

Yokohama is the second largest city in Japan, home to a population of 3.7 million people. Today, Yokohama is one of the prime international ports in Japan and has long led the country's development in heavy industry. Simultaneously, the city has become one of the most livable cities in the world and is well known in Japan as a popular place for people to live because of its high-standard living environment and good accessibility to Tokyo, as well as between the city center and its residential suburbs.

Yokohama is a chosen destination for tourism by both local and foreign tourists due to its rich history, vibrant culture, and the availability of various entertainment facilities.

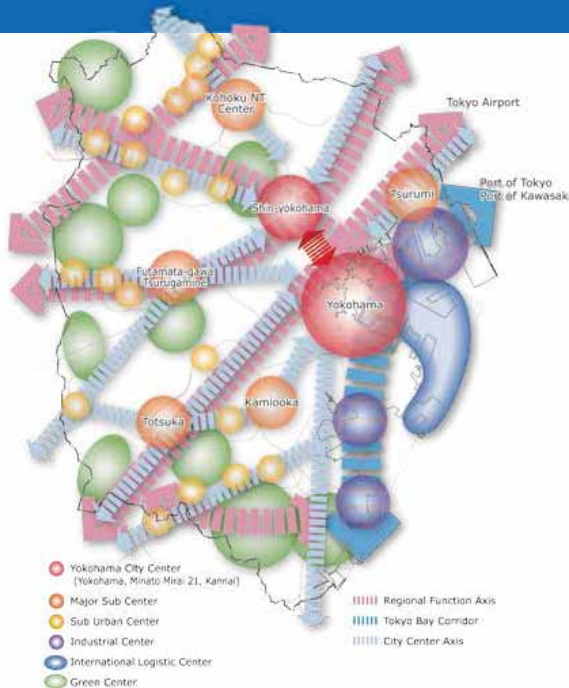
There is a long way to go, however, to be an internationally competitive and livable city.



Source: JICA Study Team

Yokohama City in Brief

The exquisite urban environment of Yokohama City is a result of coordination and cooperation between the city government and citizens during its long 150-year history.



Main Indicators of Yokohama City	
Population	3.69 million (2011)
Population Density	8,491 people/ km ² (2011)
% of Pop. over Age 65	19.6 % (2009)
Land Area	434.98 km ² (2010)
Green Space Ratio	29.8% (2009)
Gross City Product	12.77 trillion JPY (2008)
Citizen's Income	3.101 million JPY/ capita (2008)
% of Public Transport	42.7% (2008)
Registered Vehicles	1.3 million, 0.84/ household
GHG Emission	5.18 ton/ capita (2009)
No. of Tourists	24.8 million (2012)
No. of MICE Events ¹⁾	47 (2010)
Livable City Ranking ²⁾	1 st (2011, 2012)

1) Medium to large scale international events (more than 300 participants of which over 50 are foreigners)
 2) Among 47 prefectures in Japan (source: SBI Life Living)
 Source: Y-PORT pamphlet, City of Yokohama

Opening the Port and Modernization



After opening the port in 1859, it became an international trading city as a gateway of western culture and modern technology.

Recovery from Earthquake and War Damage



After the war in 1945, most of the city center was destroyed, and financial and commercial facilities were expelled from the city because of condemnation, so economic activities were hindered.

Rapid Population Growth and Urbanization



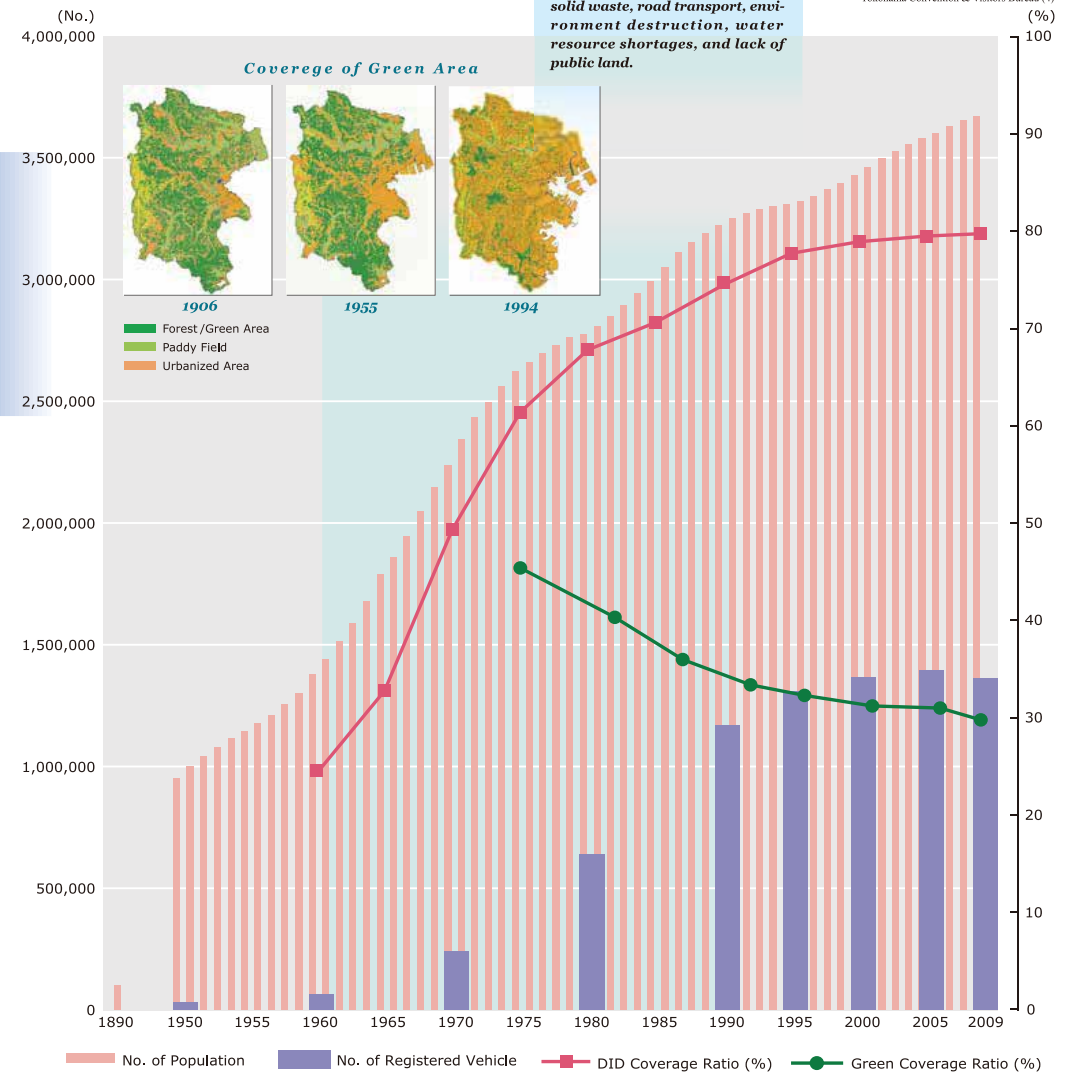
Yokohama became a bedroom town for Tokyo when a strong inflow of population took place in Tokyo. Rapid population growth and urban sprawl caused various urban problems, which was called the "5 big wars": solid waste, road transport, environment destruction, water resource shortages, and lack of public land.

Innovation for Sustainable Development



Yokohama today works on continuous innovations and experiments to cope with the new urban issues of globalization.

Source of Photos: Yokohama City Port Opening Memorial Hall (1), Yokohama City Historical Reference Room (2,3), Yokohama Convention & Visitors Bureau (4)



Legend: No. of Population (red bar), No. of Registered Vehicle (blue bar), DID Coverage Ratio (%) (red line), Green Coverage Ratio (%) (green line)

Source of Maps: Yokohama Environmental Science Research Institute, Environmental Planning Bureau, City of Yokohama
 Source of Data: Statistic Data of City, Yokohama

Similar to what emerging cities in the world face nowadays, Yokohama City also experienced significant urban issues from the 1960s through the 1980s, when strong economic growth took place and the population dramatically increased in the city.

The City Government, which complies with requests and demands of citizens directly, must formulate plans with a long-term perspective. In 1965 when Yokohama City had faced various urban issues, Yokohama's goal to be the "International Cultural Management City" was formulated, which integrated the historical development background of a port city, an industrial city and a residential city.



Approaches to Sustainable Urban Development

Yokohama's experience, or the "approaches we took to achieve sustainable growth, can offer a new perspective for city governors and urban planners around the world.

In order to cope with the issues, Yokohama introduced various development projects and regulative measures, each of which were designed to ensure integration with each other, consistent, long-term implementation, as well as active participation of citizens and private sectors.

By calling for collaboration with the National Government, private sectors and citizens for planning and implementation, Yokohama City has provided public services and facilities to attain policies and targets for urban development.

Yokohama today forges ahead with continuous innovations and experiments to cope with the new urban challenges.

The experiences of challenges to urban issues can be shared with other cities around the world for sustainable development. Yokohama's experience, or the 7 approaches we took to achieve the sustainable growth, can bring a new perspective for city governors and urban planners around the world.

Examples of Target Benchmarks of Urban Development

- **6 Strategic Projects** for strategic infrastructure development
- **190,000 employment** in *Minato Mirai 21*
- **300,000 population** of 2,500ha in *Kohoku New Town*
- **30%** waste reduction target of *G30 Plan*
- **15 minutes** accessible from home to nearest station
- **Less than 30 minutes** accessible to urban center
- **100% service coverage** of sewerage system
- **Zero children** on waiting list for child care support

Building Basic Urban Structure through Integration of Strategic Projects



Urban Development Management through Regulations and Guidance



Enhancing the Attractiveness of the City through Urban Design and Town Management



Private Sector and Citizen's Participation



Building a Resilient City through Comprehensive Disaster Prevention



Providing 24-hour Lifeline for All Citizens



Continuous Innovations



Building Basic Urban Structure through Integration of Strategic Projects



Minato Mirai 21

Source: Urban Development Bureau, City of Yokohama

Strategic Project-Based Approach

Yokohama in the 1960s and 1970s, during which strong economic growth took place in Japan, faced serious urban issues, which were correlated with each other intricately. Rapid economic development in Tokyo resulted in urban sprawl and land development of neighboring suburban areas including Yokohama City. Population growth in this period was 5-10% per year, which was much higher than other metropolitan areas in Japan at the time.

This rapid urbanization caused a lack of urban infrastructure and services, traffic congestion, pollution and insufficient social services, etc. Furthermore, the local budget was limited in providing sufficient urban services and facilities to meet increasing demand. Yokohama City decided to solve these issues drastically by implementing strategic basic infrastructure projects,

which would formulate a massive urban structure, which was similar to the backbones and organs of people. “6 Strategic Projects”, composed of 3 urban development and 3 transport development projects, were elaborated projects that were closely linked to each other.

Furthermore, the comprehensive project implementation process called for involvement of various stakeholders, not only city government but also national government, the private sector and citizens. A shared vision and clear project images mobilized and vitalized these stakeholders to work together for implementation.

These major projects required a large amount of funding, which Yokohama City alone had no way to cover on its own. Instead, Yokohama chose to share the financial burden with other stakeholders, such as the national government and the private sector. Yokohama’s proactive proposals successfully pushed the national

government to implement the proposed projects by using the national budget, which was a pioneering case for city governance in those days.

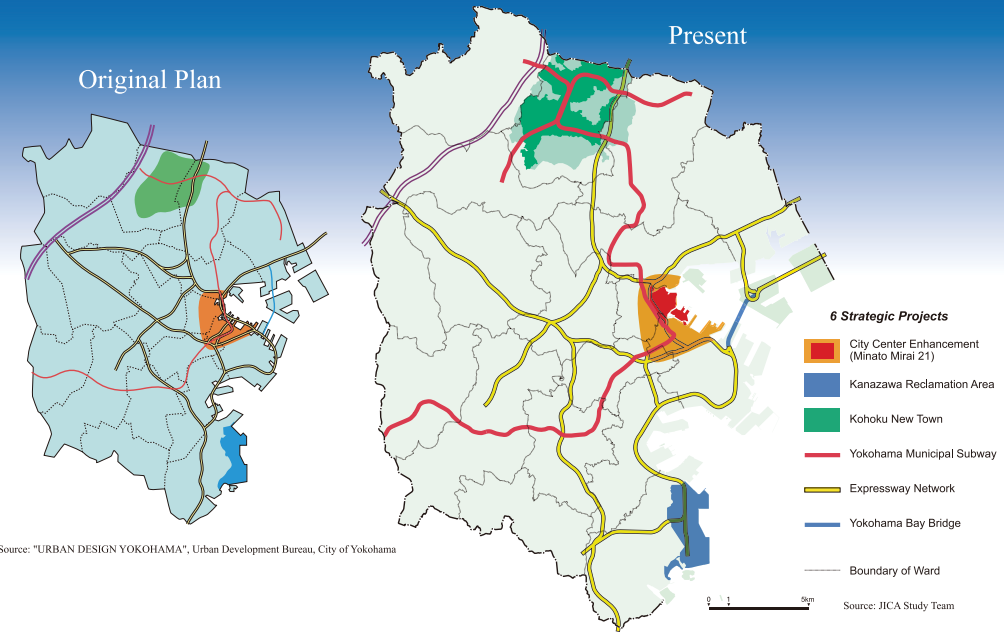
Yokohama also facilitated private investment by establishing partnerships with private developers and encouraging their participation in the projects. The city issued both domestic and foreign currency bonds that were guaranteed by the national government.

Synergy Effects and Integrated Projects

The six projects were originally integrated, supporting and enhancing the functions of each other and had synergistic effects. Such large-scaled, mutually connected projects were essential in establishing the foundation for the development of the city as a core economic center as well as a comfortable, livable city for the entire citizenry.

Providing a Functional Foundation for the City’s Development

The 6 Strategic Projects



Source: "URBAN DESIGN YOKOHAMA", Urban Development Bureau, City of Yokohama

Source: JICA Study Team

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 driver

Subway Network Development

Connecting 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

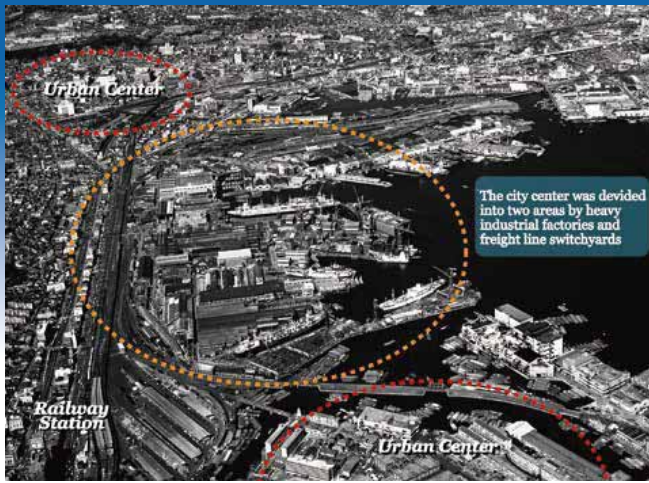
Distributing goods and people by formulating a trunk road network as the backbone of the City

Kohoku New Town

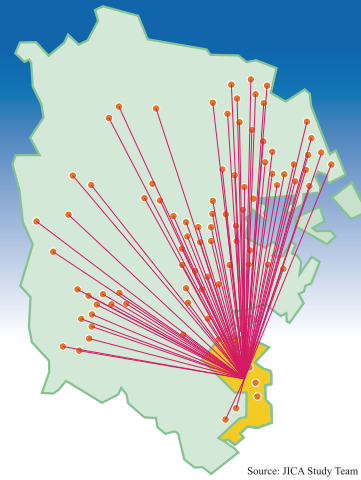
New town development with independently enjoy urban services by connecting to the urban center of Yokohama by subway

Yokohama Bay Bridge

860m bridge for goods transport, also served as a monumental icon for the waterfront city center



Source: JICA Study Team based on photo of Amano Studio



Source: JICA Study Team

Area Developments for Improving Economic Functions & Livable Environment

1) "Minato Mirai 21 (MM21 or Future Port for 21st Century) Project", the waterfront rejuvenation project, created a revitalized business and cultural center in the waterfront zone, which is today attracting a number of global firm offices, shops, museums, MICE events, and tourists from around the world.

City center enhancement projects including MM21 were aimed at strengthening the economic function of the city, in order to transform itself from a mere bedroom town for commuters to Tokyo into a new economic center that

provides employment opportunities, investment attractions, and entertainments. To create employment in the City, half the number of commuters to Tokyo at the time was set as the target number of employment in MM21 (190,000 people).

However, so much land in Yokohama City including this waterfront zone used to be dominated by heavy industries and factories in the 1960s. In order to implement the city center enhancement projects, the city conducted the 2) "Kanazawa Reclamation Project", the 660 ha land reclamation project that provided a designated industrial zone with highly environmental-conscious designs with wastewater treatment facilities and preserved greeneries.

Private heavy industrial companies decided to relocate to this area, by

utilizing vacant land for urban redevelopment projects of MM21. Nowadays, MM21 District is a showcase of Yokohama's urban development. In addition, factories that used to be scattered around the city were encouraged to relocate to this new area. The City worked on the negotiations with some of the private operators for the relocation. Their relocation improved the overall environment of the city and also created much vacant land, which was utilized creating more public spaces and facilities.

3) "Kohoku New Town Project" was developed as a planned residential area with commercial centers, public facilities and agricultural land, and is today accommodating many commuters to the new city centers mentioned above. The new town was designed to provide a

Kohoku New Town Project



Source: Urban Development Bureau, City of Yokohama

Yokohama Municipal Subway



JICA Study Team

Source: JICA Study Team based on photos of JICA Study Team (1,5), "MINATOMIRAI 21 ECO Information", Urban Development Bureau, City of Yokohama (2,7,8), "URBAN DESIGN YOKOHAMA", Urban Development Bureau, City of Yokohama (3,4) and Nikken Sekkei Ltd. (6)

comfortable living environment while restraining the trend of disorganized, environmentally destructive construction of housing around the city. The new town offers green zones, parks, and hillside open spaces, designed to create a beautiful, livable environment for all residents.

Access Developments for Enhancing Mobility

In order to improve accessibility for these new areas and to solve traffic congestion, transport networks of 4) "subway development" and 5) "expressway development" were also implemented.

The subway network of the City was formulated to provide public transportation services to inconvenient areas where private railway companies didn't operate.

Municipal City Subway provided a good access for Kohoku New Town to the city center of Yokohama.

Expressways were also developed. The new expressways were designed to segregate the roads for local and medium-/long-distance travel to enhance mobility of people and goods both within and around the city. Though it was originally planned to develop an elevated expressway in the city center, the City discussed with the National Government and finally decided to develop an underground expressway to preserve the

landscape and commercial functions of the city center. This is one of the experiences which the City developed transport infrastructure from viewpoint not only of traffic functions but also of overall urban development.

The City also accomplished the construction of an 860 m "Yokohama Bay Bridge" in the Port of Yokohama, mainly designed for goods transport by heavy trucks as a direct route between the portland industrial area in the City and the Tokyo area. The segregation of cargo traffic helped reduce congestion within the city, and the bridge became a new monumental icon for the waterfront area.

Yokohama Bay Bridge



Photo by Mizuho Kuwata