those spaces and to note their impressions and feelings.
- On the second phase they were asked to interact and analyze those spaces by taking pictures during predefined timeframe of the day and to note their analytic supervision for the area & to define some predefined components.

Methodology:

For the second phase, the Beirut team member were asked to conduct a visual analytic assessments for the Sea cornice & Sand Beach area according to below predefined criteria:

<table>
<thead>
<tr>
<th>Assessment Timeline</th>
<th>Assessment Components (during each timeframe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekdays</td>
<td>Weekends &amp; Holidays</td>
</tr>
<tr>
<td>3Am to 6 Am</td>
<td>2 Pm to 6 Pm</td>
</tr>
<tr>
<td>6Am to 10 Am</td>
<td>6 Pm to 10 Pm</td>
</tr>
<tr>
<td>10 Am to 2 Pm</td>
<td>10 Pm to 2 Pm</td>
</tr>
<tr>
<td>Gender</td>
<td>Male %</td>
</tr>
<tr>
<td>3Am to 6 Am</td>
<td>6 Pm to 10 Pm</td>
</tr>
<tr>
<td>6Am to 10 Am</td>
<td>6 Pm to 10 Pm</td>
</tr>
<tr>
<td>10 Am to 2 Pm</td>
<td>10 Pm to 2 Pm</td>
</tr>
<tr>
<td>Female %</td>
<td>10 Pm to 2 Pm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 5 years</td>
<td>Sport</td>
</tr>
<tr>
<td>5-10 years</td>
<td>Swimming</td>
</tr>
<tr>
<td>10-16 years</td>
<td>Beach</td>
</tr>
<tr>
<td>16-22 years</td>
<td>Recreational</td>
</tr>
<tr>
<td>22- 30 years</td>
<td>Business meeting</td>
</tr>
<tr>
<td>30-50 years</td>
<td>Elderly Gathering</td>
</tr>
<tr>
<td>Above 50 years</td>
<td>Public Disturbance</td>
</tr>
<tr>
<td>Attendee / Activities</td>
<td>Tourist</td>
</tr>
<tr>
<td></td>
<td>Gathering (family)</td>
</tr>
<tr>
<td></td>
<td>Gathering (friends)</td>
</tr>
<tr>
<td></td>
<td>Lovers meeting</td>
</tr>
<tr>
<td></td>
<td>Relaxation</td>
</tr>
<tr>
<td></td>
<td>Fishing</td>
</tr>
<tr>
<td></td>
<td>Kids Play</td>
</tr>
</tbody>
</table>

For the sand Beach the assessment was only conducted during summer period. Each student conducted his assessment individually & the result were compared & analyzed collectively. In accordance of the obtained results the below area descriptions, charts & SWOT analysis were deducted.
The Ramleh El Bayda beach is covered with fine sand within an area of 85000m² over 1km of Mediterranean seashore. This area is the last public sand beach in Beirut city and its surroundings. Over a decade, this beach has been neglected by the government for unknown reasons. Some NGOs tried, with their limited resources, to maintain its cleanliness and to offer some amenities such as safeguard, public toilets, showers, etc…

Despite the fact that the beach is surrounded by high standing residential quarters, the users of the beach are limited to low-income swimmers, foreign workers, some European tourists and rarely Arab tourists.

The presence of two sewer discharges creates a major ecological issue that pollutes the sea water and renders it unsuitable for swimming. According to a water analysis conducted in 2010 by UNDP and the Ministry of Environment, the Ramleh El Bayda water is infected by a high level of bacteria and the Coliform fecal exceeds 55000/100ml (Shall not exceed 100/100ml according to the World Health regulation).

During summer, the beach is one of the most vital public spaces; it’s visited by a large number of people for different types of recreational activities such as swimming, ball games and flying kites. From time to time, the beach witnesses some cultural, artistic and musical events. The most important city social-religious gathering held in Ramleh El Bayda beach is the gathering for the memory of “Arbahat” Ayoub (Last Wednesday of April).

During the winter, the beach users are few as activities are limited to either touristic promenade or family gatherings, but the major users are lovers that seek some privacy from the busy corniche sea walkways.
## RAMLEH EL BAYDA - ASSESSMENT

**VISUAL ASSESSMENT**

<table>
<thead>
<tr>
<th>TIME (HOURS)</th>
<th>DENSITY</th>
<th>GENDER</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td><img src="image1" alt="Density" /></td>
<td><img src="image2" alt="Gender" /></td>
<td><img src="image3" alt="Age" /></td>
</tr>
<tr>
<td>10</td>
<td><img src="image1" alt="Density" /></td>
<td><img src="image2" alt="Gender" /></td>
<td><img src="image3" alt="Age" /></td>
</tr>
<tr>
<td>14</td>
<td><img src="image1" alt="Density" /></td>
<td><img src="image2" alt="Gender" /></td>
<td><img src="image3" alt="Age" /></td>
</tr>
<tr>
<td>18</td>
<td><img src="image1" alt="Density" /></td>
<td><img src="image2" alt="Gender" /></td>
<td><img src="image3" alt="Age" /></td>
</tr>
<tr>
<td>21</td>
<td><img src="image1" alt="Density" /></td>
<td><img src="image2" alt="Gender" /></td>
<td><img src="image3" alt="Age" /></td>
</tr>
<tr>
<td>24</td>
<td><img src="image1" alt="Density" /></td>
<td><img src="image2" alt="Gender" /></td>
<td><img src="image3" alt="Age" /></td>
</tr>
</tbody>
</table>

**ACTIVITIES MOSAIC**

- **Public Sand - Beach**
  - **SUMMER**
    - Activities: Sport, Swimming, Beach Activity, Gathering

**CADASTRAL IDENTIFICATION MAP**

- **Public Property**
- **Private Property**
- **Public Property (Beach)**
- **Public Property (corniche)**

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Beirut - 22 of 30
The sidewalk sea promenade is a public sidewalk (around 55000m²) of paved pedestrian walkways, stretching over 5km of the Mediterranean sea. This public sea promenade passes through the following quarters: Ain El Mreisseh, AUB, Ras Beirut, Manara, Dalieh-Raoushe, Ramleh El Bayda- UNESCO. The Zaituna Bay which was historically part of the public sea promenade has been privatized after the war. The Sea sidewalk height varies from 5cm to 30cm a.b.s.l. and its width varies from 5m to less than 2m.

The sidewalk is active all the day in all seasons. It’s considered the most vital public space of the entire country and is visited by all classes, ages and genders.

The direct connection to a vehicular road is of double consequence: the visual connection which secures the space, and the physical connection that transforms it into an unsafe space, especially for playing kids. The activities differ according to the timeframe and vary from sports, gatherings, touristic promenades, recreation, relaxation, “arguileh” smoking, fishing, kids play, and other social and cultural events. The walkways need a lot of maintenance and care. There is a noted lack of car parking, public amenities, urban furniture, signage, safety regulations and guidelines, etc…

On the vehicular road median, two public toilets are located. Those are closed during Sundays and holidays, and not only are they insufficient, but they also need extensive maintenance and security.

The public is served by walking sellers who mingle among the pedestrians and have become part of the collective memory.

Some sections are visually obstructed from the sea by private resorts, restaurants and military construction.

The dominant vegetation is of tropical features and origin: the palm trees (W. filifera and P.Dactylifera).

In simple words the sea promenade walkway is:
“A national public space by excellence”.
### BEIRUT SEA PROMENADE – CORNICHE – VISUAL ASSESSMENT

#### Ain el Mresisse-Ramleh el Bayda

**Corniche - Sea Promenade**

<table>
<thead>
<tr>
<th>WeekEnds</th>
<th>WeekDays</th>
<th>TIMELINE</th>
<th>Density</th>
<th>Gender</th>
<th>Age</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>10</td>
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<td>18</td>
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<td>21</td>
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<tr>
<td></td>
<td></td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**
- **Density %**
- **Gender Category**
  - Female
  - Male
- **Age Category**
  - 0 - 5
  - 6 - 10
  - 11 - 15
  - 16 - 20
  - 21 - 25
  - 26 - 30
  - Above 30

**Activities**
- Walking
- Cycling
- Jogging
- Running
- Shopping
- Dining
- Others

[Image of the BEIRUT SEA PROMENADE – CORNICHE – VISUAL ASSESSMENT with charts and graphs showing density, gender, age, and activities over different timelines.]
<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>Two city sewage discharges &amp; water contamination</td>
<td>Public linear park</td>
<td>Unsafe (Direct connection with medium speed vehicular road)</td>
</tr>
<tr>
<td>Secure (visual connection)</td>
<td>Contaminated water bacteria (UNDP 2010)</td>
<td>Secure (visual connection)</td>
<td>Inaccessible for the disabled</td>
</tr>
<tr>
<td>Long &amp; Narrow Beach</td>
<td>Lack of proper accessibility &amp; inaccessible for the disabled</td>
<td>Sea promenade</td>
<td>Lack of public amenities: toilets, potable water, sitting &amp; resting benches, phone cabinets, sheltered seats, trash bins, etc…</td>
</tr>
<tr>
<td>Sand Beach (Suitable for Kids &amp; Beach activities &amp; swimming)</td>
<td>Difference of level between the public sea promenade &amp; the Beach</td>
<td>Touristic attraction</td>
<td>Lack of cars parking; Traffic problem</td>
</tr>
<tr>
<td>Attended by citizens from different ethnicities &amp; religions</td>
<td>Majority of users: Low-income citizens</td>
<td>Sport activities</td>
<td>Lack of urban furniture &amp; service kiosks</td>
</tr>
<tr>
<td></td>
<td>Lack of public amenities (WC, Showers, potable water, etc…)</td>
<td>City social core</td>
<td>Lack of low level maintenance</td>
</tr>
<tr>
<td></td>
<td>Absence of services: water treatment plant</td>
<td>Attended by citizens from different ethnicities &amp; religions</td>
<td>Absence of bicycle track</td>
</tr>
<tr>
<td></td>
<td>Absence of renewable &amp; eco-friendly energy</td>
<td></td>
<td>Mixture between pedestrian, motorized cycle, bicycles, etc…</td>
</tr>
<tr>
<td></td>
<td>Absence of sustainable design</td>
<td></td>
<td>Visual obstructions in several sections</td>
</tr>
<tr>
<td></td>
<td>Lack of restaurants, food courts &amp; service Kiosks</td>
<td></td>
<td>Unsuitable plantation (Low Shade trees)</td>
</tr>
<tr>
<td></td>
<td>Lack of beach sport installations &amp; equipment</td>
<td></td>
<td>Uncontrolled activities (Argileh smoking, picnics, barbecues, etc…)</td>
</tr>
<tr>
<td></td>
<td>Lack of beach promenade tracks</td>
<td></td>
<td>Illegal commercial activities</td>
</tr>
<tr>
<td></td>
<td>Lack of signage</td>
<td></td>
<td>“Alien” &amp; imported species</td>
</tr>
<tr>
<td></td>
<td>Lack of watch towers &amp; sea safeguard</td>
<td></td>
<td>Absence of eco-friendly energy use</td>
</tr>
<tr>
<td></td>
<td>Lack of urban furniture</td>
<td></td>
<td>Absence of sustainable design</td>
</tr>
<tr>
<td></td>
<td>Lack of car parking (traffic) &amp; absence of public transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low level of maintenance, cleanness &amp; general management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Absence of sheltered kids playground</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist attraction</td>
<td>Part of the beach is a private property</td>
<td>Touristic attraction</td>
<td>Lack of safety &amp; control</td>
</tr>
<tr>
<td>City attraction</td>
<td>Privatization by the creation of private resorts</td>
<td>City linear public park</td>
<td>Unorganized activities &amp; lack of management</td>
</tr>
<tr>
<td>Safe place for all social classes</td>
<td></td>
<td>Place for recreation &amp; sports</td>
<td></td>
</tr>
<tr>
<td>Cultural &amp; artistic activities</td>
<td></td>
<td>Social &amp; religious core</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cultural &amp; artistic activities</td>
<td></td>
</tr>
</tbody>
</table>
CONCLUSION

As mentioned before, Ramleh El Bayda beach is today the main, as not to say the only, public beach in Beirut city.

If we analyze and summarize the study we can clearly notice that Ramleh El Bayda beach is very vulnerable and seriously threatened to be lost as the last city public beach.

Among the most dangerous threats we could mention:

- The property between the road and the beach is private (all the beach could easily be transformed into a private resort in a “corrupt” country like Lebanon)
- The maintenance and security level are so low making it an unsafe public space

Imminent threats of transformation or disappearance of this public space will persist if we stand inactive, and such non-reversible urban adaptation could occur.

The Ramleh El Bayda is intensely neglected and ignored by the government, for unknown reasons. A fast strategic plan for the rehabilitation and preservation of the public beach is required urgently and instantly.

The aim of this study is to remark upon the urgency of preserving and rehabilitating the few public spaces left in Beirut due to the ignorance and chaotic urban sprawl during the last decades. Working towards solutions regarding this issue is imperative for the health of a city that lacks a lot of public space.

The side mentioned recommendations are only guidelines that could generate a future urban preservation strategic plan.

R.B PUBLIC BEACH & SEA “CORNICHE”

RECOMMENDATIONS

A- General Recommendations & design guidelines:

1. Ownership modifications (private lot between road & beach): from private property to public property.

2. Urban categorization of the entire beach as a public beach by decree and law – Free and unconditional accessibilities for the public.

3. Reconnecting this public space to the city and transforming the sea promenade into a linear urban park.

4. Prioritizing pedestrian and cycle movement; Road management according to gradual urban transition law (from Pedestrian to Vehicular), and ensuring that the street structure is clearly understood as follows:
   A. Pedestrian walkway
   B. Bicycle track
   C. Low speed vehicular side/access road
   D. Green Area
   E. Vehicular road

5. Creating a city public car parking, could be:
   ▪ Distant: served with free public electrical shutter
   ▪ Adjacent: served from side-access road

6. Disabled Accessibility (especially handicapped and blind).

7. Creation of a management and maintenance group (public or private) to maintain and secure the beach (define activities and rules).

8. Creating a green public city park (recommended area defined on side map).

9. Urban design to create a sense of place that attracts surrounding citizens. The area redesign shall also connect with the urban structure to reconnect to the city components.
10. Combine activities and services (restaurants, cafés, tourist shops, etc…) to the public space to create a coherent urban fabric.

11. Rehabilitation and maintenance of the “corniche”:
   - Road management and gradual transition (as mentioned above).
   - Car parking management (free public car parking).
   - Resolving the visual obstruction between the “corniche” and the sea in several parts where private investments are (restaurants, coffee shops, etc…), and at the military area.
   - Resolve the narrow walkways at several parts and preserve continuity for the promenade.
   - Zoning, activity identification and the transformation of the “corniche” into a linear park.
   - Complete soft and hard “scape” design for the entire area according to sustainable design criteria.
   - Reorganizing and redesigning urban public amenities.
   - Creating an event management group to schedule and organize social, cultural, musical and public activities.
   - Defining a list of activities and rules for the public space.

12. Defining one legal management public authority for all the public areas (Sea beach, “corniche”, Vehicular road, etc…): This monopole will help for better and faster sustainable maintenance.

13. Proposal of the creation of a future-city public green park (in the neglected area at the beginning of BCD side of the beach). A part of it could also be used as public landscaped car park.

14. The above mentioned recommendation should also be applied for the entire seashore & especially Dallieh area that could also be a touristic attraction & a public city core.

15. Sustainable intervention & Design

16. Energy saving use (lighting, water heater, equipments,…..)
B- Design Guidelines in Detail

a) The design must be implemented according to sustainable landscape rules and guidelines.

b) Plantation: Use of endemic species of trees and plantation that support biodiversity & emphasize native species. Use of low-water consumption & self-maintaining vegetation.

c) Provide shaded area for pedestrian walkways and sitting areas by using trees with a large canopy.

d) Enable Ecological connectivity.

e) Provide temporary pick-up and permanent car parking.

f) Reduce the vehicular use; Invest in public transportation.

g) Redesign the public amenities more sustainably by reusing material and monitoring the level of energy consumption design. Add more public amenities such as phone cabinets, sheltered bus stops, signage (location maps, directions, etc...), public toilets, potable water fountains, showers, changing rooms, kiosks, lighting poles, bicycle racks, signal poles, road marking (pedestrian priority), trash bins (per category), seating benches (durable and low maintenance), shaded kids playground & resting areas, etc…

h) Public art: educative, interpretive, historical, that could be permanent or temporary. Public art should be a part of public spaces amenities design. The location of public art should take in consideration not creating a visual obstruction for drivers.

i) Public awareness and knowledge of the cleanliness and the maintenance of the beaches.

j) Reuse of recycled material paving, preferably porous pavements, that respect the disabled people’s needs (blind and handicapped).

k) Redesign the sand Beach access and connection to the sea promenade walkway.

l) Define the number of amenities, and safeguard according to International standards: Area of Ramleh El Bayda beach of approximately 85000m² and the maximum capacity is around 40000 persons (according to American standards that define approximately 25ft²/person for public beach). PS: no records where found concerning the swimmers in R.B beach during peak time (a survey must be conducted in phase two to define the beach requirements / according to beach attendee). Ex: according to US standards there should be one drinking fountain/1000pers, 1 male toilet, 1 urinal, 1 female toilet, 1 washbasin for each 200 bathers, 1 shower for each 100 bathers (of each sex), a lifeguards tower every 100m ( according to Blue Flag requirements this distance shall not be more than 200m).

m) Indicative signage, situation maps and regulation boards.

n) Finding a solution to resolve the city discharge system; providing water treatment plants for beach public toilets and showers.

o) Walkways for sea promenade & disability access.

p) Private or governmental surveillance & security guards.

q) Eating & smoking area identification & management.

r) Distinction & designation of different beach-activity areas & limits (sports, kids, swimming, jet Skiing, fishing, etc…

s) Using renewable energy especially solar energy.
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- MAPS. – Area map

## Abbreviations & Notes
- BCD: Beirut Central District
- CDR: Council for development & reconstruction
- RB: Ramleh EL Bayda
- NLUMP: National Land use master plan
- SADTL: Schémas directeur d’aménagement du territoire Libanais
- UTPD: Urban transport development project
- IAURIF: Institut d’aménagement et d’urbanisme de la région Ile de France
- Solidere: Société libanaise pour le développement et la reconstruction de Beyrouth
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