

Realizing Burnham's Vision

Chicago's Public Lakefront in the 21st Century

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Chicago was founded in 1837 along the waterfront of Lake Michigan, and quickly became an important transportation hub for the entire Midwestern United States. It was ideally situated for the Illinois & Michigan Canal, built in 1848, which created a water link between the Great Lakes and the Mississippi River. Though the canal was quickly rendered obsolete by freight railroad lines, the city remained an important center for the movement of goods.

In the 1860s, Chicago became the home of the massive meat industry, representing the first global industry. This expansion contributed to the city's continued growth as an industrial center, which has defined much of its history. Industry dominated the city's waterfront, which served as a dumping ground in certain areas and was cut off from people throughout much of the urban area. It was in at the turn of the century when city leaders began to realize the importance of opening up some of the lakefront to public use.



above: Cloud Gate Sculpture at Millennium Park

<http://www.flickr.com>
by: kjellarsen

left: View of Chicago Central Area, looking South

<http://www.smpp.northwestern.edu/ICORR2005/travelinformation.htm>

“The Lakefront by right belongs to the people – not a foot of its shores should be appropriated to the exclusion of the people...Chicago is one of the world's most beautiful cities, unequaled among major cities in the world due to the vision of our founding citizens and park advocates.”

- Trustees of the Illinois and Michigan Canal Commission, 1836
(<http://www.fotp.org>)

Burnham's proposal for lakefront fill between Downtown and Jackson Park



<http://www.chicagocarto.com/burnham/lakefront.html>



Daniel Burnham

Daniel Burnham and the *Plan of Chicago*, 1909

Daniel Burnham is best known for his statement to “make no little plans.” His studies of the great cities of the world informed his approach to urban planning, which was, at the time, distinct for being comprehensive, systematic and regional. In response to the city’s growing social problems, the Commercial Club sponsored Burnham, in 1906, to begin work on a plan for recommendations for how to improve the urban fabric through physical design and infrastructure.

Burnham’s Plan focused on six major physical elements:

1. Improving the lakefront
2. Developing a highway system
3. Improving the freight and passenger railway systems
4. Acquisition of an outer park system
5. Arranging systematic streets; and
6. Creation of a civic center of cultural institutions and government.

Note that improvement to the lakefront is placed at the top of this list. Burnham recognized the importance of having public access to the lakefront so that it could be accessible for all people. Public access improves the overall quality of the urban fabric by providing residents opportunities to interact with the shoreline and because it creates a greater sense of openness throughout the urban area.

Current Lakefront Planning and Design

Burnham’s Plan has remained integral to much of the subsequent growth of Chicago. Language from the Plan provides principles that continue to guide planning and development in the Chicago region today.

In honor of the centennial of Burnham’s Plan, the group, Burnham Plan Centennial, identified six principles that are intended to guide future development in the Chicago region:

1. Water
2. Transportation tied to good land use
3. Public transit and freight
4. Ecosystem and energy
5. Connect people to opportunity; and
6. One region, one future.

“Perhaps [Burnham’s] Plan’s most treasured legacy is the city’s public lakefront, unique in the world.”

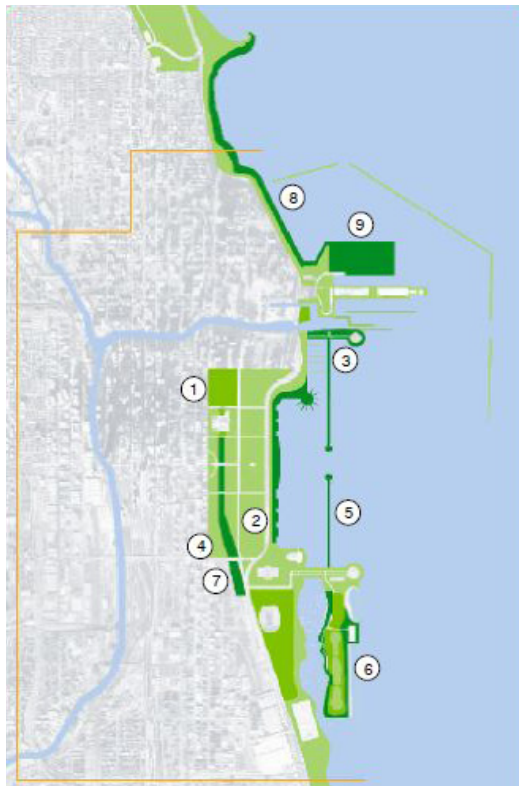
"Make no small plan"
- Daniel Burnham

Realizing Burnham's
Vision: Chicago's Public
Lakefront in the 21st
Century

The Public Lakefront

- ⌘ There are 26 miles of lakefront, all of which is public property
- ⌘ The Chicago Parks District is responsible for construction and management of the waterfront.
- ⌘ A pedestrian and bike trail extends 18 miles along the water

Key recommendations for the Lakefront
Open Space System



source: *Chicago Central Area Plan*



Open space systems will form a
connected network for residents
and visitors.

source: *Chicago Central Area Plan*

Chicago Lakefront: Overall Plan



<http://www.aiachicago.org>



The following Guiding Principles are behind the Chicago Lakefront Harbor Framework Plan

- ☞ Chicago's Lakefront is a primary civic amenity, and it should be protected and enhanced for all types of users
- ☞ The Chicago Park District's mission of offering a diverse range of recreational opportunities includes providing and operating a set of lakefront harbors
- ☞ Chicago's magnificent lakefront parks and the Chicago Harbor System are interconnected, and what affects one affects both
- ☞ Boaters comprise an important stakeholder group who help bring activity, vitality and interest to the lakefront
- ☞ Thoughtful planning and design can develop lakefront harbors that mutually benefit boaters and non-boaters
- ☞ Significant civic benefits can be derived by identifying appropriate opportunities for improving and expanding the Chicago Harbor System

Lakefront Harbors

- ☞ A series of harbors connect the water itself to the shoreline, managed by the Parks District
- ☞ The harbors open up the shoreline for parks along the shoreline
- ☞ The harbors are revenue generators, not only paying for themselves but contributing to overall capital funds for the Parks District

source: *Chicago Lakefront Harbor Framework Plan*



below: Belmont Harbor
source: Wikipedia



source: *Chicago Lakefront Harbor Framework Plan*



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Ecology

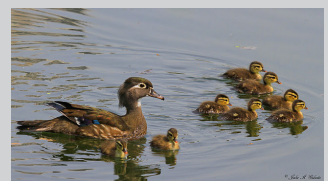
Original habitat:

- ⌘ Low and marshy.
- ⌘ The shoreline was originally dominated by sand dunes and sandy savanna habitat.
- ⌘ Two major water sources in the Chicago area into the lake - Calumet River in the south and Chicago River in the north. Both highly developed.
- ⌘ Prairie, savanna, forest, and wetland habitats were all present.
- ⌘ Lake Michigan is oligotrophic -- its waters are nutrient-poor and do not support a great deal of life even in an untouched condition.
- ⌘ The western shore of Lake Michigan was and is a major migratory route for dozens of species of birds that prefer not to fly over open water but are pushed east by westerly winds.

Man-made changes over the 19th and 20th centuries:

- ⌘ 90% of the wetlands are gone.
- ⌘ Conversion of river mouths into harbors has reduced drift of soils and sand downshore, causing shoreline erosion.
- ⌘ The Chicago central area was raised to a level several feet above its original grade to overcome the mud and sewage problems from building on a marsh. Raising the grade ultimately resulted in an entirely artificial shoreline along the length of the Chicago lakefront.
- ⌘ The flow of the Chicago River was reversed so that the lake flows into the river. Numerous invasive fish and aquatic plant species (over 160, wikipedia) were introduced over the decades and are now a major ecological problem.
- ⌘ Overfishing, dams, high levels of chemical pollution, and logging have also taken heavy tolls over the decades on native aquatic life.

Native Species Found in Lincoln Park Pond Areas



source: <http://naturesplendor-julie.blogspot.com/> Julie G



North Pond, Lincoln Park
from www.northpond.org



Artificial Reef in Lake Michigan
from chicagomag.com



McCormick Bird Sanctuary
from [annamalhouse on flickr.com](http://annamalhouse.on.flickr.com)

Ecology

Ecological Projects of the 21st century:

- ⌘ Former brownfields: with the decline of industry, now becoming available for ecological restoration and protection.
- ⌘ Northerly Island (formerly Meigs Field): The artificial peninsula (the only element actually built from Burnham's planned string of islands) was converted in 2003 from an airstrip into Northerly Island. The park transitions from urban space with built recreational structures to a constructed example of native prairie and savannah habitat.
- ⌘ McCormick Place Bird Sanctuary: The most recent of four bird sanctuaries along the lakefront, constructed in 2003 with prairie, woodland, and wetland habitat. While not accessible to the public, boardwalks and overlooks give public viewpoints into the sanctuary.
- ⌘ Lincoln Park: The largest public park in Chicago. The North Pond has been set aside with an Urban Conservation Treaty for Migratory Birds, and also attracts beavers. The South Pond was restored in 2010 to recreate a wildlife marsh environment.
- ⌘ Artificial Reef: Two miles offshore in 30-foot deep water, the reef is controversial as it attracts plenty of invasive species as well as more desirable native species.

Meigs Field (1948-2003)

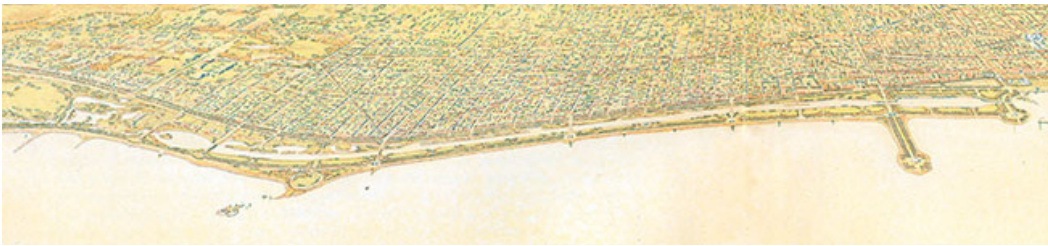


Source: www.chicagomag.com

Northerly Island (restoration ongoing)



Source: www.worldlandscapearchitect.com



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Access

- ☞ Lakefront Trail: 18 miles of multi-use trail running between and parallel to Lake Shore Drive and the waterfront
- ☞ Proximity: Close to dense downtown, although busy Lake Shore Drive necessitates designated crossing points from multiple major east-west streets.
- ☞ Safety: In some places, crossing can be difficult, particularly for bicyclists.

Urban Design, Waterfront, and Open Space



- Parks
- Waterfront
- Pedestrian Bridge
- Streetscape
- Lighting Plan

Urban Design Focus Areas and Signature Streets



source: <http://samrunnr.blogspot.com>



Goals and Needs for the Chicago Central Area Action Plan

- ☞ Strengthen the Lakefront as Chicago's Great Public Space
- ☞ Strengthen Chicago as an Environmentally Sustainable City
- ☞ Develop the Riverfront as a Premier Public Space and Continuous System
- ☞ Create the Next Generation of Parks
- ☞ Complete the Central Area's Framework of Richly Landscaped Streets and Boulevards

Culture and Activities

Navy Pier



The Pier covers more than 50 acres, and Centerpiece Attractions include:

- ☞ the Chicago Shakespeare Theater
- ☞ a Ferris Wheel
- ☞ an IMAX Theater
- ☞ the Chicago Children's Museum
- ☞ the Smith Museum of Stained Glass Windows

source: *Chicago Lakefront Harbor Framework Plan*

Navy Pier is considered the number one tourist attraction in Illinois, attracting nearly 9 million people per year and generating sales around \$138 million.



source: *Chicago Central Area Action Plan*



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Beaches



source: Wikipedia

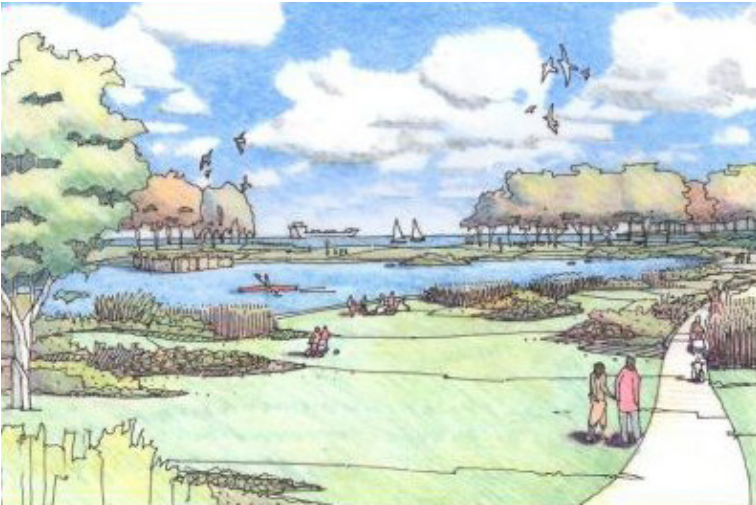
The beaches are an extensive network of waterfront recreational areas operated by the Chicago Parks District.

There are 33 beaches along the Lake Michigan waterfront

Activities

18 miles of pedestrian and bike trail stretch along the Chicago waterfront, linking the series of parks and beaches

The waterfront also hosts concerts and festivals throughout the year



<http://www.aiachicago.org>



<http://www.picasa.com>
by Mitch Rice



<http://www.vintagebmx.com>



<http://cityescapenortherlyisland.wordpress.com/>



<https://picasaweb.google.com/blakecoe>



Lessons Learned

Similarities – Chicago/Seattle

- ⌘ Waterfront is a busy focus of shipping and industry
- ⌘ Many now-unused industrial sites
- ⌘ A lot of landfill of former marshland
- ⌘ Loss of habitat and species diversity due to human-induced pollution
- ⌘ Major corridor for migratory bird populations
- ⌘ Large urban population needing space for sports, outdoor cultural events, and recreation
- ⌘ Large highway (Lakeshore Drive) running along the waterfront
- ⌘ Need to improve underdeveloped or poor connections between waterfront areas

Differences

- ⌘ Intercontinental, thus not subject to sea-level rise
- ⌘ Much larger city
- ⌘ Different climate & local ecology
- ⌘ Shipping is much less prevalent than it used to be
- ⌘ Less original habitat remains
- ⌘ More residential development across from the waterfront



Chicago approaches that could be applicable to Seattle

- ⌘ Converting industrial sites into mixed-use and natural areas
- ⌘ In the last 10 years, entire length of the waterfront has become open to the public (although some of it is still under development)
- ⌘ Providing space for a wide variety of recreational and cultural activities
- ⌘ Restoring marshland and installing artificial reefs and rock walls to encourage aquatic animal life
- ⌘ Multiple access points across the major dividing road
- ⌘ Linear consistency linking otherwise dissimilar neighborhoods





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Chicago Central Area Plan

Chicago Lakefront Harbor Framework Plan

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