Minato Mirai 21
Yokohama, Japan
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Minato Mirai 21 is a 1.2-mile urban redevelopment of the waterfront of Yokohama, Japan’s second largest city behind Tokyo. Minato Mirai 21 literally translates to “the future port city of the 21st century”. Since the mid-19th century, Yokohama has remained Japan’s main trading port and industrial base, the country’s “gateway to the world”. Minato Mirai 21 is the core of Yokohama’s comprehensive ‘Plan for the 21st century’, an initiative by the municipal government in 1981 to revitalize Yokohama’s port area, establish the city’s independence from Tokyo, and decentralize business functions from central Tokyo. This vibrant development continues to evolve and grow, exhibiting “elements of smart growth, public/private partnerships, an extensive transportation network, mixed-use programming, and 24-hour nodes of activity”, which attract new businesses, residents, and more than 50 million visitors every year.


“MM21’s ambition is to become an international cultural centre active around the clock, an information city of the 21st century, and a human environment surrounded by water, greenery, and history”.

**SITE, EARLY PLANNING, AND DESIGN IDEOLOGY**

**History of Yokohama**

1854 - Commodore Matthew Perry of the U.S. Navy negotiates a trade treaty with Japan, and Yokohama becomes a commercial trading city.

1868 - The Yokohama port is developed for trading silk, particularly with Great Britain.

1899 - Yokohama is the most international city in Japan, with foreign areas stretching from Kannai to the Yamate Bluff area and the large Yokohama Chinatown.

1923 - The Great Kantō earthquake, killing an estimated 23,000 people.

1930 - Yamashita Park on the waterfront is built, using the rubble of the quake.

1945 - End of World War II, and the city, which eventually claimed land to the north of the old harbor, industrial areas and freight handling areas stretching between the modern district around Yokohama station and the old historical center at Kannai, as a place to reinforce a city center. There were 3 main objectives:

- Create an economically independent Yokohama
- Improve port functions and transform the waterfront into a citizen’s harbor
- Decentralize Tokyo with respect to its official, commercial, and international conference functions

In the 1970s, the city was able to successfully negotiate with Mitsubishi to relocate their shipyards, and formalized planning of the city was able to begin.

**A Disconnected City**

In the 1960s, Yokohama was a disconnected city; the North was a strong transportation hub that linked to Tokyo with rail lines extending into the growing suburbs, the South was a center for businesses and local government, and the central waterfront area was largely occupied by Mitsubishi Heavy Industries Corporation’s shipbuilding dockyards and industrial functions, separating the North and South into “two isolated cores without a true city center” (Lin, p. 65). The city was also unable to cope with an increasing population size; people went to Tokyo for businesses, commerce, entertainment and culture. Yokohama was regarded as a huge suburban town (Lin, p. 80).

**Design Ideology**

The planning and design for an improved Yokohama was inspired by the megastructural movement of the 1960s, which “...represented an idealistic effort to create total environments that serve as model cities of their eras.” (Lin, p. 73). These urban schemes for autonomous urban cities were by a group of architects known as ‘Metabolism’, which included their mentor Kenzo Tange (1913-2005). The term ‘Megastructure’ was coined by Fumihiko Maki who defined it as “a large frame in which all the functions of a city or part of a city are housed ... made possible by present technology” (Maki, Investigations in Collective Form, 1964, p. 8).

The solution was to look to the central waterfront area, which comprised of the old harbor, industrial areas and freight handling areas stretching between the modern district around Yokohama station and the old historical center at Kannai, as a place to reinforce a city center. There were 3 main objectives:

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**Early Planning Process**

The early planners of Minato Mirai 21 considered the spatial organization of the whole district and desired spacious greenery, numerous cultural facilities, preservation of historic buildings, “a carefully tailored skyline” (Lin, p. 87), and the use of advanced technologies that would showcase a new type of business and cultural urban center in the age of information technology and economic globalization. A grid street system was proposed, in contrast to the labyrinthian streets of many Japanese towns where inadequate zoning resulted in overlapping and undefined land uses. There was a strong desire to offer a traffic plan that would support vibrant urban activities and make streets safe and comfortable for pedestrians while creating a more attractive vista.

**History of Minato Mirai 21**

Feb. 1965 - City of Yokohama announces Redevelopment Plan, one of six major projects.

1970s - The Yokohama ports face increasing demands to accept larger ships and to adapt to changes in international trade. National government is pushing for Tokyo Bay waterfront reform and decentralization of Tokyo.

Nov. 1978 - City of Yokohama and various national organizations form the Planning and Investigatory Committee for the Overall Improvement of Yokohama City Center and Waterfront Area. Basic plans are announced.

1980s - Japan’s “bubble economy”. The value of land increases, resulting in a series of large-scale developments around Tokyo Bay in rediscovered waterfront areas.


Mar. 1983 - Mitsubishi Heavy Industries, Ltd.’s, a major port occupant, must remove its shipyard, because the site could no longer support further growth.
Minato Mirai 21, con’t.

Feb. 1989 - Sakuragicho Station Plaza opens.


Apr. 1994 - Kokusai-bashi Bridge (Kokusai-odori Boulevard) opens.


Minato Mirai 21 Corporation

In 1984, the Minato Mirai 21 Corporation was established as a third sector organization (a hybrid of the public sector and private enterprise) to coordinate the design of this $30 billion project, to facilitate processes and ease cooperation among more than 50 government agencies involved in the project, as well as to coordinate governmental efforts at the municipal and national levels with those of the private sector. “MM21 Corporation was able to take ideas and goals from all sides and produce tangible results. They were in a position to cut through the red tape and had the industry know-how to do it right.” – Toshihide Yoshimura, executive officer of Mitsubishi Estate's Yokohama Branch (Lin, p. 66). This was a true model of public/private partnership: Yokohama was responsible for land reclamation, land adjustment, and construction of infrastructure and public facilities; private companies invested in business and housing developments after the infrastructure was built; and MM21 was responsible for planning of the project and operation of public facilities. The chief planner, Masato Otaka, one of the founding members of the Metabolist group, called for a multi-functional urban vision of which were to be built on reclaimed land.

The Minato Mirai 21 Project

**Primary Objectives**

1. A More Self-Sufficient Yokohama

Prior to the Minato Mirai 21 project, Yokohama's city center was divided into ten areas: the Kanazawa-bashi District and the Yokohama Station Area District. Minato Mirai 21 District consolidates and integrates the ten areas and concentrates companies, shopping centers and cultural facilities in these areas. This creates public and tourist recreational areas for citizens, integrates the local economy and establishes an economic infrastructure that enhances Yokohama's self-sufficiency.

2. A Transformable Red Light for the Air

The Minato Mirai 21 project is designed to facilitate decentralization of the city, commercial and international conference facilities from the_near downtown Yokohama City) to promote new advanced area developments.

3. A Decentralized Capital Region

The Minato Mirai 21 project is designed to facilitate decentralization of the official, commercial and international conference facilities formerly concentrated in Yokohama City to promote new advanced area developments.

**Urban Vision**

1. A Round-the-Clock Cosmopolitan Cultural City

Puducchi Yokohama (Pacific Conventio Plaza Yokohama) integrates arts, culture and commercial facilities in proximity to the city's business and residential areas as a center for cross-cultural exchange. A body, appealing, cosmopolitan city in tune with trends from across the globe is emerging.

2. A 21st Century Information City

Minato Mirai 21 is an information city. Acting with a consistent stream of economic and cultural information. It is attracting a cluster of high-tech, knowledge-intensive, global enterprises' executive HQ and R&D operations, as well as divisions of many government agencies.

3. An Inviting City Offering Ample Waterfront, Open Space and Heritage

Harmony between people and nature is emphasized, highlighting the waterfront's charm and covering green spaces. Preserving the Awa-Rio Gaiko (red brick warehouses) and stone docks existing Yokohama's historical heritage, Minato Mirai 21 intends to adaptively change its environment.

Funding

At the onset, there were no government subsidies, so the city used fees assessed on surplus soil removed from other construction projects. Additional funds came from property sold to private investors. More than $84 billion has been invested into megaprojects around Tokyo Bay. The 1st stage of development took place during Japan’s bubble economy, which saw rapid development and rents skyrocket. In 1996, after the boom’s collapse, official land prices were half at 1991 peaks, rents in the commercial sector were half or a third of what they had been, and there was a 10% vacancy rate. Work slowed drastically in the 1990s, and the public and private landowners together revisited the master plan to determine ways to move forward. MM21 carried out economic incentive plans to keep projects moving and to encourage relocation of businesses to this area, such as 50% reduction in property and city planning tax for up to 5 years, and subsidies, such as 10% of invested capital up to $45M per corporation that targets the information technology, biotech, imaging, convention, and environment industries. MM21 also focused on constructing cultural facilities and open spaces to host large events, such as the 1989 YES-Fair and the 2002 World Cup, to attract tourists from Japan and aboard, to attract investments into the city’s development, and to present an image of the place to the world. Rather than leave large plots of designated business zones undeveloped and unused, provisional land use was being promoted with 10-year fixed-term leases available on several commercial facilities.

“We understand that in times of uncertainty, forward progress was essential. To do that, it was clear that we were just as committed then as we were on day one.” – Hiroshi Nakada, Mayor of Yokohama (Lin, p. 68)
Minato Mirai 21, con't.


Sep. 2003 - Modification of land readjustment plan authorized (expanded to 101.8 ha).


June 2006 - Land readjustment reploting announced.


June 2006 - Land readjustment reploting announced.


Nov. 2007 - Designated the target model zone in the Cool City Center Pilot Program administered by the Ministry of the Environment.


The Minato Mirai 21 project has been strategically designed to offer an esthetically superb cityscape with broad public appeal. To create urban spaces where citizens can work comfortably, relax and have fun through leisure activities and shopping, and enjoy a secure, prosperous lifestyle.


Transit
Minato Mirai 21 has a complex circulation system that organizes pedestrian spaces, roads, highways, and rail lines on different levels – multi-level underground structures and overhead crossings. Existing railway lines connect to new subway lines, such as the Minatomirai line that goes through the Center District. Vehicles travel East-West on two main arterial roads, and intersect the city on smaller roads that have wider sidewalks to accommodate pedestrians and bikes. Existing railway stations are located along the old water front area stretching from modern Yokohama station to historic Kannai district. There are also two municipal bus systems as well as tourist buses that drop visitors off at sightseeing spots. MM21 is also accessible from the bay with water bus services.

“Rather than being one of those places one thinks about visiting on the weekend, it’s becoming the place to visit, now that one arrives right at its front door”. – Eiji Kobayashi, manager of Yokohama Minatomirai Railway Company (Lin, p. 67)
Green Space and Water Network
Minato Mirai 21 makes use of its waterfront location with numerous green spaces linked by promenades to showcase the special features of the waterside environment. Including Grand Mall Park at the heart of the Central District, a green network covering the whole of the district is taking shape. Most park spaces are planned along the waterfront to ensure access to the water and pedestrian circulation. Parks and greenery comprise 1/4 of the total area, or 115 acres.

Zou-no-hana Park (2006 - 2009)
This park was created to commemorate the 150th anniversary of the opening of the Port of Yokohama. It offers views of the waterfront and the restored 19th century breakwaters.
Area: 3.6 ha
Facilities: Resthouses, lawn space, terraced embankments, breakwaters
Developer: Municipal Government

Shinko Park (1998 - 2001)
Shinko Park offers an intimate connection to the waters edge and a grass lawn from which to enjoy the harbor views.
Area: 2 ha
Facilities: Lawn space, terraced embankments, emergency underground water tanks
Developer: Municipal Government

Kishamichi Promenade, Unga Park, Promenade (1995 - 2001)
This promenade and park were along old railway tracks.
Area: 2.2 ha
Facilities: Garden path, lawn space, water square
Developer: Municipal Government

Rinko Park (1998 - 1999)
Rinko Park follows the curve of the waterfront. It is the largest park in MM21.
Area: 9.3 ha
Facilities: Lawn space, terraced embankments, tidal basin, parking lots, concession stands, emergency underground water tanks
Developer: Municipal Government

The Waterside Park opens to views of the Katabira-gawa River. The Promenade will link Minato Mirai-odori Boulevard to Route 1.
Area: Park - 1.3 ha, Promenade - 2 ha (330 m length, 6 m width)
Facilities: Pedestrian walkway
Developer: Urban Renaissance Agency

Pedestrian Network
Minato Mirai 21 has an extensive network of pedestrian walkways throughout the area, with the three city axes serving as the main pedestrian corridors. The Queen Axis is equipped with moving walkways and links Sakuragicho Station with Pacifico Yokohama, Nippon-maru Memorial Park, and the Landmark Tower. The King Axis links Yokohama Station and Rinko Park. The Jack Axis is a 25 m wide corridor that connects the two axes. Many parks, plazas, open spaces, and promenades are accessible from all three axes:

Minatomiri Pedestrian Bridge (2008 - 2010)
This pedestrian-only deck crosses Minato Mirai-odori Boulevard, along King Axis and Jack Axis, and links the main gateway to the city, Yokohama Station, to the Central District.
Size: Along Jack Axis - 70 m length, 8 m width; along King Axis - 62 m length, 6 m width
Developer: Urban renaissance Agency

This promenade extends 550 m from Aka-Renga Park to Yamashita Park and is built on the elevated tracks of a former freight line. It is a “barrier-free” design that features ramps and elevators for easy access. From the promenade, there are views of the Port of Yokohama from Sakuragicho to the Yamate District.
Size: 550 m length, 3.5 - 6 m width
Developer: Municipal Government

Sakuragicho Station Plaza (1987 - 2002)
The Sakuragicho Station Plaza has drop-off and pick-up points for buses and taxis, and a tourist information center that provides information on city events, planning projects, and tourist spots in Yokohama.
Area: 17,200 m²
Developer: Urban Renaissance Agency, Municipal Government

Hamamirai Walk (2003 - 2009)
The Hamamirai Walk is a pedestrian bridge that links the east gateway of Yokohama Station to the Central District. It is an open pedestrian deck that links the Central Waterfront Promenade, the King Axis, and the Jack Axis.
Size: 100 m length, 12 m width
Developer: Municipal Government

Takashima 2-chome Pedestrian Bridge (2004 - 2008)
This pedestrian deck passes over Route 1 and links Takashima 2-chome to the Central District. It is part of the network that extends from the south gateway of Yokohama Station to the King Axis.
Size: 80 m length, 6 m width
Developer: Municipal Government


We knew that we needed to create a sustainable city – something that could be given to our future generations.”
– Hiroshi Nakada, Mayor of Yokohama (Green, P. 67)
EVALUATION AND LESSONS LEARNED

Successes
Like Seattle, Yokohama had disconnected cores within the city. The waterfront was historically dominated by port and heavy industries, and the planners desired to have the waterfront be a strong urban center to link the city.
Unique model of public/private enterprise.
Good planning and innovative incentive programs ensure development will continue, even through economic hardships.
Good emphasis on a well-connected and integrated public realm.
Access to Minato Mirai is fast and accessible, particularly if one uses the rail lines (~30 minutes from Tokyo).
Extensive amenities provide opportunities for people to stay and enjoy themselves, especially 24/7.
Aggressive plan to attract new businesses, residents, and visitors by making the entire area a commercial zone.
Thoughtful historic preservation plans that renovate and adaptively reuse historic buildings and structures, such as the transformation of old railways into parks and promenades, as a means to celebrate the city’s history and port identity.
The most interesting contrast is the “futuristic” look of buildings in the central district and the historic preservation efforts made to evoke Yokohama’s heritage, notably in the Shinko District.
Zoning and building height regulations show the different characteristics of these two areas. It helps the transition of super modern urban scenery into historic Kannai area. Shinko Waterfront park is another good example.

Opportunities for Improvement
Over-investment and over-control has resulted in underutilization of the highly designed facilities and public spaces.
Maintenance is creating another issue when the area is under-occupied and under-used. Decrease in anticipated revenue generated in the area is causing more burdens to the city to maintain the facility. Employment especially, is a lot less than what was projected.
According to the master plan, resident facilities is planned for 10,000 residents, and 90,000 workers, yet it would be interesting how the planners will respond to the increasing middle-class population.

Long promenades. Paths do not meander. There are rarely elements of “surprise”.
Overly prescribed pathways and walkways. Little opportunity to “wander” and explore. Feeling of being “shuttled” from one point and to another.

Out of scale. Large empty plazas, endless promenades, and towering skyscrapers make certain areas seem empty and exposed.

No opportunities to directly interact with the water. Yokohama was built on platforms due to sea level rises during storm surges and tropical cyclones and typhoons, where waves can swell up to 10 ft.
Resources

Text


Websites

