Moving towards Cities of the Future

Development Cooperation Division
City of Yokohama

Yokohama? Where? Just in case you don’t know
Overview of Yokohama City

- International port city
  Opening of port of Yokohama in 1859
- Population: approx. 3.7 million
  Largest city in Japan
- Area: 434.98 km²
- Density: approx. 8,500 person / km²
  (approx. 120 billion USD) \(1\text{USD}=105\text{JPY}\)
- 20 minutes from Haneda Airport (Tokyo)

Urban Structure of the Yokohama City

- Urbanization control areas: 1/4 of the entire city area
Land use plan

Residential Area
Commercial Area
Industrial Area

Emergence of Sprawl and urban problems caused by the rapid population growth

Population trend in Yokohama

<table>
<thead>
<tr>
<th></th>
<th>1960</th>
<th>1980</th>
<th>Increase for 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yokohama</td>
<td>1.37</td>
<td>2.77</td>
<td>1.40</td>
</tr>
</tbody>
</table>

Source: City of Yokohama
Urban issue in 1960s

- Shortage of connectivity between the city center and residential area

- Pollution by uncontrolled industrialization
Urban issue in 1960s

Sprawl by expansion of residential area

Synergy Effects and Integrated Projects

Six Flagship Projects well balanced for whole area

Three Area Developments

Three Access Developments

Elements of “The 6 Strategic Projects”

Minato Mirai 21 and other City Center Enhancement
Creating new business, commercial & cultural centers as the City’s economic drivers

Subway Network Development
Completing city centers and suburbs by public transport network

Kanazawa Reclamation
Creating an eco-friendly industrial zone to which factories relocate and create good environments for workers, residents and visitors

Expressway Network
Distributing goods and people by formulating a trunk road network as the backbone of the City

Kohoku New Town
New town development with independently run urban services by connecting to the urban center of Yokohama by subway

Yokohama Bay Bridge
860m bridge for goods transport, also serves as a monumental icon for the waterfront city center
6 Major Projects in 1960s

Developing new city center

- Combining two existing city centers
- Providing work places for citizens

Developing factory park

- Building factory park by land fill to relocate small or mid-size factories which were scattered in residential area
- Building public facilities such as fire stations and kindergarten in residential area after factories moved out

Developing new residential district

- Preventing from disordered urban sprawl, ideal development with plenty of greenery
- Providing ideal housing complex for citizens connecting to the city center by subway

Developing municipal subway system

- Filling up public transportation service in the residential area without existing private train service, connecting to the city center
- Contributing to the “Within 15 minutes to the train station for everyone” policy
- Providing alternative transportation after closing streetcar service
6 Major Projects in 1960s
Developing express ways

- Easing serious traffic jam within the city center
- Better access to Tokyo
- Contributing to the “Within 30 minutes to the city center by car” policy

Building “Bay Bridge”
- Shifting distribution traffic such as heavy trucks and trailers from the city center to the port area
- Monumental icon for the waterfront city center

Long Term Achievement of Flagship projects based on urban planning

The Yokohama Port City Construction Act (1960)

The Yokohama General Plan (1973–2005)

Yokohama General Plan (Long Term Vision) (2008–2028)

The Yokohama Comprehensive Plan to Build an International Port City

The City of Yokohama Master Plan


The Yokohama 2010 Plan

Mid-Term Plan

Mid-Term 5-Year Plan

4 decades

Population

Mayor

Ichiro Aoyama 1963–
Minoru Saito 1978–
Hidemitsu Takahashi 1990–
Hiroshi Nakada 2013–
Yamato Hayashi

Approx. 330 Million in 1960
Approx. 380 Million in 1985
Approx. 550 Million in 2000
Approx. 580 Million

Six Flagship Projects
- Improvement of the Functions of the City Center
- Land Reclamation of the waterfront
- Development of New Residential Towns
- Construction of Parks
- Construction of the Bay Bridge
Community Development in the Minato Mirai 21 (MM21) District
Yokohama City Metro
(Blue Line 40 km)
City
Sub Center
“Shin (new) Yokohama”

City Center
“Minato Mirai 21 District”

Minato Mirai 21 District

Yokohama City Metro
(Green Line)

JR and Private Railways
Minato Mirai 21 District development concept and current state

1 Minato Mirai 21 District development concept and current state

2 Urban development and landscape formation in the Minato Mirai 21 District
Before the start of construction (1980)

- Division of the city center into the area around Yokohama station and the Kannai-Isezakicho area
- Limits of existing port & harbor functions -> vision for relocation

The Project Outlined

<table>
<thead>
<tr>
<th>Land in use</th>
<th>Target</th>
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</thead>
<tbody>
<tr>
<td>Population employed</td>
<td>190,000</td>
</tr>
<tr>
<td>Resident population</td>
<td>10,000</td>
</tr>
<tr>
<td>186 ha</td>
<td></td>
</tr>
<tr>
<td>Housing:</td>
<td>87 ha</td>
</tr>
<tr>
<td>Roads and railroads:</td>
<td>42 ha</td>
</tr>
<tr>
<td>Parks and green spaces:</td>
<td>46 ha</td>
</tr>
<tr>
<td>Docks:</td>
<td>11 ha</td>
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Progress of Development (As of Jan 2017)

Progress: **74.0%** (Incl. Temporal Use: **86.3%**)

Growth of Visitors and Employment

**Visitors**

(Annual)

![Bar Chart for Visitors Growth]

- **2012**: 6,000
- **2013**: 7,000
- **2014**: 8,000
- **2015**: 9,000
- **2016**: 10,000

**Employment**

![Bar Chart for Employment Growth]

- **2012**: 50,000
- **2013**: 60,000
- **2014**: 70,000
- **2015**: 80,000
- **2016**: 90,000

- **Total Employment 2016**: 103,000

- **Total Visitors 2016**: 81 Million
1 Minato Mirai 21 District development concept and current state

2 Urban development and landscape formation in the Minato Mirai 21 District

Infrastructure Improvement Project

Waterfront land reclamation

Body responsible: Port and Harbor Bureau, City of Yokohama
Source of finance: The reclaimed land is sold to finance the project.
Infrastructure Improvement Project

**Land readjustment**

Body responsible: Urban Renaissance Agency
Source of finance: Some reserved land is sold to finance the project. Government subsidies are also available.

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**Mechanism of Land Readjustment**

Integrated development of **public facilities (roads, parks)** along with reconsolidation of residential areas/roads.

Land value increase due to betterment of land can finance land for public use.
**Mechanism of Land Readjustment**

Before

- Mr. A’s site

After

- New site
- New Road
- Park
- Land converted
- Land reduced

Finances roads and park development

**Infrastructure Improvement Project**

Port building

Body responsible: National government and Port and Harbor Bureau, City of Yokohama

Source of finance: The project is financed by the City of Yokohama. Government subsidies are also available.
Urban Development of Minato Mirai 21

<table>
<thead>
<tr>
<th>Color</th>
<th>Sub-project</th>
<th>Entity responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Waterfront land reclamation</td>
<td>Port of Yokohama</td>
</tr>
<tr>
<td></td>
<td>Land readjustment</td>
<td>Urban Renaissance Agency (an independent administrative body)</td>
</tr>
<tr>
<td></td>
<td>Port building</td>
<td>Port of Yokohama, Japanese government</td>
</tr>
</tbody>
</table>

Role sharing between the public and private sectors

- **Roles of public entities and enterprises**
  - Defines the master plan
  - Builds up infrastructure facilities (such as roads, green spaces and utility tunnels)
  - Builds up public-benefit facilities (such as art museums)
  - Establishes laws, ordinances and rules

- **Roles of private enterprises**
  - Builds up office buildings, commercial facilities, houses, etc.
Land Use Policy (MM21 Central District Plan)

**Waterfront Zone**
- Rinko Park, Takashima Sansuisen Park, Nippon-maru Memorial Park

**International Zone**
- Pacifico Yokohama, Exhibition Hall, Highrise Urban Housings, Commercial Facilities, etc.

**Promenade Zone**
- Yokohama Museum, Commercial Facilities, Offices, etc.

**Commercial Zone**
- Commercial Facilities, Offices, etc.

**Business Zone**
- Offices etc.

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Height Restriction for the Buildings (MM21 Central District Plan)

**Formulation of the Skyline**

- Under 60m
- Under 100m
- Under 120m
- Under 180m
- Under 300m
Setting Color Tone (MM21 Central District Urban Scenery Formulation Guideline)

Classical Waterfront Area

Warm Colors in inner land area

Stylish Mainstreet Area

Urban development effects (business facilities)

Buildup of business facilities along arterial roads
Urban development effects (business facilities)

Attraction of siting with consideration for the balance with the buildup of other urban functions

Residential population: about 10,000

Urban development effects (residential facilities)
Shin-Yokohama District
Urban Development through Inter-City Transport Development

Area developments along the Blue Line (Municipal Subway)

Residential and Commercial Complex Area “Kohoku New Town”

City Sub Center “Shin (new) Yokohama”

City Center “Minato Mirai 21 District”

Yokohama City Metro (Blue Line 40 km)
Yokohama City Metro (Green Line)
JR and Private Railways
Location of Shin-Yokohama

Shin-Yokohama Station

Yokohama Station

Development of High-Speed Railway (Shinkansen)

3000Km

Shin-YOKOHAMA
Tokaido-Shinkansen

Shin-Yokohama

Osaka⇔Tokyo
550 km
2h 30 min

Shin-Yokohama District

Shin-Yokohama Station

80 ha
Overview of Land Readjustment Project in Shin-Yokohama District

- Project Implementer: Yokohama City Mayor
- Project Area: 80.4 ha
- Project Period: 1964-1980
- Land Owners: 439
- Project Cost: 3.2 billion JPY (1975)
  (very roughly 32 million USD in 1975 prices, 1 USD = 100 JPY)

Comparison of Construction Costs

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<tr>
<th></th>
<th>1975</th>
<th>2015</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>1.9</td>
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Streetscape of Shin-Yokohama District

- 2,000 firms
- 50,000 daytime workers
Assessment of Shin-Yokohama Project

Direct access to high-speed railway network

Assessment of Shin-Yokohama Project

Increased accessibility to Yokohama CBD, Airport, Tokyo

Shin-Yokohama

40 min.

Tokyo

35 min.

Yokohama

Haneda Airport
Assessment of Shin-Yokohama Project

Cheaper tenant rates compared to other districts

Shin-Yokohama District before Project

1962
After the Completion of the Land Readjustment Project

1975

Increase of office area

YOKOHAMA URBAN DEVELOPMENT BUREAU

Issues and Solutions

Few high speed trains stopping at station

Accessibility to Yokohama CBD

Low willingness for development among land owners and developers

Lack of assertive development assistance from Yokohama City
Operation Patterns

Passenger Increase and Operation Patterns

- # of high-speed trains stopping at Shin-Yokohama Station
- # of Passengers

- Kodama
- Opening of Metro
- Hikari & Nozomi
Issues and Solutions

- Few high speed trains stopping at station
- Accessibility to Yokohama CBD
- Low willingness for development among land owners and developers
- Lack of assertive development assistance from Yokohama City

Road Network and Railway Network
Increased Accessibility

- Shin-Yokohama to Tokyo: 20-40min
- Shin-Yokohama to Yokohama: 10min
- Shin-Yokohama to Airport: 35min

Issues and Solutions

- Few high speed trains stopping at station
- Accessibility to Yokohama CBD
- Low willingness for development among land owners and developers
- Lack of assertive development assistance from Yokohama City
Stagnation of Urbanization after Project

1983

Issues and Solutions

- Few high speed trains stopping at station
- Accessibility to Yokohama CBD
- Low willingness for development among land owners and developers
- Lack of assertive development assistance from Yokohama City
Development of Incentive Facilities

Yokohama International Stadium

Yokohama Arena

Transition of Workers and Offices

- Construction of High-speed Railway Station
- Completion of land readjustment project
- Increase of "Hikari" stops (1987)
- Opening of Metro Station (1985)
- Opening of Yokohama Arena (1989)
- Extension of Metro (1993)
- All "Hikari" and "Nozomi" stopping at Shin-Yokohama (2008)
New Developments

Kanagawa Eastern Lines
(Sotetsu-JR and Sotetsu-Tokyu Through Lines)

Thank you for your kind attention.