



Responsible Land Governance: Towards an Evidence Based Approach

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Case Study of Integrated Housing and Railway Development (Kohoku New Town and Yokohama City Metro Development)

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Abstract

During Japan's period of rapid economic growth, rapid urbanization took place in Yokohama City, bringing about new inflow of population from Tokyo Metropolitan Region. In order to accommodate the inflow of population from Tokyo and at the same time develop into a city with a livable environment, the city developed the Kohoku New Town as a new center that was expected to be open to the community and to adopt the Transit Oriented Development (TOD) concept with construction of municipal subways. About 1,317 hectares underwent land readjustment project was implemented in the Kohoku New Town for 31 years. The Kohoku New Town achieved the following with the recovery of development profits from TOD.

- Government and land owners came together to create a new urban area
- Through land adjustment and railroad/subway development, total development and transportation infrastructure was created.
- Daily convenience was increased and a green, warm living environment was provided.
- Through the concentration of commercial and administrative functions, a city was created that draws any visitors from both inside and out of the city.

Key Words:

Yokohama city of Japan, Kohoku New Town, Transit Oriented Development (TOD), Land Readjustment, Railroad/subway development, Recovery of development profits (Land value capture)



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1. Background, Aims and Concept

During Japan's period of rapid economic growth, rapid urbanization took place in Yokohama City, bringing about new inflow of population from Tokyo Metropolitan Region. However, until the mid-1960s, legislative tools to regulate development were absent, allowing land ownership and land use to revert to land owners. Developers (both private and public) were not obliged to develop public utilities to maintain a good living environment; hence issues such as the degradation of water sources, lack of arterial roads, insufficient number of schools, among others, were all imposed on the municipal governments, depleting municipal coffers.

Although Yokohama's northern area, which eventually became the site of Kohoku New Town, was not yet urbanized at the time, arterial roads and railways leading to metropolitan Tokyo were then being constructed at a high pace, which presented the possible threat of a disorderly development and urban sprawl in the area. It seemed then that Yokohama City was destined to become a mere bedroom town of Tokyo, while answering the huge demand for infrastructure and services such a role would require.



Bird's eye view of Town Center of Kohoku New Town



Tokyo's rapidly growing population, the Kohoku New Town project set its ultimate goal, i.e., to control disorderly development and urban sprawl. This is specifically what makes Kohoku New Town worthy of special mention.

2. Project Implementation and Outcomes

Kohoku New Town is a project which aimed to construct a 21st century city, with a population of 300,000 in an area covering 2,500 hectares of hilly land in the suburbs. It is located 12 km northwest of downtown Yokohama and 25 km southwest of downtown Tokyo. In 2010, Kohoku New Town had a total of 75,000 households with 199,000 residents.

The objectives of the project were to: (i) prevent disorderly development and urban sprawl, (ii) establish a new model of suburban development, (iii) pursue public participation, (iv) restore development benefits to the public, and (v) initiate the development of infrastructure and good living environment in residential areas. Key strategies to realize these goals are described in the following paragraphs.

The basic concept of the plan was formulated by residents, the city government, and the developer, which is the Housing and Urban Development Corporation (HAUDC). These three bodies organized a forum to discuss the plan to create an ideal city whose inhabitants would play a major role in its development. The 2,530-hectare new town area was divided into: (i) areas for housing development, (ii) areas for agriculture, and (iii) other areas. The division itself was discussed among residents to reach consensus. Eventually, this became the leading program to improve Yokohama's relatively low standard of living environment at that time.

The goal was to plan the urbanization of residential areas ensuring good environments with competitive town centers, multifunctional parks, and green belts. As for the remaining areas, the natural environment was preserved; exclusive agricultural areas were allowed to ensure the steady supply of foodstuff and horticultural products.

About 52% (1,317 hectares) of the entire 2,530 hectares underwent land readjustment which was implemented by the HAUDC. While in most cases it was normal to expropriate land for such kind of development, Kohoku New Town adopted the land readjustment scheme. Moreover, the city allowed land owners to select the location of land to be given to them as compensation, a normal practice nowadays but something quite innovative at that time. Measures to recover livelihoods were also customized according to the land owners' needs; technical advice on urban agriculture was given to those who wanted to remain farmers, along with the support in agricultural infrastructure in the area, while professional advice to conduct real estate business or support for occupation changes was given to those who gave up farming.



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Another important aspect of the Kohoku New Town development project was that while it continuously attracted resident not only from its vicinities but also from metropolitan Tokyo through the development of attractive commercial facilities, it ensured that the private sector participated in community development activities and that their development also worked for the public good.

3. Green Matrix

Green Matrix: This idea was applied in urbanized areas with 220,000 inhabitants. The activity involved building a 14.5-km green road as the area's center; a network of parks with diverse functions, preserved shrines and temples; hillside open spaces; and public utilities to promote the expansion of "green zones," thereby creating a green belt inside the residential area which serves as the backbone of the new town. Through this program, the city enhanced its disaster-preservation efforts, increased its accessibility to natural environment, and gave residents access to recreational space. The unexcavated cultural assets from the Jomon and Yayoi eras (from 145 BC to 3 AD) are carefully preserved in parks as precious historical assets of the area.



Green Matrix Map and Pedestrian Road

4. Participatory community development:

The new town's residential area was divided into apartment housing districts and detached housing districts. Apartment housing which opened to the public in 1983 was built in areas around train stations and major arterial roads, and citizens of Yokohama got top priority to move into them. Various public facilities for high-level social services were jointly developed to benefit it's the inhabitants. A 74-hectare town center was established in the central area to



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accommodate commercial, business, and cultural activities. As a result, Kohoku New Town now serves as a sub center in northern Yokohama.



Green Pedestrian Street and Nightscape of the Town Center

4. Project Cost and Effect of City Tax Revenue

It was estimated that the total investment cost borne by the city for the land readjustment project, which exceeded 100 billion yen, has been recouped by the increase of the city tax revenue within 5 to 6 years, because increase amount was meanwhile estimated as 20 billion yen per year.

City tax revenues mentioned above are being used for general expenditures including maintenance cost of roads/parks, operational cost of public schools and cost for childcare support, etc.

5. Strong transportation and infrastructure development:

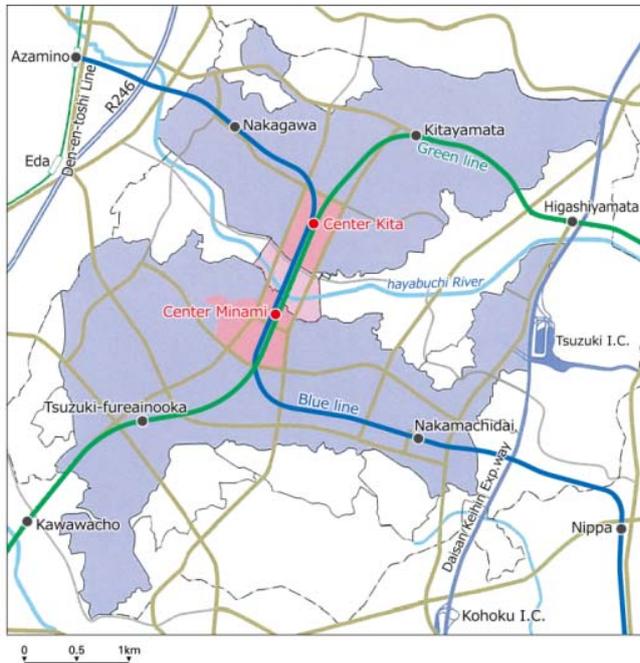
The plan was designed to create a hierarchical road system with three distinct road functions, i.e. arterial roads, district distributors, and exclusive pedestrian paths. Simultaneously, Municipal Subway Route No.3, also known as the “Yokohama Blue Line” and No.4, also known as the “Yokohama Green Line”, was constructed to connect with other parts of the city. The Blue Line connected the existing city center of Yokohama, the Shin Yokohama transportation terminal, and Kohoku, thus forming a new urban axis. Six stations were constructed within Kohoku New Town.

Three east–west arterial roads and five north–south arterial roads were also constructed to form the city’s backbone, and these were connected to interregional trunk roads to ease access traffic to other cities.



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Transport Network Map, Yokohama Metro (Subway) Blue line, and Trunk road along the Town Center

6. Conclusion

The Kohoku New Town achieved the following with the recovery of development profits from TOD.

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