

THE PRESERVATION AND RESTORATION OF TOKYO RAILWAY STATION
IN THE PROCESS OF URBAN REDEVELOPMENT AND STRATEGIC PLANNING

A Thesis

Presented to the Faculty of the Graduate School

Of Cornell University

In Partial Fulfillment of the Requirements for the Degree of

Master of Arts

By

Jiageng Zhu

February 2016

© 2016 and Jiageng Zhu

ABSTRACT

The recently restored Tokyo Station and its neighboring Marunouchi District, in the urban core of Tokyo, have experienced significant redevelopment in the past two decades. The successful restoration of Tokyo Station presents a valuable case for preservationists to reflect on how saving historic modern architecture is possible in an urban area where the land value is extremely high. As the business of real estate in Japan increases in significance and economic development is linked to new buildings in people's perception of progress, modern-era architecture that lacks designation is endangered by the process of urban renewal. This thesis explores the decision-making process behind the restoration of Tokyo Station and the redevelopment of its surrounding area and discusses the rationale of this restoration and redevelopment.

The restoration of Tokyo Station is not merely a preservation effort. It should also be placed within the context of the re-developing transportation industry, the transformation of the local and the national economies, and the preservation climate in Tokyo. By reviewing secondary documents and data to construct the basic framework for the analysis of the restoration, this work demonstrates that the Tokyo Station project was associated with the changing economic conditions of Marunouchi District and the transformation of the railway industry; and that the restoration of Tokyo Station met the core interests of the major stakeholders in the district. Although the preservation group successfully attracted broad attention to the need for the preservation of Tokyo Station it played only a limited role in the actual process of redevelopment.

BIOGRAPHICAL SKETCH

Jiageng Zhu was born in Shanghai, and grew up in Beijing, China. Having stayed in Hong Kong for 4 years and spent one year in Helsinki, Finland as an exchange student, he completed his bachelor degree at the Chinese University of Hong Kong in July 2013. During his research on the redevelopment of one of Beijing's historic commercial districts, Qianmen, for his undergraduate final year project, he generated great interest in the historic preservation, especially in an urban context, where the tension between real estate development and preservation is so intensive. With this passion, he was admitted to Cornell University's Master of Arts in Historic Preservation Planning Program in August 2013. At the same time, he has been a fan of Japanese culture since his first visit to Osaka during the high school in 2006. He minored in Japanese language in Hong Kong, and continued to study the language and Japanese architecture after entering Cornell's graduate school. His internship experience in Tokyo, Japan during the summer of 2014 led him to construct his master thesis on one of Tokyo's recent preservation cases that attracted wide attention. He intends to pursue his career in the field of historic preservation and further investigate the restoration efforts that have taken place in urban areas.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to Professor Michael A. Tomlan, for his patience, thoughtfulness and support throughout my two years at Cornell. Without his help and encouragement, I would not be able to go to Japan to complete my summer internship there in 2014 and dig into the topic that I really have passion for. His immense knowledge and generous guidance led me through ups and downs of this long journey from the very first moment. I also want to thank my second committee member, Professor Jeffrey Chusid, for providing insightful comments and contributing his knowledge to this thesis. My thanks also go to Professor Leonard Mirin, who supervised my independent study in the history of Japanese modern architecture.

I have been extremely grateful to have known Sachiko Kuwahara (MRP '07), who was willing to spend her valuable time to make my summer internship in Tokyo possible and provided all she can help during my stay in Japan. I am also tremendously thankful to Yushi Yoshida, my internship supervisor at Nikken Sekkei Research Institute (NSRI), from whom I learned a lot about Tokyo's railway system and station area development, and all other colleagues I worked with at NSRI. Makotoni arigatougozaimashita.

My research has been partially funded by the Barclay Jones Research Grant from Historic Preservation Planning Alumni, Inc., and supported by Cornell University Library, especially many librarians at Fine Arts Library and Uris Library, to whom I express my sincere gratitude.

I also appreciate the help and accompaniment of my HPP classmates, my Chinese friends at Cornell, and Nathaniel Guest and Tina Nelson among many other faculty and staff at the Department of City & Regional Planning. My special thanks goes to Bowei He, who always stands by me, trusts in me, and empowers me in the past two years. Last but not least, I must

thank my parents for being there, supporting my study abroad, and allowing me to do what I would like to pursue. I love you from the bottom of my heart.

TABLE OF CONTENTS

ABSTRACT	iii
BIOGRAPHICAL SKETCH	iv
ACKNOWLEDGEMENTS	v
LIST OF FIGURES	viii
LIST OF TABLES	x
INTRODUCTION	1
CHAPTER 1: RAILWAY DEVELOPMENT AND THE TRANSFORMATION OF THE TRANSPORTATION INDUSTRY IN TOKYO	13
Transportation in Transition During and After “Meiji Restoration”	14
Post-war Transportation Development and the beginning of Shinkansen Program	15
Environmental and Equity Issues, and Their Implications in Transportation Policy	22
Conclusion	24
CHAPTER 2: CHANGING ECONOMIC OUTLOOK OF JAPAN AND ITS CAPITAL CITY	26
Rapid Economic Recovery of Postwar Japan and the Transformation of its Economy	27
Changing Economic Outlook of Tokyo	35
Conclusion	47
CHAPTER 3: PRESERVATION CLIMATE IN TOKYO AND PRESERVATION OF RAILWAY HERITAGES	49
The Japanese Designation and Registration System	50
Local Designation, Protests and Preservation Activities in Tokyo	57
Preservation of Railway Heritage and Stations in Japan	61
Conclusion	64
CHAPTER 4: EVOLUTION OF MARUNOUCHI DISTRICT AND REDEVELOPMENT OF TOKYO STATION AREA	67
Brief History of Tokyo Station, and Its Recent Development	68
Development of Marunouchi District and Its Changing Economic Outlook	74
Preservation Efforts and the Preservation Group “Citizens who love the red-brick Tokyo Station”	86
Conclusion	88
CHAPTER 5: THE RESTORATION OF TOKYO STATION AND COMPARISON WITH THE REDEVELOPMENT OF UENO AND SHIBUYA STATION	92
Review of Tokyo Station’s Restoration and the Redevelopment Project	93
Comparison of the redevelopment of Tokyo Station with Ueno Station and Shibuya Station	101
Conclusion	109
CONCLUSION	113
BIBLIOGRAPHY	118

LIST OF FIGURES

- Figure 1 – Map of Tokyo Station’s Surrounding Area
- Figure 2 – Map of Tokyo, Japan with Highlight of Tokyo Station and Marunouchi
- Figure 3 – The Original Design of Marunouchi Ekisha and Its Appearance After the Second World War
- Figure 4 – Restored Marunouchi Ekisha and High-rise Towers Constructed in the Station Area, 2013
- Figure 5 – Marunouchi Building Before and After Demolition and Reconstruction
Marunouchi Building Before and After Demolition and Reconstruction
- Figure 6 – Tokyo Central Post Office Building Before the Demolition and the New JP Tower Reconstructed On the Site
- Figure 1-1 – Share of Domestic Freight Transportation in Tonnage Carried
- Figure 1-2 – Share of Domestic Freight Transportation in Ton-Kilometres Carried
- Figure 1-3 – Share of Domestic Passengers Carried
- Figure 1-4 – Share of Domestic Passenger-Kilometres Carried
- Figure 1-5 – Passengers Carried by Railway Transport of Major Countries in Million-Kilometers in 2008
- Figure 1-6 – Freight Carried by Railway Transport of Major Countries in Million-Ton-Kilometers in 2008
- Figure 2-1 – Real GDP, Japan, 1880-1995
- Figure 2-2 – Percentage of Employment in Different Industries 1950-2005
- Figure 2-3 – Comparison of Tokyo and Japan’s Gross Product in Different Industries, 2011
- Figure 2-4 – Percentage of Gross Product by Different Industries of Tokyo, 1960-2010
- Figure 2-5 – Percentage of Employee Numbers by Industries in Tokyo and Osaka, 2010
- Figure 2-6 – Change of Tokyo’s Residential and Commercial Land Value, 1975-2009
- Figure 4-1 – Map of Tokyo Station and Its Surrounding Area
- Figure 4-2 – Evolution of Tokyo Station’s Station Buildings and Tracks from 1914 to 1980
- Figure 4-3 – Development Model of Tokyo Metropolitan Region 1987 with larger double circles showing the urban core and the smaller double circles and other circles showing subcores and other centers

Figure 4-4 – Development Model of Tokyo Metropolitan Region 1991

Figure 4-5 – Development Model of Tokyo Metropolitan Region 2000

Figure 4-6 – Organizational Structure of the Advisory Committee on Ootemachi-Marunouchi-Yurakucho Area Development

Figure 4-7 – Facilities for landscape/style and cultural exchange within the redevelopment district

Figure 5-1 – “Tokyo Station City” Redevelopment Plan

Figure 5-2 – Tokyo Station Special FAR Applicable District and Transfer of Development Rights

Figure 5-3 – Ueno and Shibuya Stations Highlighted in the Map of Tokyo

Figure 5-4 – Large Group of Young People from Rural Areas Arriving at Ueno Station to Support the Rapid Economic Growth in the 1950s and 1960s

Figure 5-5 – Arata Isozaki’s New Ueno Station Building Model

Figure 5-6 – Demolition of Shibuya’s Station Building of Toyoko Line

Figure 5-7 – Shibuya Station Area Redevelopment Plan

LIST OF TABLES

Table 1-1 – Japan’s Freight Volume by Transportation Means
Table 1-2 – Japan’s Passenger Volume by Transportation Means
Table 1-3 – Major Commodities Carried by JNR
Table 1-4 – Japan’s Current Shinkansen Network
Table 2-1 – Percentage of Japan’s GDP Made Up By Different Economic Sectors
Table 2-2 – Nominal GDP and the Share Based on Different Industries 1955-1995
Table 2-3 – Nominal GDP and Its Change Based on Manufacturing Industries 1955-1980
Table 2-3 (continued) – Nominal GDP and Its Change Based on Manufacturing Industries 1985-2005
Table 2-4 – Nominal GDP Based on Different Industries 2000-2012
Table 2-5 – Different Industries’ Share of Gross Product 2000-2012
Table 2-6 – Population and Population Growth Rate of Tokyo, Tokyo Metropolitan Region and Japan, 1956-2010
Table 2-7 – Population Growth of Tokyo and Tokyo Metropolitan, 1956-2014
Table 2-8 – Gross Products of Tokyo and Japan
Table 2-9 – Gross Products of Tokyo and Japan by 3 Sectors of Industries
Table 2-10 – Location Quotient of Tokyo, 2005
Table 3-1 – Comparison of Designated and Registered Cultural Properties by Different Periods
Table 3-2 – Current Cultural Properties System of Japan
Table 3-3 – Top 5 Prefectures with Most Designated Cultural Properties
Table 3-4 – Number of Designations and Percentage of the Total Designation by Different Periods in Tokyo and Japan
Table 3-5 – Top 5 Prefectures with Most Registered Cultural Properties
Table 3-6 – Number of Registration and Ratio to Total Registration by Different Periods in Tokyo and Japan
Table 4-1 – Ranking of Daily Passenger Volume of Tokyo’s Major Railway Stations
Table 4-2 – The Annual Passenger Volume and Volume of Commuters and Non-Commuting Passengers at Tokyo’s Major Railways Stations, in thousands
Table 4-3 – Land Price Growth of 3 Central Wards in Tokyo

Table 4-4 – Commercial Real Estate Vacancy Rate of 5 Central Wards in Tokyo 1995-2011

Table 4-5 – Commercial Real Estate Rent Rate of 5 Central Wards in Tokyo in Japanese Yen/Tsubo 1997-2011

Table 5-1 – Schedule of JR-East’s “Tokyo Station City” Redevelopment Project

Table 5-2 – Tokyo Land Price in 1000 Japanese Yen/m²

Table 5-3 – Summary of Four Major Redevelopment Projects in Shibuya Precinct

Table 5-4 – Comparison of Redevelopment Projects at Tokyo Station, Ueno Station, and Shibuya Station

INTRODUCTION

No matter if you are an international tourist arriving at Tokyo on an airport express train from any of Tokyo's two airports, or you visit the city by either domestic train or Shinkansen, the renowned bullet train service, from other part of Japan, many of the visitors are likely to first encounter the enormous and complex Tokyo Station after their arrival at the capital city. Known as the gateway to Tokyo, a global city that currently accommodates over 13 million people and contributes to about 18% of the entire nation's GDP, Tokyo Station has been one of the major hubs of the nationwide railway network in Japan since it opened in 1914 and the largest Shinkansen station that serves more Shinkansen passengers than any other stations throughout the country. The station is located at the heart of the city, next to the eastern side of the Imperial Palace, which was described as the empty center inhabited by an emperor whom no one ever sees¹. Tokyo Station has two main exits, Marunouchi Exit and Yaesu Exit (Figure 1). While the Marunouchi Exit of the station faces Tokyo's financial district, Marunouchi District, and the Imperial Palace in the distance, the Yaesu Exit leads to the Nihonbashi District, a traditional commercial area of the city.

¹ Roland Barthes, *L'Empire des Signes*



Figure 1 – Map of Tokyo Station's Surrounding Area (source: http://s29.postimg.org/mib8h50iv/area11_map_en.jpg)



Figure 2 – Map of Tokyo, Japan with Highlight of Tokyo Station and Marunouchi (source: www.tokyomap.com)

This research mainly revolves around the preservation and the restoration of Tokyo Station's station building on the side of Marunouchi Exit, which is known as *Marunouchi Ekisha* in Japanese. The story of Tokyo Station, its station building, and the efforts to restore it, also entails the discussion on the redevelopment of the entire station area and the central business

district among the government, the developers, the railway company, and the local community. Opened in 1914 after the completion of *Marunouchi Ekisha* (Figure 3), Tokyo Station soon stimulated the development of the entire region and witnessed the transformation of Marunouchi District after the 1923 Great Kanto earthquake. The station was also important to the imperial family's royal visit and closely associated with the power of emperor. The open space in front of *Marunouchi Ekisha* became the venue for a series of ceremonies to celebrate Japan's victory over Russia in the Russo-Japanese War, which marked the rise of Japan as a modern nation that was able to compete with western powers. The station building was devastatingly damaged due to the bombardment during the Second World War. The post-war repair work did not restore most of its 3rd floor and the north and south domes on top in order to restart the operation of railway services as soon as possible (Figure 3). Tokyo Station, therefore, was regarded as an important cultural property to the country and a railway heritage that witnessed the rises and falls of Japan and the transformation of its capital city.

As Tokyo Station celebrated its 100th anniversary in December of 2014 with the completion of a major restoration of *Marunouchi Ekisha* to its original appearance in 2012 as shown in Figure 2, the city center of Tokyo and its central business district, Marunouchi District, where the station is located, also transformed over the past few decades towards a global financial center (Figure 4). Many high-rise office towers recently constructed in the station area were made possible by the transfer of development rights from Tokyo Station, which had unused Floor-Area Ratio (FAR) under current zoning. The restoration of Tokyo Station truly became an essential part and a strategic component of the entire area's redevelopment. Besides the preservation and restoration of this historic station building, the redevelopment also led to the demolition of many other historic buildings, including *Tetsudo Kaikan*, a station building on the

other side of the station, the original *Marunouchi Building*, a modern-era office building near the Marunouchi Exit of Tokyo Station (see Figure 1), and the original Tokyo Central Post Office Building next to *Marunouchi Ekisha* (Figure 5 and Figure 6).



(大正3年)しゅん功当時の正面



現在の駅舎

Figure 3 – The Original Design of Marunouchi Ekisha (Top) and Its Appearance After the Second World War (Down) (source: http://blogs.c.yimg.jp/res/blog-7f-3d/sekisen_tsurezure/folder/1602825/56/52988856/img_0)



Figure 4 – Restored Marunouchi Ekisha and High-rise Towers Constructed in the Station Area, 2013 (Source: www.japan-guide.com)



Figure 5 – Marunouchi Building Before and After Demolition and Reconstruction (source: <http://blogs.yahoo.co.jp/teds3d/2069675.html>; <http://bb-building.net/tokyo/image/tokyo/501-01.jpg>)



Figure 6 – Tokyo Central Post Office Building Before the Demolition and the New JP Tower Reconstructed On the Site (source: <http://solidthinking.sblo.jp/article/12620406.html>; https://en.wikipedia.org/wiki/JP_Tower)

The redevelopment of Tokyo Station's surrounding area over the past three decades has significant socio-economic and political implications. It is not a simple story in which preservationists and local community members stood up to fight against developers. Instead this discussion portrays a dynamic interaction among representatives of the national and local government, the East Japan Railway Company (JR-East), the developers of the district, and members of the community. It took place in response to the changing needs of these different parties, who in turn were responding to the changes of the transportation industry, local and national economy, and the city's preservation climate.

This thesis explains the steps that were taken by using a number of different sources. The basic information was gathered through secondary sources, including journals and newspapers, statistical data from official government departments, and planning guidelines. The study also adopts statistical analysis to explain the changing socio-economic environment and

transportation industry, while attempting to understand these transformations and Tokyo's preservation climate through literature reviews. All this material was found in the Cornell University Library and several other locations including Asahi Shimbun Online Database, Government online statistics, and WorldCat. In addition to the case study of Tokyo Station area's redevelopment project, two other case studies of railroad station in Tokyo are discussed briefly. The time frame for the redevelopment of all of them is roughly the same.

The first chapter will discuss the railway development in Japan since the Meiji Restoration. Both the Meiji government and the Japanese military force at that time recognized the significance of railroads as an efficient tool to unify the country and catalyze industrialization. Under the tight control of the government, railroads remained at the center of its transportation and economic development policy for decades, and stimulated the country's capitalism. Railway services, connection networks, and technology advanced drastically prior to World War II. While the rapid recovery of post-war Japan's economy in the 1950s and 1960s created enormous demand for both freight and passenger transportation, railroads started to lose their privilege in comparison to roads. Public investment in road infrastructure was favored over railway improvement. Even though public policy was slightly modified in response to the oil crisis in the 1970s and environmental and social equity issues, the preference for passenger vehicles has not been reversed. Given the success of the Shinkansen project and other railway service improvements, however, railway transportation has retained some of its competitiveness in passenger transportation. The privatization of its national railway company, encouraged the railway company to adjust its strategies to make better use of its resources and capture the value within the dynamics, sets the stage for the following chapters.

In Chapter 2, the focus is Japan's changing economic outlook, in the late twentieth century and the early twenty-first century. Prior to the 1970s, the rapid expansion of the entire economy resulted in growth in all industries. Manufacturing outranked the other industries, while agriculture, forestry and fishing, although they grew, dropped significantly in their share from 25% to less than 5% in a 20-year period. From the 1980s, manufacturing also lost strength, while the service sector became the leading engine of economic growth. These changes had major implications for how travel demand and behavior would develop and the type of freight and passenger railway services needed. In Tokyo, multiple functions began to concentrate in the city, especially the central wards, as large numbers of the population flew into the capital city during the rapid economic development period. Although the process slowed down as suburban areas attracted more residents and, later, due to the decrease of employment opportunities caused by the collapse of economic bubbles, in the recent decades Tokyo has again witnessed increasing population and a growing share of the nation's gross product. Recent analysis of Tokyo's Location Quotient indicates that communication, finance and insurance, and real estate industry are three major export bases of the city. This indicates that the capital city is transforming into an advanced information society, dominated by the service sector.

Chapter 3 deals with Japan's national preservation system, known as the "Cultural Properties Protection Law," Tokyo's local preservation climate, and the influences on the preservation of railway heritage. Although a preservation law in Japan was first enacted in 1897 and evolved over time to include extensive categories for protection, the law was seen as a response of the central government to the increasing influence of western culture in Japan and was an attempt to preserve ancient temples and shrines that represented Japan's traditional culture. The modern protection system of Cultural Properties designation enacted in 1950

inherits these ideas and has an emphasis on pre-modern structures. Tokyo, having been devastated by the Great Kanto Earthquake in 1923 and bombardment during the World War II, has few structures constructed prior to the Meiji Restoration. It has more modern architecture that reflects the nation's industrialization, which is not well protected through the government's legal framework of preservation that favors the protection of pre-modern structures. The registration system enacted in a recent amendment to the preservation law that aimed to give a level of protection to modern structures in need of preservation and reuse limited in terms of provisions for economic incentives and regulations for the property owner to preserve the historic building, especially for commercial buildings. Preservation efforts at the grassroots level, on the other hand, became more sophisticated in the 1970s and 1980s, after a series of failed protests against the US-Japan Security Treaty and the Vietnamese War. The preservation activities became more locally focused and less radical in strategy, working closely with environmental groups, and advocating for issues concerned with the quality of life. As the government started to encourage the private sector to contribute more to the national economy, private preservation groups also played a more active role in filling gaps in the official protection system. In addition, the prosperity of the railway culture in Japan puts the railway heritage in a more advantageous position compared to other modern structures.

Having discussed the development of the transportation industry, the transformation of the economy of Japan and Tokyo, and the preservation climate of the nation, the thesis continues with a discussion of the evolution of the Marunouchi District and the redevelopment of Tokyo Station area in the fourth chapter. Here we explore the development of Tokyo Station as a major terminal for the capital, the transformation of the Marunouchi District, which has been the central business district of the city, the preservation campaigns of local preservation groups, and

the influences of these factors on the treatment of Tokyo Station. The investigation digs into the history and the significance of Tokyo Station and how its tracks and station buildings evolved into its appearance today. As the economic condition of Marunouchi District changed, Tokyo Station started to serve an increasing number of travels without a commuter pass from the late 1980s, while the share of the number of commuters declined. Around the same time, the major local developer, Mitsubishi Estate Company, Ltd., sought to upgrade and expand office space in this financial district in response to the transformation of Tokyo into an information society and a global financial center. Meanwhile, the government endeavored to solve the problem of overconcentration of too many functions in the urban core, including Marunouchi District. The prompt action of preservationists, especially the preservation group named “Citizens who love the red-brick Tokyo Station”, in addition to the metropolitan government’s disapproval, impeded Mitsubishi Estate and JR-East’s ability to execute their plans to replace Tokyo Station and the Marunouchi District with high-rise towers. It was not until the mid-1990s when the government shifted its policy towards Tokyo’s urban core that the developers, JR-East, metropolitan and local governments, and other stakeholders were able to gather and effectively negotiate on the redevelopment plan that was later carried out.

In the last chapter, the redevelopment of Tokyo Station and its surrounding area will be described and explained in detail. The chapter will show how the redevelopment project satisfied the interest of developers, the government, and JR-East in the station area. It argues that the designation of *Marunouchi Ekisha* as Important Cultural Property and its restoration were made possible mainly because the redevelopment project fulfilled the needs of major stakeholders, although the preservation group continued to make efforts to communicate with the politicians and the railway company, and to advocate for the restoration of Tokyo Station in the

1990s. The case of Tokyo Station's restoration is then compared with the redevelopment of Ueno Station and Shibuya Station to demonstrate how different local economic conditions and interactions among stakeholders can result in different preservation outcomes.

CHAPTER 1: RAILWAY DEVELOPMENT AND THE TRANSFORMATION OF THE TRANSPORTATION INDUSTRY IN TOKYO

Introduction

Development and transformation of an industry have important implications for the decisions made on how its structures of the industry are treated. This transformation might inevitably change the value and use of a property, or create new demand on any asset of the industry. Transportation industry is not an exception to this statement. Abandoned railway stations or ports were commonly direct consequences of the termination of transport services. On the other end of the spectrum, transportation facilities on a valuable piece of land might not sustain their uses because other competitive uses could generate higher profits for the landowner than the operation of transport services. As the examples in Manhattan have indicated, threat of demolition both Penn Station and Grand Central Station faced resulted from the rocketing land price and increasing demands on office space. Therefore, an insight into the development of the transportation industry and railroads will provide a useful base on which the understanding of the decisions made towards any railway station could build up.

In Japan, the Meiji government started to modernize and industrialize the nation in the 1860s. Railroads, as an important catalyst for stimulating economic development, helped to unify the country and support its rapid industrialization under the planning and control of the government. The central government's tight control over the railway transportation, which was placed at the center of the nation's transportation policy, lasted until the end of World War II. The railroads faced enormous challenges from road transportation and declined in terms of freight and passengers carried shortly after the recovery of Japan's post-war economic

accelerated. On the other side, the success of Shinkansen, the high-speed railway program, in the 1960s, became the first bullet train service in the world. It created new possibilities for railway development and brought vital changes to the industry. This chapter seeks to explore this railway development process, to compare and contrast the railroads' strength and weakness in the recent transformation of transportation industry, and to identify important changes that shaped the Japanese Railway Company's development strategies.

Transportation in Transition During and After "Meiji Restoration"

Transportation systems in Japan during the Edo period primarily served military and administrative purposes, in which the Samurai class was given priority to use the roads and post-stations, while use by commoners was severely restricted. Five main highways (*Gokaido*) *Tokaido*, *Koshu-Kaido*, *Nakasendo*, *Oshu-Kaido* and *Kikko-Kaido*, radiated out from Edo (which is Tokyo today). They had been established as official routes during this period, and these *Gokaido* formed the basic structure of later railway and highway development in Japan.

It is not hard to imagine that this tightly controlled transportation system inherited by Meiji government, which imposed several restrictions on the flow of people, could not fulfill the new government's goal of unifying the entire nation and stimulating the country's industrialization, and would eventually be abandoned. As the government still tightly controlled the transportation system, it adopted the same transportation system that had fueled the development of capitalism in Europe by establishing and protecting transportation companies in both sea and land transport. The national transportation system included very expensive transport facilities.

Railroads that had been given the highest priority by the central government started being built in 1870s, and expanded very quickly in 1880s and 1890s. It was not long until both military and private investors realized their effectiveness in terms of transporting freight and cargo as well as soldiers. The national Japan Railway Company, created in 1881, oversaw the construction of all railroads, whereas private railway companies were only allowed to build at secondary locations. When the government found it necessary to strengthen its control on railroads, the private railways would be nationalized and included into the national railway system. This development was accompanied by Japan's rapid industrialization, especially in heavy, which in turn demanded for further extension of railway services. In addition, railway-related technology advanced quickly during World War I, and a large qualitative shift in transportation occurred in line with the changes in urban structure. Significant growth of population took place in the metropolitan areas as manufacturing progress concentrated in four industrial belts: Tokyo-Yokohama, Nagoya, Osaka-Kobe, and Northern Kyushu.

World War II interrupted this rapid development, and raised numerous problems concerning fuel supply, overloading, and lack of labour. National policy had shifted to provide adequate transport to prosecute the war and great damage had been caused on the transportation system during the wartime. The Occupation Authority took in charge of the recovery after the surrender of Japan, and the reconstruction began.

Post-war Transportation Development and the beginning of Shinkansen Program

The Occupation Authority did not immediately encourage a quick reconstruction of national and private railroads until the outbreak of Korean War in 1950. The Japanese economy benefited from the war and began to recover very quickly during this time. Thereafter, the

central policy was dedicated to stimulate economic growth with several long-range plans. These plans sought to accelerate travel demands with public investment targeted at railroads, roads, and ports. The Shinkansen project might be seen as part of the response to these new demands. The first Shinkansen, in 1964, Tokaido Shinkansen, had been an extraordinary success, which led to more construction. The success of Japan's Shinkansen program created a new era of high-speed railway and reversed the prior downfall trend of railway. This was in the face of increasing automobile, truck and air transportation. The railway system in Japan progressed with electrification, introducing electric trains and diesel multiple units. A limited express network was also re-introduced, all of which improved the operating efficiency.

Although the rapid economic growth and intensive public investment on transportation in the 1950s and 1960s triggered the development of all transportation means, the increase of productivity in the motor-vehicle industry at the same time, however, was even more remarkable. One of the reasons was that public investment on roads was favored over railway improvement. Among all the public investment on roads, industrial-use highway was favored over general-use roads. By the 1970s, in both freight and passenger transportation, roads surpassed railways in terms of tonnage of cargo and passengers carried, as well as ton-kilometers carried (Table 1-1 and 1-2). The leap of overall freight transport, as shown in Table 1-1, occurred during the 1960s, and this tremendous increase was mostly due to motor vehicles. The tonnage carried by railways peaked in the mid-1960s, and the ton-kilometers carried a bit later, in early 1970s. As the tonnage carried by railways kept declining, the ton-kilometers carried by railways stabilized after 1985. The passenger transport of railways did not suffer from as significant a decline but, instead, gradually increased the number of passenger and passenger-kilometers carried until early 1990s. Then the annual passengers carried by railways stabilized at the level of 21 billion, and

the passenger-kilometers figure at 380 billion. The increase in railway ridership, however, was not comparable to that of road transport, which became the most widely used passenger transport mode of the nation in 1966. The number of passengers motor vehicles carried doubled 4 times from 1950 to 1970, and is still the main source of ridership growth.

Table 1-1. Japan's Freight Volume by Transportation Means (Source: Japanese Statistics Bureau and Statistics Centre, 1950-2004)

	Tonnage Carried (million)					Ton-Kilometers Carried (billion)				
	Total	Motor Vehicles	Railways	Coastwise Vessels	Domestic Aviation	Total	Motor Vehicles	Railways	Coastwise Vessels	Domestic Aviation
1950	552	309	165	49	0.0	65	5	34	26	0.0
1955	832	569	203	59	0.0	85	10	44	32	0.0
1960	1503	1156	238	108	0.0	140	21	55	62	0.0
1965	2625	2193	252	180	0.0	186	48	57	81	0.0
1970	5223	4626	256	342	0.1	342	136	63	143	0.1
1975	5026	4393	181	452	0.2	361	130	47	184	0.2
1980	5981	5318	163	500	0.3	439	180	37	222	0.3
1985	5597	5048	96	452	0.5	434	206	22	206	0.5
1990	6776	6114	87	575	0.9	547	274	27	245	1.0
1995	6643	6017	77	549	1.0	559	295	25	238	1.0
2000	6371	5774	59	537	1.1	578	313	22	242	1.1
2004	5569	5076	52	440	1.1	570	328	22	219	1.1

Table 1-2. Japan's Passenger Volume by Transportation Means (Source: Japanese Statistics Bureau and Statistics Centre, 1950-2004)

	Passenger Numbers (million)					Passenger-Kilometers (billion)				
	Total	Motor Vehicles	Railways	Passenger Vessels	Domestic Aviation	Total	Motor Vehicles	Railways	Passenger Vessels	Domestic Aviation
1950	9907	1515	8392	-	0.0	118	9	106	2.6	0.0
1955	14117	4262	9781	74	0.0	166	28	136	2.0	0.2
1960	20291	7901	12290	99	1.2	243	56	184	2.7	0.7
1965	30792	14863	15798	126	5.2	383	121	256	3.4	2.9
1970	40605	24032	16384	174	15	587	284	289	4.8	9.4
1975	46194	28411	17588	170	25	711	361	324	6.9	19
1980	51720	33515	18005	160	40	783	432	315	6.1	30
1985	53866	34679	18990	153	44	858	489	330	5.8	33
1990	66929	44762	21939	163	65	1131	686	387	6.3	52
1995	73531	50674	22630	149	78	1233	762	400	5.6	65
2000	76422	54572	21647	110	93	1296	828	384	4.3	80
2004	80187	58306	21686	101	94	1308	837	385	3.9	82

In terms of the share of both freight and passenger transport, measured in both tonnage carried and ton-kilometer carried, it is apparent as shown in the following four figures that railway transport's share in all these four sectors has been taken up by the motor vehicle, and this process had been especially fast from 1950s to 1970s. In the passenger transport sector, the still-rising aviation industry started to take railway transport's share in passenger-kilometers carried since 1970s (Figure 1-4), mostly for medium-to-long distance domestic travels.

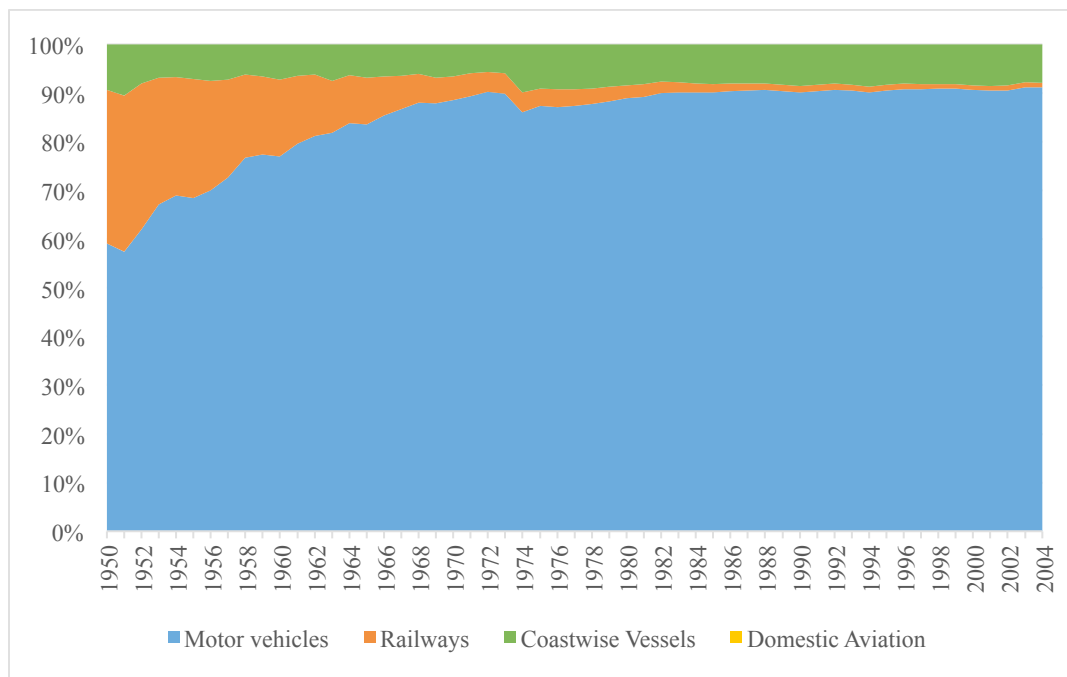


Figure 1-1. Share of Domestic Freight Transportation in Tonnage Carried (Source: based on the data collected from Japanese Statistics Bureau and Statistics Centre, 1950-2004)

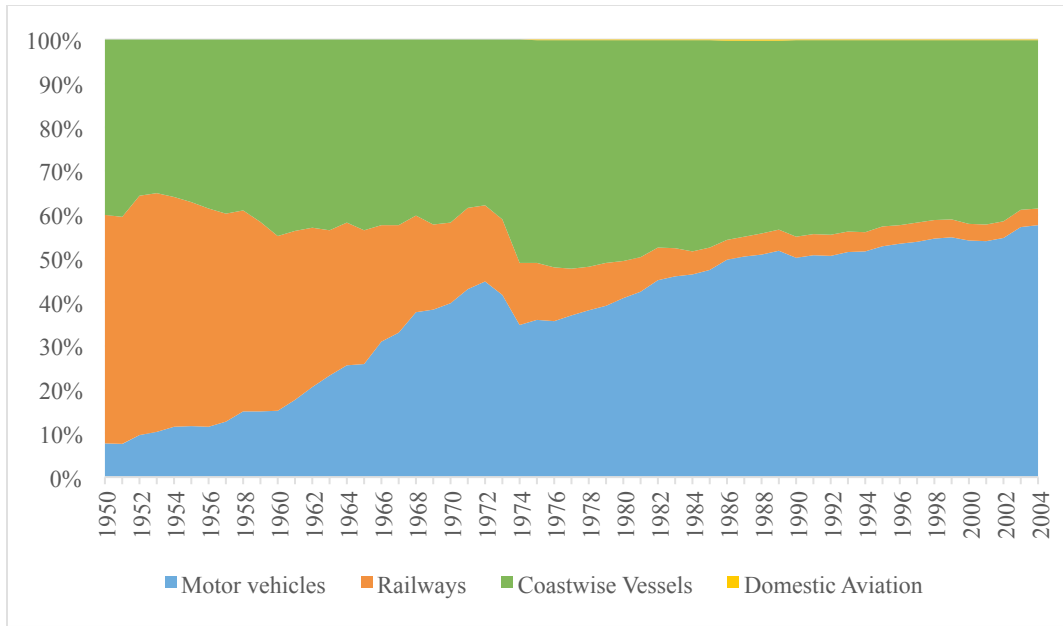


Figure 1-2. Share of Domestic Freight Transportation in Ton-Kilometres Carried (Source: based on the data collected from Japanese Statistics Bureau and Statistics Centre, 1950-2004)

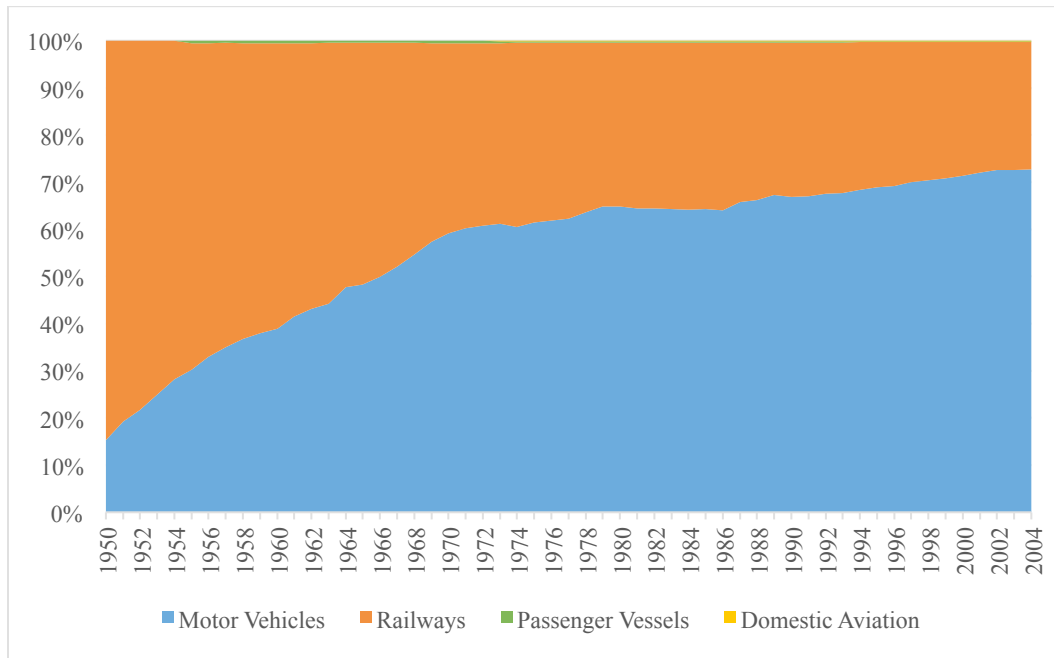


Figure 1-3. Share of Domestic Passengers Carried (Source: based on the data collected from Japanese Statistics Bureau and Statistics Centre, 1950-2004)

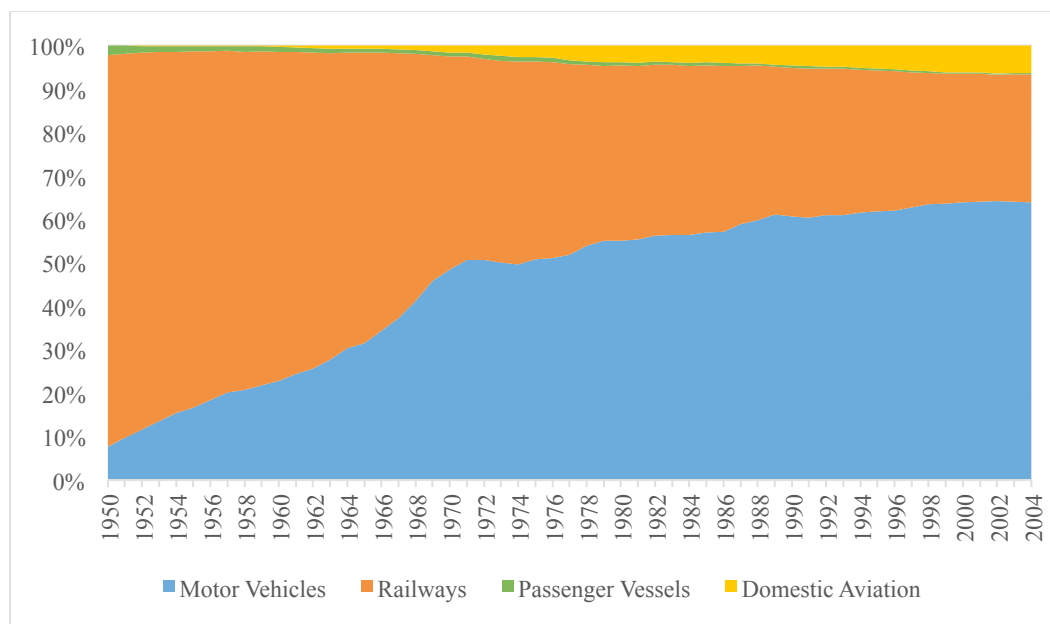


Figure 1-4. Share of Domestic Passenger-Kilometres Carried (Source: based on the data collected from Japanese Statistics Bureau and Statistics Centre)

The Japanese railway system retains its competitiveness in passenger transportation, while it has declined dramatically in its significance in the share of freight transportation. In comparison to other countries, Japan's railway system still carries a significant amount of passengers, especially among developed countries (Figure 1-5), but the railroad freight transportation volume is comparatively trivial (Figure 1-6).

It is noteworthy that the passenger revenues have almost always dominated over freight revenues throughout Japan's railway history. Japan's geography and topography favor ships rather than trains, and the country's major population and hubs are located along the coast. It is conspicuous from Figure 1-2 that coastal shipping has had a stable and considerable share of freight transport in Japan. Another constraint to the development of rail freight was that Japanese railway system used narrow-gauge tracks that limited its ability to carry a larger freight loads. It could not compete with coastal shipping that offers far cheaper tariffs for bulk

commodities, as well as trucks for their higher speeds and flexibility in transporting small high-value goods. Rail freight's advantages in medium- or long-distance heavy haulage gradually vanished as coal mining and forestry declined beginning in the late 1960s (Table 1-3). The Japanese National Railway Company accumulated heavy debts due its freight business, and thus in 1984, it launched a massive reform to abandon the entire relay system and shut down all marshaling yards nationwide, leaving only express freight trains making direct links among major stations.

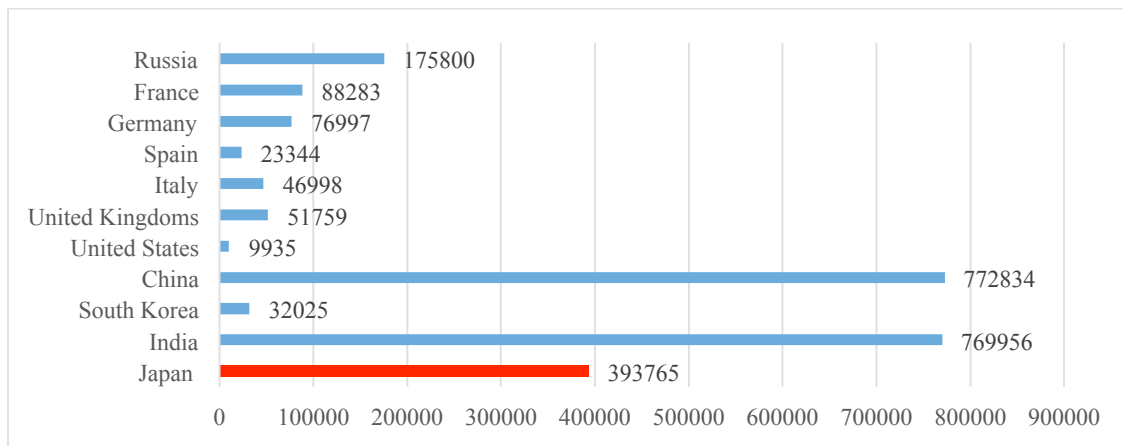


Figure 1-5. Passengers Carried by Railway Transport of Major Countries in Million-Kilometers in 2008 (source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan, 2012)

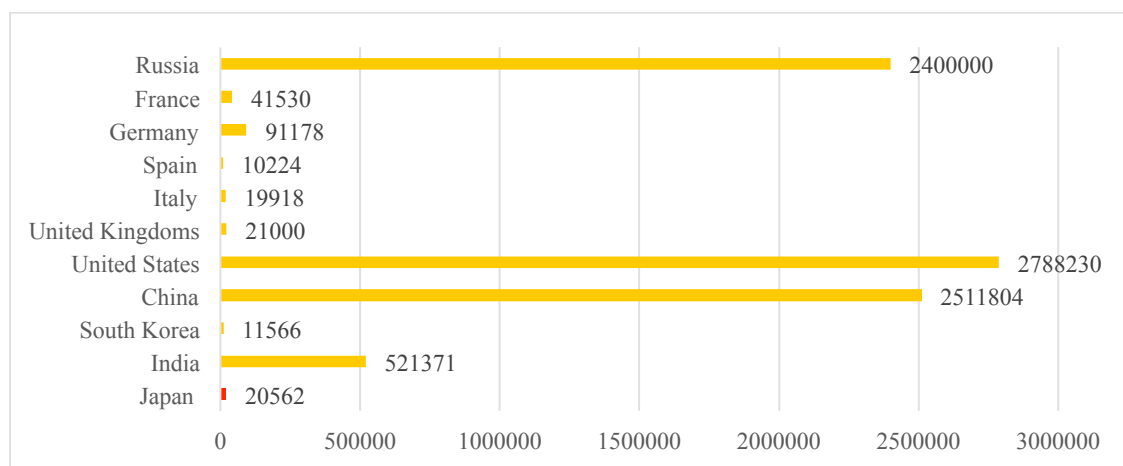


Figure 1-6. Freight Carried by Railway Transport of Major Countries in Million-Ton-Kilometers in 2008 (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan, 2012)

Table 1-3. Major Commodities Carried by JNR (Source: JNR Statistics, cited in *A History of Japanese Railways 1872-1999*)

Fiscal Year Type of Freight	1950	1955	1960	1965	1970	1975	1980	1985
Coals	28314	33874	39167	31360	18040	6588	5891	4378
Coke, Coalite	1319	1551	1850	1832	1946	1254	880	354
Gravel, Sand	4034	4581	4270	3224	2765	1261	477	169
Limestone	3177	5755	9700	10668	13311	16782	15342	7665
Iron, Steel	2399	2923	5308	4117	5801	3498	2368	537
Timber	12257	14045	13166	11897	8459	2934	1597	94
Rice	2413	2999	3921	4549	4961	3716	2998	684
Other grains	2044	2796	1775	1998	1559	1081	863	377
Fruit	1346	960	1645	1737	1366	647	321	49
Fresh and frozen fish	1459	1963	2548	2550	1643	482	195	22
Chemical fertilizers	3585	5327	6833	6981	8533	6295	5366	623
Petroleum	938	2280	4483	8821	15139	15631	16499	8371
Chemicals	NA	NA	NA	4471	5748	4182	3654	1384
Cement	3060	6930	11451	14507	16394	14213	14986	9326
Pulp	564	1288	1412	1810	2223	1296	697	222
Paper	858	1530	2524	3266	4539	3913	3194	2324
Containers	-	3769	3060	3019	8965	12114	9955	12184

Environmental and Equity Issues, and Their Implications in Transportation Policy

The environmental problems that arose with the rapid growth of road transport and motor vehicle production became visible in the 1970s. Extensive discussion followed over whether priority should be given to mass transit while applying restraint on motor vehicles especially after the oil crisis in 1973. The central government became involved in regulating transportation demand after the failure of its policy based on allowing free competition.

On the second stage of Shinkansen program, following the success of its first Tokaido Shinkansen, economic needs were not anymore the major driving force, as politicians intended to stress social equity issues by leading Shinkansen network into less populated and less profitable areas. The discussion on efficiency vs. equity and the distribution of social overhead capital

involved throughout later Shinkansen development. Among various national economic plans and comprehensive development plans, which had been modified very frequently to guide the direction of Shinkansen program in response to changing economic situation, Prime Minister Kakuei Tanaka's "remodeling Japanese archipelago" plan (*Nippon Rettou Kaizou-ron*) was set up in the 1970s. It became one of the most influential plans aimed at remodeling the country's population flows and regional development in order to solve the problem of urban overcrowding, environmental deterioration, and unbalanced interregional development. He envisioned an extension of Shinkansen network into secondary cities to achieve his goals in the plan.

The National Shinkansen Development Law was enacted in 1970, and the total length of Shinkansen scheduled for construction under the law was about 7000 km, which was approximately 2.67 times of current Shinkansen network length that had entered service so far, which is 2620 km. This ambitious expansion into low-density areas was soon proved to be unprofitable and the process slowed down in the 1980s. Consequently, the Japanese National Railway's financial difficulties worsened and the company split into seven private Japanese Railway companies in 1987. At the same time, Japanese manufacturers started to go overseas and enter the international market. The accompanying transformation of Tokyo into a postindustrial city shall be mentioned in more detail in next chapter. As a result, in the fourth National Comprehensive Development Plan, Tokyo again became the concentration of national economic development, which marked the failure of Tanaka's remodeling plan, and this time with increasing stress over international tourism and local culture.

Table 1-4. Japan's Current Shinkansen Network

	Start	End	Length (km)	Opened
Tohoku Shinkansen	Tokyo Station	Shin Aomori Station	713.7	1982.6.23: Ohmiya-Morioka 1985.3.14: Ueno-Ohmiya 1991.6.20: Tokyo-Ueno

				2002.12.1: Morioka-Hachinoe 2010.12.4: Hachinoeki-Shin Aomori
Joetsu Shinkansen	Ohmiya Station	Niigata Station	303.6	1982.11.15
Hokuriku Shinkansen	Takasaki Station	Nakano Station	117.4	1997.10.1
Tokaido Shinkansen	Tokyo Station	Shin Osaka Station	552.6	1964.10.1
Sanyo Shinkansen	Shin Osaka Station	Hakata Station	644	1972.3.15: Shin Osaka-Okayama 1975.3.10: Okayama-Hakata
Kyushu Shinkansen	Hakata Station	Kagoshima Central Station	288.9	2004.3.13 Shin Yatsushiro-Kagoshima Central 2011.3.12: Hakata-Shin Yatsushiro

Conclusion

Japan had already built up its railway network and advanced the technology prior to World War II. The railway, while stimulating the industrialization and economic development, primarily served for political and military purposes at that time. The country's defeat of World War II resulted in a situation in which the US had enormous influences on the reconstruction of Japan's transportation system. Consequently, the policy shifted to favor public investment on roads over railroads. While the rapid economic recovery generated transport demands on all means of transportation at the beginning of post-war era, the motor vehicle production, the construction and upgrade of express highway system, and the use of automobiles as freight and passenger transportation all increased dramatically prior to the oil crisis in the 1970s. Motor vehicles quickly took up the railways' share of domestic freight and passenger transportation in the 1950s and 1960s before this process slowed down in the 1970s. However, the oil crisis in the 1970s, along with the awakening awareness of environmental and social equity issues, encouraged the government and the society to reevaluate the pros and cons of road transportation and increasing use of motor vehicles. The success of first Shinkansen project between Tokyo and Osaka, together with the government's intension to expand this high-speed railway network to the entire nation, on the other hand, brought new development possibility for the railway

industry, especially for its passenger services. From the 1980s, the decline in the share of railroads in both domestic freight and passenger transportation decelerated. Railway transportation sustained the number of passengers it carried at the annual level of 20 billion after 1990, while the tonnage of freight it carried kept suffering from slight decline. It has been constantly observed that Japanese railway's passenger revenue has always exceeded freight revenue. By the 1980s, freight sector of the railroads shrank to the degree that the national railway company that at that time faced severe financial problems tried to retreat from its freight services. The Japanese National Railway Company was privatized in 1987 to seek better and more efficient use of its assets as well as strategies to increase its profits. Therefore, by the time the redevelopment plan of Tokyo Station area was on the table and attracted great attention, the railway company faced a situation that trains carried limited amount of cargo but had a stabilized passenger ridership. Domestic passenger air transportation was on its way to increase its influence, and road transportation, although past the period of most rapid development, was still on the rise.

CHAPTER 2: CHANGING ECONOMIC OUTLOOK OF JAPAN AND ITS CAPITAL CITY

Introduction

The transformation of Japan's transportation industry in the past 70 years was directly related to its post-war economic development. It created and shifted the demand on transportation, altered the way capital, materials and labors moved and accumulated, and influence the strategies different industries adopted to capture the value and sustain the business. The railroads prospered in Japan along with its industrialization prior to the war largely because the railway system efficiently supported the transportation of raw materials, labors that flew into big cities, and, later during the World War II, soldiers and weapons. The government heavily invested into railway development for the benefits of the industries that fueled the nation's modernization. Similarly, changes that occurred in the transportation industry, as we have seen in the first chapter, closely tied with changes that took place in the industrial structure and local and national economy.

In this chapter, the research aims to explore Japan's post-war industrial structure and its change by digging into the share of three economic sectors in Japan's GDP and gross product by different industries in different periods. This change provides strong implication of how demands on transportation are likely to transform. The chapter will investigate the changing socio-economic condition of Tokyo, its demographic shift, changing industrial structures in terms of gross product and employment, and the capital city's economic base. Through the following quantitative analysis of Japan and Tokyo's changing economic outlook, this chapter seeks to produce both macro and micro pictures, in which the railway industry operated its

services and made different decisions. It illustrates how the capital city's economy has changed and what implications the change may have to influence the transportation industry and preservation activities.

Rapid Economic Recovery of Postwar Japan and the Transformation of its Economy

The spectacular economic growth recorded by Japan during the 1950s and 1960s has been widely referred as the “economic miracle”, which reinvented the nation from the ashes of defeat after the World War II to prosperity. Although Japan benefited significantly from the war procurements by the American military during the Korean War and US's favorable foreign policy with a fixed currency exchange rate, open market and the licensing of US technology, Japan also had favorable advantages in a reservoir of experienced policy-makers, scientists and businessmen that matured before and during the war, a high savings rate, and an effective employment system that helped the economic recovery. The experienced and powerful bureaucracy quickly managed the Japanese economy, and tightened the central control over the recovery by implementing protection over domestic industries.

As Takatoshi Ito's calculation has shown (Figure 2-1), Japan's GDP quickly recovered to pre-war level by the mid-1950s, and caught up with and exceeded the pre-war growth in the late 1950s. The “miraculous” growth did not slow down until the oil crisis in 1973 and when the United States started to take action on Japan's significant trade surpluses in the 1970s. Real GDP growth of Japan from 1946 to 1960 scored at 9.38% and from 1960 to 1975, this percentage was as high as 8.26%. Economic development further stagnated in the 1990s when the bubble collapsed and Japan economy was entrapped into a recession that the nation seems to still struggle with today.

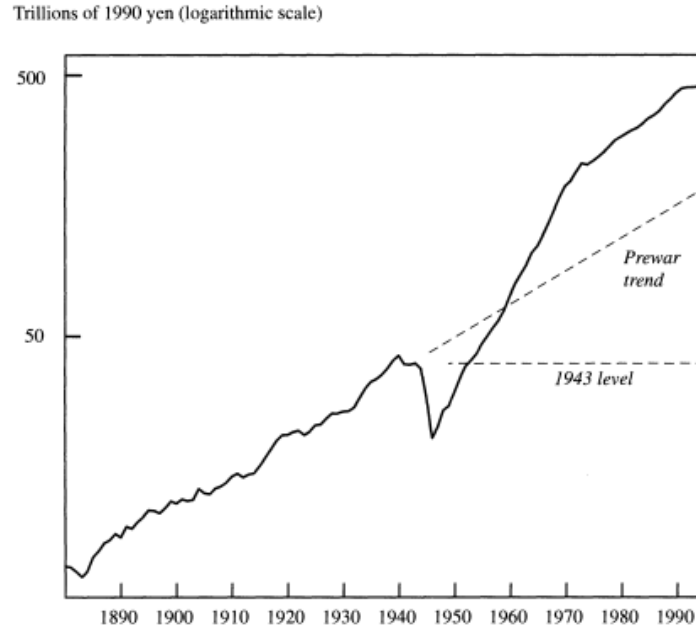


Figure 2-1. Real GDP, Japan, 1880-1995 (Source: Takatoshi Ito, 1996)

What accompanied with this rapid economic growth was a structural transformation of the economic activities. Japan was already an industrialized nation before World War II. Shortly after this the primary-sector still occupied a quarter of Japan's GDP (26% in 1950), but this figure dropped dramatically to 5.9% in 1965 as the country started to change. It became less than 2% by the end of 20th century. The secondary sector, mainly manufacturing, first expanded in scale during the "rapid growth" period, but then shrank in terms of its share of GDP very quickly after the 1970s. The tertiary industries became the dominant sector in postwar Japan that contributes most to the nation's GDP, and they increased to 73.6% in 2010 (Table 2-1).

Table 2-1. Percentage of Japan's GDP Made Up By Different Economic Sectors (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

	Primary Sector	Secondary Sector	Tertiary Sector
1950	26.0	31.8	42.2
1965	5.9	42.0	52.1
1980	3.1	34.0	63.0
1995	1.8	29.2	69.0
2010	1.2	25.2	73.6

Table 2-2 shows each industry's gross product from 1955 to 1995. The two decades of 1950s and 1960s witnessed significant growth in almost all industries. Manufacturing industry was the most outstanding sector that contributes over 35% to the nation's high GDP growth rate during this period². The manufacturing industry doubled in value every 5 years during these two decades and accounted for one third of the total nominal GDP of all industries. A breakdown of manufacturing industry's GDP into sub-sectors as shown in Table 2-3 suggests that, prior to 1970s, almost all sub-sectors increased their products by over 100% each 5-year period. Petroleum and coal industry as well as machinery production expanded most rapidly among all sub-sectors in 1950s, followed by manufacturing of transport equipment and metals. The growth of all sub-sectors remained strong in the second half of 1960s, but suddenly slowed down in the 1970s. The end of Japan's rapid economic growth also marked the termination of manufacturing sector's fast development. This has also been reflected in rail freight transport as mentioned in the first chapter. Still, manufacturing industry grew, although much more slowly compared to its growth rate during the economic recovery period, prior to the collapse of economic bubbles.

Construction industry, financial sector, and real estate business became the fastest growing industries in Japan after the oil crisis in 1973 instead. Until the bubble economic collapsed, these three industries led the Japanese economic growth and especially the real estate market became overheated. Among them, the share of real estate industry in the GDP of total industries increased most significantly. Also in this period of time, services industry increased rapidly in its share as well, from less than 10% to approximately 15%, and by 2000 this number went further up to about 20%. During the "lost 10 years", services industry became one of the few industries that did not suffer from a negative growth rate, while manufacturing, construction,

² Yoshigawa and Miyagawa, 2009, The change of industrial structure and post-war Japan's economic growth (産業構造の変化と戦後日本の経済成長, 吉川 洋, 宮川 修子)

retail and real estate all received shocking impact from the collapse of the bubble and the Asian financial crisis around 1997 and 1998. By 1995, manufacturing industry, although still took account for a large portion of the gross product, dropped in its share to about a quarter, by over 10% from its peak in 1970. Whereas most sub-sectors of manufacturing industry decreased in terms of gross product during the 1990s and early 2000s, food and beverage industry, petroleum and coal production, and transport equipment production retained their strength and did not suffer from significant decrease (Table 2-3).

Table 2-2. Nominal GDP and the Share Based on Different Industries 1955-1995 (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

Billion Japanese Yen (Percentage to GDP of Total Industries)	1955	1960	1965	1970	1975	1980	1985	1990	1995
Agriculture, Forestry, Fishery	1665.5 (21%)	2101 (13.8%)	3229.4 (10.4%)	4488 (6.4%)	8141.1 (5.9%)	8847.2 (3.9%)	10,213.7 (3.4%)	10,920.5 (2.7%)	9,350.6 (2.1%)
Mining	164.7 (2.1%)	246.3 (1.6%)	331 (1.1%)	620.3 (0.9%)	776.2 (0.6%)	1363 (0.6%)	958.5 (0.3%)	1,121.6 (0.3%)	1,071.5 (0.2%)
Manufacturing	2381 (30%)	5535.4 (36.4%)	11085.6 (35.5%)	26402.3 (37.5%)	44800.9 (32.3%)	70232.3 (31.3%)	94,672.6 (31.4%)	121,218.9 (29.5%)	119,261.3 (26.2%)
Construction	377.7 (4.8%)	893.1 (5.9%)	2159.2 (6.9%)	5650.2 (8.0%)	14,322.4 (10.3%)	22,506.1 (10.0%)	25,381.3 (8.4%)	43,427.5 (10.6%)	50,331.6 (11.1%)
Electricity, Gas, Water Supply	198.3 (2.5%)	406.8 (2.7%)	887.4 (2.8%)	1557.7 (2.2%)	3,001.7 (2.2%)	6,580.3 (2.9%)	10,305.4 (3.4%)	11,242.0 (2.7%)	13,733.3 (3.0%)
Wholesale and Retail	893.7 (11.3%)	1860.1 (12.2%)	4173.2 (13.4%)	10531.3 (15%)	21,934.1 (15.8%)	36,792.4 (16.4%)	42,835.8 (14.2%)	58,358.0 (14.2%)	60,984.5 (13.4%)
Finance and Insurance	340 (4.3%)	565.3 (3.7%)	1474.7 (4.7%)	3120.5 (4.4%)	7,795.8 (5.6%)	12,440.4 (5.5%)	16,971.9 (5.6%)	25,545.6 (6.2%)	24,331.3 (5.3%)
Real Estate	464.5 (5.8%)	1215.3 (8.0%)	2817 (9.0%)	5899 (8.4%)	12,138.0 (8.8%)	22,654.3 (10.1%)	32,358.5 (10.7%)	46,792.2 (11.4%)	62,290.3 (13.7%)
Transportation, Communication	610.8 (7.7%)	1187.8 (7.8%)	2461.9 (7.9%)	5044.3 (7.2%)	9,546.0 (6.9%)	14,786.8 (6.6%)	21,086.7 (7.0%)	28,474.8 (6.9%)	31,354.1 (6.9%)
Services	844.9 (10.6%)	1205.4 (7.9%)	2570.3 (8.2%)	7074.3 (10.1%)	16,251.4 (11.7%)	28,063.3 (12.5%)	46,390.9 (15.4%)	63,624.2 (15.5%)	82,332.7 (18.1%)
Total Industries	7941.1	15216.5	31189.7	70387.9	138707.6	224266.1	301175.3	410725.3	455041.2

Table 2-3. Nominal GDP and Its Change Based on Manufacturing Industries 1955-1980 (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

	1955	1960	Change 1955-60	1965	Change 1960-65	1970	Change 1965-70	1975	Change 1970- 75	1980	Change 1975-80
Food and beverages	631.9	911.6	44%	1548.8	70%	2790	80%	5027.4	80%	7912.9	57%
Textiles	284	457.1	61%	722.6	58%	1442.6	100%	2148.2	49%	2534.8	18%

Pulp, paper and paper products	77.2	169.1	119%	347.4	105%	695	100%	1405.7	102%	2009.1	43%
Chemicals	219.1	472.1	115%	1034.3	119%	2224.7	115%	3398.9	53%	5392	59%
Petroleum and coal products	69.4	282.6	307%	632.8	124%	1242.2	96%	1626.1	31%	2570.7	58%
Non-metallic mineral products	89.6	213.5	138%	490.9	130%	1110.6	126%	1917.8	73%	2734.6	43%
Basic metal	232.8	672.5	189%	1006.1	50%	2987.6	197%	4907.6	64%	8884.8	81%
Fabricated metal products	76.1	223.9	194%	602.9	169%	1580.2	162%	2502.8	58%	3272.7	31%
Machinery	108.7	468	331%	984	110%	2826.7	187%	4443	57%	7507.4	69%
Electrical machinery, equipment and supplies	103.9	492.3	374%	917.7	86%	2865.8	212%	4115.3	44%	7663.2	86%
Transport equipment	147.6	477.8	224%	1184	148%	2853.6	141%	5783.7	103%	7962.2	38%
Precision instrument	38.6	86.4	124%	205.3	138%	437.8	113%	757.1	73%	1433.1	89%
Others	302	608.5	101%	1408.7	132%	3345.5	137%	6767.2	102%	10354.8	53%

Table 2-3 (continued). Nominal GDP and Its Change Based on Manufacturing Industries 1985-2005
(Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

	1985	Change 1980-85	1990	Change 1985-90	1995	Change 1990-95	2000	Change 1995-2000	2005	Change 2000-05
Food and beverages	11133.9	41%	12321.7	11%	13624.2	11%	14199	4%	12845.7	-10%
Textiles	2545.1	0%	2514	-1%	1874.6	-25%	1015	-46%	698.5	-31%
Pulp, paper and paper products	2390.1	19%	3366.3	41%	3479.8	3%	3167.7	-9%	2728.3	-14%
Chemicals	7031.6	30%	9375.2	33%	9938	6%	9105.7	-8%	8293.4	-9%
Petroleum and coal products	3924.9	53%	4143	6%	5145.1	24%	5437.9	6%	5062.8	-7%
Non-metallic mineral products	3447.3	26%	4381.7	27%	4255.2	-3%	3728.9	-12%	3253.8	-13%
Basic metal	7865.2	-11%	9466.1	20%	8660	-9%	7119.8	-18%	7979.6	12%
Fabricated metal products	4638.3	42%	7157.8	54%	6970.3	-3%	5894.1	-15%	5420.1	-8%
Machinery	11852.4	58%	15901.8	34%	14333.3	-10%	11351.1	-21%	11083.7	-2%
Electrical machinery, equipment and supplies	13966.6	82%	19386.2	39%	18978.5	-2%	20066.8	6%	15609.7	-22%
Transport equipment	10009	26%	11820	18%	11862.4	0%	10804.4	-9%	12634.7	17%
Precision instrument	1859.8	30%	2203.8	18%	1760.5	-20%	1682.6	-4%	1740.8	3%
Others	14008.4	35%	19181.3	37%	18379.5	-4%	13962.8	-24%	12347.5	-12%

Table 2-4 illustrates the nation's economic outlook in the 21st century. After the 1997 Asian financial crisis, Japan recorded negative growth rate of GDP almost every year until its

gradual recovery that started from 2002. The financial crisis in 2008 and the 3.11 earthquake in 2011 again caused the nation's economy declined in 2008, 2009 and 2011. Generally, most industries indicated a similar trend. They gradually recovered from around 2002 and 2003 until the financial crisis, which damaged almost all categories to some degree except for infrastructure supply and real estate. It is conspicuous that mining, manufacturing, and construction lost their strength, although manufacturing and construction industries started to recover slightly in the recent years. Manufacturing industry declined in its share of gross product of total industries from a quarter by the end of 20th century further down to approximately 20% in 2012 (Table 2-5). Wholesale and retail industry has historically been an important sector in Japan's economy, and the industry regained some strength after a significant decline from 2006 to 2009. Finance and insurance industry, unlike most of the other industries, started to grow rapidly, shortly after the Asian financial crisis. However, the finance and insurance industry has not yet recovered from the recent global financial crisis and kept declining in its product value and share of total gross product. Real estate business became one of the leading growth factor after the oil crisis, and has achieved a long-lasting growth with very few exceptions and minor impacts from negative factors. Transportation, communication, and services sectors gradually increased in value and share at the beginning of the century, and are recovered rapidly after the financial crisis and the earthquake.

As shown in Table 2-3 and Table 2-5, manufacturing industry kept decreasing in its product value and share during the recent decade after a significant drop from its peak in the 1970s. This followed the decline of agriculture industry's share in the nominal GDP from 20% to less than 5% prior to 1980. They became the primary outcomes of Japan's post-war economic transformation. What have replaced manufacturing industry's leading role in the industrial

structure are all other service-sector industries. Real estate business and services industry gradually increased their shares over time. This increase accelerated after the 1980s and took up the portion that manufacturing industry had lost. It is also noticeable that wholesale and retail industry has taken up a relatively stable and significant part in Japan's economy. Actually, wholesale and retail industry has been one of the industries with largest employment in Japan, and if compared with other developed countries, Japan has a higher percentage of employees working in wholesale and retail.³ Transportation and communication industry, once took account for a stable portion of gross product prior to 2000, has slightly increased in its share in general ever since.

Table 2-4. Nominal GDP Based on Different Industries 2000-2012 (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

(Billion Yen)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agriculture, Forestry and Fishery	8,076.4	7,279.6	7,262.4	6,888.1	6,615.7	6,107.7	5,957.2	5,854.4	5,699.5	5,440.1	5,655.6	5,425.7	5,739.8
Mining	589.1	579.2	506.9	482.1	400.5	399.6	397.3	392.2	352.6	283.3	301.0	303.5	289.7
Manufacturing	107,535.8	99,487.5	95,937.2	96,582.5	98,499.5	99,698.6	100,267.9	103,564.6	98,666.2	83,351.2	94,333.1	87,283.9	87,947.5
Construction	36,331.8	34,005.3	32,331.3	31,667.1	31,199.9	29,018.1	29,547.2	29,385.2	28,091.3	26,948.4	26,197.7	26,461.1	26,797.4
Electricity, Gas, Water Supply	13,346.9	13,593.6	13,217.9	12,649.8	12,497.7	11,712.4	11,259.3	10,422.9	9,661.4	11,131.8	11,007.8	8,550.9	8,004.5
Wholesale and Retail	69,001.1	69,593.3	69,073.7	69,080.2	73,094.3	74,814.4	71,743.4	69,871.2	70,110.9	64,135.5	65,980.5	67,131.0	67,964.4
Finance and Insurance	25,342.7	28,274.6	29,834.2	30,798.9	30,382.6	30,788.5	30,214.6	30,807.8	25,082.1	23,741.6	23,766.0	22,430.0	21,864.9
Real Estate	54,474.0	53,963.8	53,517.4	53,575.6	53,788.1	54,041.7	55,364.5	55,720.8	56,013.4	56,879.2	56,890.0	56,725.7	56,505.0
Transportation	23,458.6	23,397.9	23,535.4	23,857.0	24,517.3	24,379.1	25,428.4	26,482.5	25,382.9	22,973.9	23,465.3	22,858.0	23,686.0
Communication	25,360.8	26,387.1	26,877.4	26,936.3	26,785.1	26,268.9	26,763.6	27,180.6	27,306.4	26,188.6	25,978.2	25,871.1	25,999.1
Services	89,496.0	88,602.7	87,426.7	86,922.9	86,534.8	88,433.3	90,730.7	94,012.4	94,579.6	91,540.8	91,266.4	91,183.0	93,253.7
Total Industries (A)	453,013	445,165	439,521	439,441	444,316	445,662	447,674	453,695	440,946	412,614	424,842	414,224	418,052
Government Service Producers (B)	46,059.2	46,283.1	46,595.2	46,013.8	45,719.3	45,499.9	45,651.4	45,871.6	45,880.7	45,054.3	43,923.9	44,041.6	43,500.9
Private Non-profit Household Service Producers (C)	8,906.9	8,939.4	9,091.2	9,065.0	9,216.9	9,445.4	9,965.2	9,992.9	9,877.7	9,667.4	10,009.2	10,698.7	11,192.8
Nominal GDP (excl. tax and adjustment) (A+B+C)	507,979	500,387	495,207	494,519	499,252	500,608	503,291	509,559	496,705	467,336	478,775	468,964	472,746

³ Labour Economic Analysis, Ministry of Health, Labour and Welfare, 2008

Table 2-5. Different Industries' Share of Gross Product 2000-2012 (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agriculture, Forestry and Fishery	1.8%	1.6%	1.7%	1.6%	1.5%	1.4%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%
Mining	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Manufacturing	23.7%	22.3%	21.8%	22.0%	22.2%	22.4%	22.4%	22.8%	22.4%	20.2%	22.2%	21.1%	21.0%
Construction	8.0%	7.6%	7.4%	7.2%	7.0%	6.5%	6.6%	6.5%	6.4%	6.5%	6.2%	6.4%	6.4%
Electricity, Gas, Water Supply	2.9%	3.1%	3.0%	2.9%	2.8%	2.6%	2.5%	2.3%	2.2%	2.7%	2.6%	2.1%	1.9%
Wholesale and Retail	15.2%	15.6%	15.7%	15.7%	16.5%	16.8%	16.0%	15.4%	15.9%	15.5%	15.5%	16.2%	16.3%
Finance and Insurance	5.6%	6.4%	6.8%	7.0%	6.8%	6.9%	6.7%	6.8%	5.7%	5.8%	5.6%	5.4%	5.2%
Real Estate	12.0%	12.1%	12.2%	12.2%	12.1%	12.1%	12.4%	12.3%	12.7%	13.8%	13.4%	13.7%	13.5%
Transportation	5.2%	5.3%	5.4%	5.4%	5.5%	5.5%	5.7%	5.8%	5.8%	5.6%	5.5%	5.5%	5.7%
Communication	5.6%	5.9%	6.1%	6.1%	6.0%	5.9%	6.0%	6.0%	6.2%	6.3%	6.1%	6.2%	6.2%
Services	19.8%	19.9%	19.9%	19.8%	19.5%	19.8%	20.3%	20.7%	21.4%	22.2%	21.5%	22.0%	22.3%

In general, postwar Japan recovered rapidly from the defeat of the war in terms of GDP growth, and transformed into an economy largely dominated by tertiary-sector industry. In 1950, almost half of the Japanese population still worked in the agriculture, forestry and fishery industry. By 1970, after two decades of rapid economic growth, it was surpassed by manufacturing industry and wholesale and retail industry in terms of number of employment. Another two decades later, manufacturing industry that had dominated since late 1960s was quickly caught up by the number of employment in wholesale and retail industry as well as service industry, including health care, education and other services.

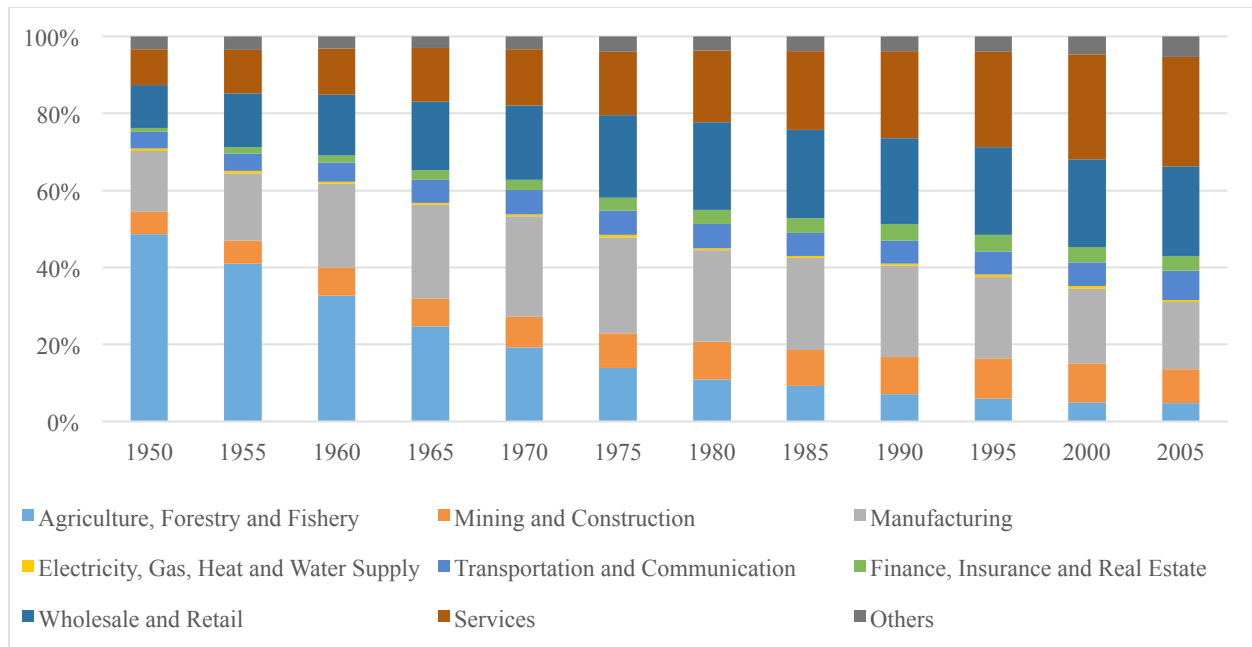


Figure 2-2. Percentage of Employment in Different Industries 1950-2005 (Source: based on the data collected from Ministry of Health, Labour and Welfare)

Changing Economic Outlook of Tokyo

The changing nature of the economy is linked to the movement of the population from other prefectures to major urban cores, such as Osaka, Nagoya, and mainly Tokyo and its metropolitan region. The capital city witnessed the fastest growth in population during the late 1950s and early 1960s, and by middle 1960s the percentage of Tokyo's population in the entire nation peaked at 11%. In 1956, the Metropolitan Region Development Law was enacted to promote a comprehensive development and planning of Tokyo Metropolitan Area as the center of Japanese politics, economy and culture. This region consists of Tokyo and seven other nearby prefectures. The population growth in this metropolitan region was also very rapid during the "economic miracle" period.

From 1955 to 1964, each year over 100,000 people flowed into the capital city. This annual growth by immigration declined significantly starting from late 1960s, and even turned to

negative from 1967 to 1996, except for 2 years. One reason is that people used to live in the city started moving to suburban areas and the neighboring prefectures to look for better housing and a healthier environment. Improving suburban railway transportation made this longer-distance commuting possible. The decline in the population that migrated into the city was mostly offset by the natural population growth, which peaked in the early 1970s. The metropolitan area continued to receive immigration until today, even though after 1970, this in-flow of population was declined substantially. As the economic growth slowed down in the 1970s, the pull factors were weakened, and thus an increasing working population became more willing to return to their hometown for employment. Even though immigration to Tokyo Metropolitan Region climbed up again in the 1980s, the economic recession soon reversed the trend, and it was not until late 1990s and the 2000s that the population growth by immigration started to accelerate again. Since the late 1990s, as the redevelopment of a few urban cores of the city of Tokyo began to take shape, the capital city has seen increasing inflow of population again, and this trend is still going on. As the natural growth of Tokyo's population almost stopped in the recent decades and even turned negative in 2013 and 2014, immigration again has become the main source of Tokyo's population.

Table 2-6. Population and Population Growth Rate of Tokyo, Tokyo Metropolitan Region and Japan, 1956-2010 (Source: Statistics Bureau, Ministry of Internal Affairs and Communications of Japan)

Year	Population			Growth Rate		
	Tokyo	Tokyo Metropolitan Region	Japan	Tokyo	Tokyo Metropolitan Area	Japan
1956	8111233	15424647	90172000	-	-	-
1960	9416364	17863859	94302000	16.1%	15.8%	4.6%
1965	10667390	21016859	99209000	13.3%	17.7%	5.2%
1970	11337809	24113414	104665000	6.3%	14.7%	5.5%
1975	11641248	27041414	111940000	2.7%	12.1%	7.0%
1980	11627359	28698533	117060000	-0.1%	6.1%	4.6%
1985	11770565	30272533	121049000	1.2%	5.5%	3.4%
1990	11865271	31796702	123611000	0.8%	5.0%	2.1%

1995	11785176	32576702	125570000	-0.7%	2.5%	1.6%
2000	11932971	33418366	126926000	1.3%	2.6%	1.1%
2005	12491286	34478903	127768000	4.7%	3.2%	0.7%
2010	13084799	35618564	128057000	4.8%	3.3%	0.2%

Table 2-7. Population Growth of Tokyo and Tokyo Metropolitan, 1956-2014 (Source: Tokyo Statistics Division, Bureau of General Affair, Tokyo Metropolitan Government)

Year	Tokyo (population in thousands)			Tokyo Metropolitan Region (population in thousands)		
	Total Population Growth	Growth by Immigration	Natural Population Growth	Total Population Growth	Growth by Immigration	Natural Population Growth
1956-1959	1305	936	369	2440	1563	877
1960-1964	1251	633	618	3153	1859	1294
1965-1969	670	-156	826	3096	1356	1740
1970-1974	303	-555	858	2928	887	2041
1975-1979	-14	-573	559	1657	187	1470
1980-1984	144	-234	378	1574	481	1093
1985-1989	95	-170	265	1524	726	798
1990-1994	-80	-226	146	780	170	610
1995-1999	199	108	91	842	339	503
2000-2004	507	439	68	1061	701	360
2005-2009	593	556	37	-	-	-
2010-2014	209	208	1.5	-	-	-

Due to this growing population inflow into Tokyo and its metropolitan area, the local economy is relatively strong. By contrast, the remaining regions of the nation have mostly undergone a process of negative population growth since the late 1990s and the beginning of this century due to both emigration and population aging. According to the national census in 2010, during the 5-year period from 2005 to 2009, Tokyo became the city with most inflow population, of nearly 600,000, followed by Kanagawa Prefecture (257,913) and Chiba Prefecture (160,657). Saitama, another neighboring prefecture of Tokyo to its northwest, ranked fifth with 140,575 people migrating in. Thus, Tokyo Metropolitan Region largely surpassed the other two major metropolitan areas, Nagoya Metropolitan Region and Kansai Metropolitan Region (Osaka and its neighboring areas) in terms of this inflow population. In these 5 years, Aichi Prefecture, in

which Nagoya is located, had a total inflow population of 153,795, and Osaka had only 45,730, ranking after Saitama Prefecture. That Tokyo is polarizing the population, social capital and economic activities (*Toukyo ikkyoku syuuchyuu*) has been long noticed and discussed.

Historically, the Gross Product of Tokyo has been approximately 17-18% of the national GDP. This ratio first increased during the rapid economic growth period in the 1950s and 1960s, but then dropped after 1970. As the economic recovered in 1980s, the percentage climbed up significantly from the 1980 level, 16.25%, all the way to the peak at 18.70% in 1990. It decreased substantially after the bubble collapse in early 1990s, but soon regained the strength to go up in the 2000s (Table 2-8). As mentioned previously, in the 1970s the central government sought solutions towards the unbalanced regional development and tried to create multiple development cores throughout the nation by expanding the Shinkansen and express highway system. However, the remodeling plan did not succeed in decentralizing Tokyo's power and capital, and the fourth Comprehensive National Development Plan issued in 1987 promoted an increased concentration of economic functions. It also emphasized the need to rebuild the capital to accommodate Tokyo's position among the international financial elite. At the same time, a long-term plan issued by the Tokyo Metropolitan Government made a statement of creating an environment for the capital city's large-scale urban redevelopment.

Table 2-8. Gross Product of Tokyo and Japan (Source: Cabinet Office, Government of Japan)

Year	Tokyo (in million Yen)	Japan (in million Yen)	Ratio of Tokyo's Gross Product to Nominal GDP
1955	1,529,161	9,044,999	16.91%
1960	2,752,514	15,628,923	17.61%
1965	5,683,906	32,294,302	17.60%
1970	12,554,775	73,543,090	17.07%
1975	25,508,148	151,640,235	16.82%
1980	40,041,380	246,389,456	16.25%
1985	57,356,852	326,976,768	17.54%

1990	84,406,722	451,252,197	18.70%
1995	84,122,248	492,227,973	17.09%
2000	91,024,125	522,368,383	17.43%
2005	92,700,871	516,677,894	17.94%
2010	91,447,507	496,461,798	18.42%

Tokyo has already transformed into a service-sector economy. The tertiary sector accounts for over one fifth of the nation's GDP in this sector, and the service industries are still progressing. In contrast, Tokyo's manufacturing sector, mostly clustering in the Eastern Tokyo, has been shrinking in terms of not only gross product, but also shipment value, number of employees and amount of value added. As Tokyo's Gross Product in the tertiary sector has been taking up a higher and higher percentage of the nation's GDP in this sector, currently more than 21%, over the decades, its share in the secondary sector has dropped to a level below 10% (Table 2-9). A comparison of Tokyo's and Japan's industrial structure in 2011, as shown by Figure 2-3, has indicated that the capital city's wholesale and retail industry, transportation and communication industry as well as finance and insurance industry occupy a larger piece of the pie, whereas the share of agriculture and manufacturing industries in Tokyo's gross product is extremely small.

Table 2-9. Gross Product of Tokyo and Japan by 3 Sectors of Industries (Source: Cabinet Office, Government of Japan)

	Industry Sectors (Tokyo)			Industry Sectors (Japan)			Ratio		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1996	47,864	17,204,983	74,040,526	8,270,599	163,186,253	373,365,870	0.58%	10.54%	19.83%
2000	42,065	15,412,067	81,015,153	6,855,401	149,039,005	385,775,576	0.61%	10.34%	21.00%
2005	40,185	14,259,345	84,182,096	6,080,036	137,113,789	393,962,388	0.66%	10.40%	21.37%
2010	47,760	11,087,416	80,298,848	5,339,128	116,490,194	372,539,441	0.89%	9.52%	21.55%

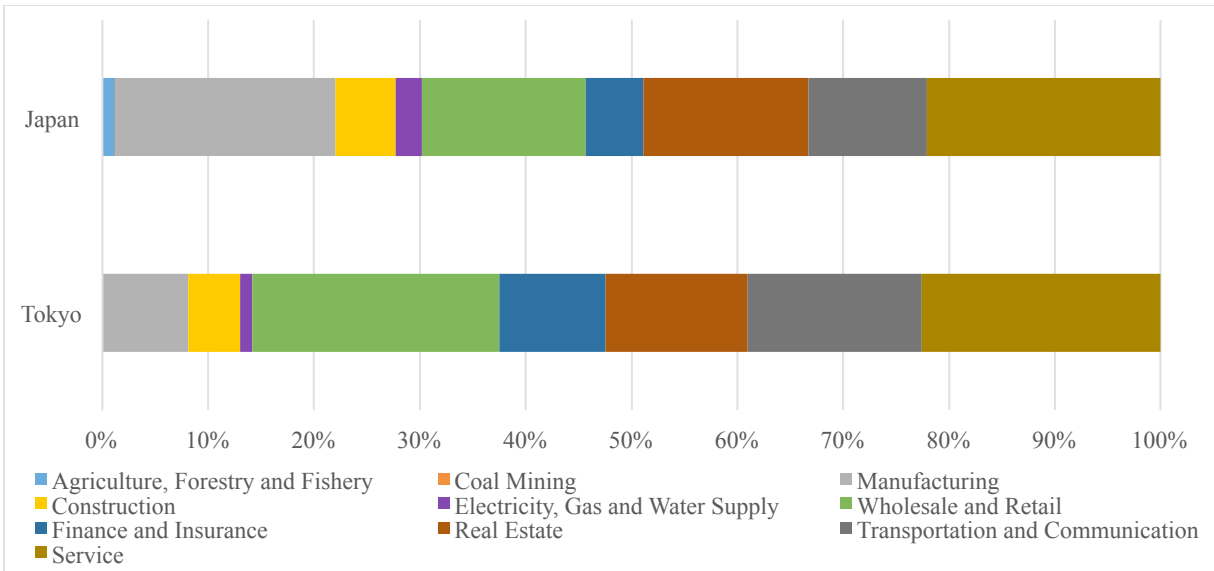


Figure 2-3. Comparison of Tokyo and Japan's Gross Product in Different Industries, 2011

Figure 2-4 illustrates the structural change of Tokyo's economy occurred over the past 50 years, and demonstrates that manufacturing industry already started to decline in its share from the 1970s, while real estate business began to increase its share in the 1970s and services industry pushed up the share significantly from the 1980s. The share that manufacturing industry has lost, therefore, has been taken up by mainly service industry and real estate. Transportation and communication industry, finance and insurance industry, and wholesale and retail industry all have historically made up a certain amount of the city's gross product and not significantly altered in terms of their shares. The industrial structure of Japan today looks similar with that of Tokyo back in the 1990s except that agriculture, forestry and fishery industry of the nation still accounts for a certain portion that cannot be neglected from the figure, and finance and insurance industry of Tokyo takes apparently a larger account. In Table 2-10, the Location Quotient (LQ) calculated for Tokyo provides a clear picture of the capital city's economic base. It shows that communication industry has the largest LQ, which means that the employment of

this industry in Tokyo significantly outranks the national average. Similarly, finance and insurance industry, real estate industry, and other services industry all have a location quotient that is much greater than 1, which makes them an export base of the capital city. Similarly, the comparison of the industrial structure of two of Japan's most important economic hubs, Tokyo and Osaka (Figure 2-5), measured by the percentage of employees working in the industry, shows that Tokyo outranks Osaka, the core city of Japan's Kansai region and of the second largest metropolitan area, in the information and communication industry, academic research category, in finance and insurance, and in the real estate business. These tables and figures give a good idea of the service-sector economy Tokyo has become. Three service sectors (Communication, Finance and Insurance, and Real Estate) have become the leading industries in this economy. It is these export bases that fueled the engine of Tokyo's economic activities, and it is where the value has been created and added.

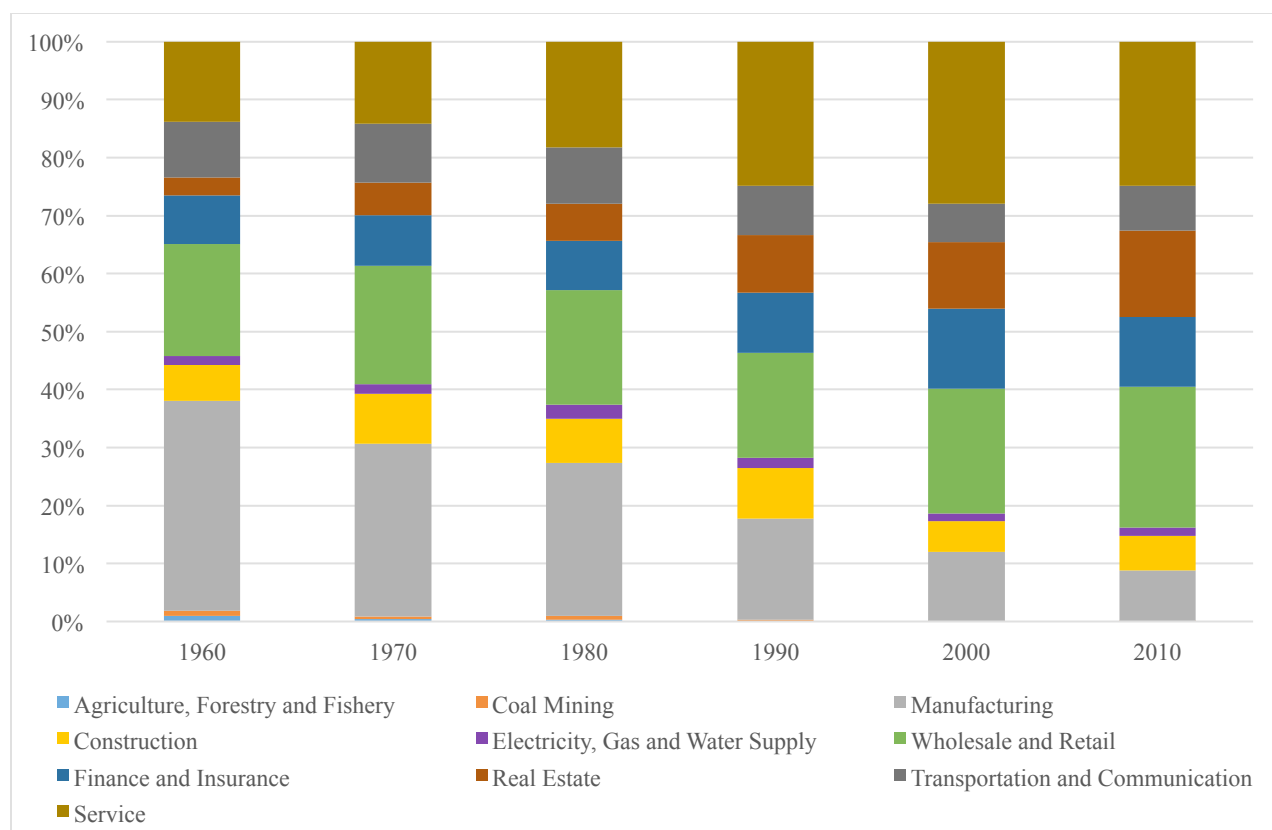


Figure 2-4. Percentage of Gross Product by Different Industries of Tokyo, 1960-2010 (Source: Cabinet Office, Government of Japan)

Table 2-10: Location Quotient of Tokyo, 2005 (Source: based on data collected from Ministry of Health, Labour and Welfare)

	Location Quotient
Agriculture, Forestry and Fishery	0.07
Mining	0.46
Construction	0.75
Manufacturing	0.67
Electricity, Gas, Heat and Water Supply	0.67
Communication	3.13
Transportation	0.99
Wholesale and Retail	1.07
Finance and Insurance	1.81
Real Estate	1.78
Accommodation, Food and Drink Service	0.92
Medical Care and Welfare	0.72
Compound Service	0.53
Other Services Industry	1.58

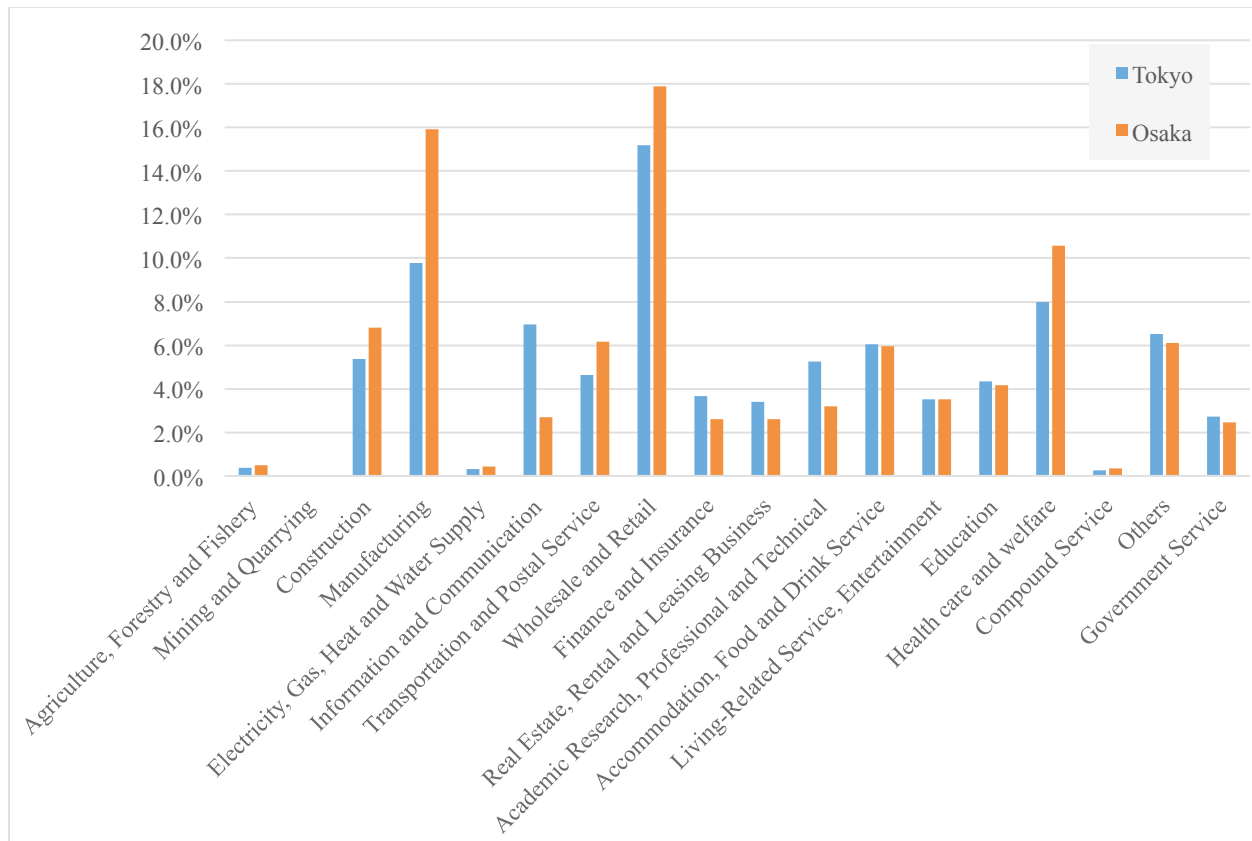


Figure 2-5. Percentage of Employee Numbers by Industries in Tokyo and Osaka, 2010 (Source: Ministry of Health, Labour and Welfare)

In the late 1970s, Japanese manufacturing firms started to move abroad from Tokyo and other domestic industrial cities, due to a net internal surplus for the first time in the country's postwar history. Japanese corporations that once had been protected by the country's favorable policies before 1970 started to face challenges and competitions when foreign countries, especially the US, pushed Japan to liberalize its trade policy. In addition, the end of the fixed exchange rate of Japanese currency and the oil crisis in the 1970s drastically raised the cost of imports of energy and other raw materials. As a result, the enormous trade surpluses Japan had built up in 1950s and 1960s were lost. As heavy industries moved away and the weight of manufacturing shifted toward micro-technology, Tokyo's urban landscape was also transformed

to a new image as a post-industrial city, in which office workers wearing suits commuted to bright office blocks and spent the night, after work, at Tokyo's commercial hubs of Shibuya or Shinjuku.

Around the same time, in the world economy the urban hierarchy was being restructured in favor of financial centers. Core industrial cities lost their positions during this transformation. Under the new order, businessmen and international tourists increasingly demanded new building construction of high-tech offices, condominiums, and mega-hotels in the core "global cities", and industrial-era buildings were rendered functionless and required to be demolished or converted. This trend and the changes it brought up reached Tokyo by the late 1980s. On the one hand, the central government was still dealing with the urban problems caused by the concentration of too many functions in the capital city, and formulating plans to direct some of the functions outward to other parts of the metropolitan region and to create a multi-core urban complex. On the other hand, the needs to transform Tokyo into an advanced information society, upon which the multi-core urban network would be built, had already been felt. The metropolitan government introduced the idea of "intelligent city" and "Tokyo Teleport Concept Plan" as the direction of Tokyo's future development. Both the Fourth National Comprehensive Development Plan, issued in 1987, and Tokyo's long-term plans, issued in 1982 and 1986, emphasized the importance to reinforce the management function of Tokyo's urban core as the hub of this advanced information society and to create an information network with Tokyo functioning as the pivot. Through this process of restructuring and reinventing the society the concentration of money and power in Tokyo had actually been enhanced, and its role as the central hub of the information society has been well established.

The Fourth National Comprehensive Development Plan in 1987 also discussed the globalization and restructuring of world cities' functions. In addition to the role as the center of the information society, Tokyo should also serve as an influential base for the entire Pan-Pacific region and one of the international hubs in the world. This suggested that Tokyo would be exposed to both a higher level of foreign enterprises' presence in the city and increasing number of Japanese firms would establish their base in Tokyo and internationalize their activities. Therefore, whether or not the city could fulfill the requirements of this role largely depended on its ability to facilitate the exchange of information, face-to-face communication, and link the central hub with functions of R&D, production, and education in its neighboring areas. The development of a sophisticated global financial market as well as the construction of necessary facilities associated with the financial and informational center was mentioned in the Tokyo Teleport Concept Plan, aimed to attract foreign investment. This function would be impossible to be relocated and separated from the urban core, where all the headquarters of large corporations agglomerated. This accelerating process of the city's transformation and globalization triggered greater demand for a more effective and integrated transportation system as well as an efficient use of limited land resource of the city to accommodate the rocketing needs for office space.

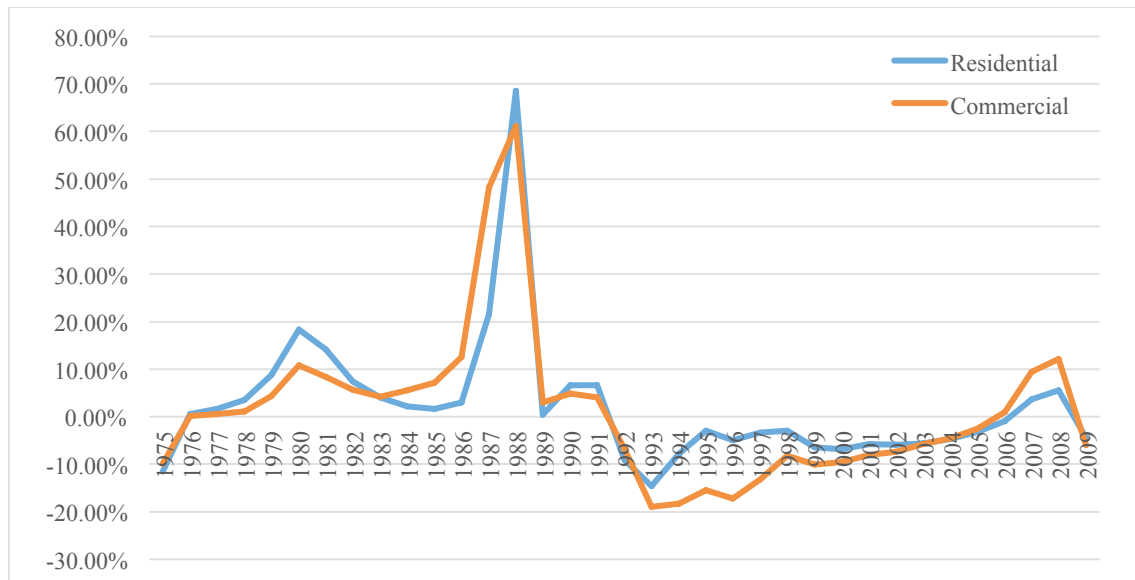


Figure 2-6. Change of Tokyo's Residential and Commercial Land Value, 1975-2009 (Source: Ministry of Land, Infrastructure, Transport and Tourism)

Consequently, the land value of Tokyo Metropolitan Region drastically increased by double digits during 1980s, until the consumption tax was introduced in 1989 and the bubble collapse occurred in the early 1990s (Figure 2-6). In the late 1970s and early 1980s, the terms “efficient use” and “high-rise use” started to be applied in urban land policy, and the height restriction in some areas was removed to allow the construction of high-rise buildings. From 1983 to 1986, 30% of central Tokyo land passed from individuals to corporations. Developers eagerly acquired and assembled pieces of land to make new construction happen. The plan to develop the Tokyo Station area and replace the historic station building with high-rise tower was initiated during this period. The commercial developer, Mitsubishi Corporation, held a large portion of the commercial lots in this area, and provided a vision to develop Marunouchi financial district into the Japanese version of Manhattan. The bubble collapse definitely slowed down the process of many redevelopment projects. The land value had been dropping since 1992 for 14 consecutive years. Again, after 3 years of increase in land value from 2006 to 2008,

it was reversed due to the global financial crisis, but the land value did not drop very significantly as compared to the early 1990s. In the past two years, the commercial land value in Tokyo increased slightly by 0.6% and 1.9% respectively. This has been interpreted as a result from the recent economic recovery and the expectation for transportation and infrastructure development associated with 2020 Tokyo Olympics.

Conclusion

Japan's economy recovered dramatically from the war defeat and experienced a two-decade-long rapid economic development, which boosted the growth of all industries, prior to the 1970s. Manufacturing industry, among many industries that grew drastically during this period, boomed in terms of its gross product most significantly and accounted for over 35% of the gross product of all industries by 1970. Petroleum and coal production and machinery, equipment and supplies production were most rapidly developing sectors in the 1960s, while the gross product of transport equipment sector and metal production sector more than doubled every five years in the 1960s and 1970s. At the same time, many service sectors also gradually increase their share of nominal GDP, while the percentage of primary sector's gross product jumped from over a quarter to less than 5%. The miraculous growth of all industries decelerated noticeably in the 1970s and the 1980s. By 1995, majority of the manufacturing sectors suffered from negative growth of gross product. Only food and beverages, petroleum and coal products, and transport equipment, these three sectors still grew positively in gross product in the period of 1990-2005. As manufacturing industry decreased in value and share of nominal GDP, service sectors took up this portion and led the economic growth, especially real estate business and services industry, while finance and insurance industry, wholesale and retail industry, and

transportation and communication industry increased their value and sustained their share in the nominal GDP.

In Tokyo, the transformation towards a service-sector economy began ahead of the country and witnessed a more significant decline in secondary sector's share of GDP and increase of tertiary sector's value. By comparison, Tokyo has a larger portion of wholesale and retail industry, finance and insurance industry, and transportation and communication industry as seen in its industrial structure. Recent analysis of Tokyo's Location Quotient indicates that communication, finance and insurance, and real estate are three major export bases of the city. The phenomenon ("*Toukyo ikkyouku syuuchyuu*") that population, social capital and economic activities of the nation largely accumulated in the capital city as the single polar, once referred to the large inflow of population into Tokyo and its metropolitan area during the "economic miracle" period, again accelerated in the recent 2 decades after a short period of relief due to the collapse of economic bubbles. This recent trend of polarization of various functions in the capital city reflects the restructuring process of the world economy in favor of financial centers. As a post-industrial city, even though the government sought to solve the problems caused by the polarization, Tokyo faced immediate needs of infrastructure and connection to facilitate its transformation into an advanced information society. Consequently, this trend inevitably demanded headquarters, research and design, and academic services to concentrate in the capital city.

CHAPTER 3: PRESERVATION CLIMATE IN TOKYO AND PRESERVATION OF RAILWAY HERITAGES

Over a century after Japan enacted its first preservation law, the Law for Preservation of Ancient Temples and Shrines (*koshaji hozon hou*), in 1897, the preservation activities of the country still concentrate mostly on pre-modern structures, especially ancient temples and shrines. Having experienced the Great Kanto Earthquake in 1923 and devastating bombardment during the World War II, the Japanese generally believe Tokyo has very few valuable historic structures left to preserve and reuse. While the Ministry of Education, Science, and Culture offers limited protection to modern architecture as well as a wide range of residential and commercial buildings of historic value, neighborhood activists, scholars, architects, and artists initiated the documentation of other traces of Tokyo's past in the 1970s.

Both top-down regulation and bottom-up activities influenced the preservation climate and gave strength to Tokyo's preservation of historic structures. This might favor the preservation of certain type of buildings, but it causes difficulties for other properties. In this chapter, the preservation law and designation system in Japan will be discussed. The discussion centers on the important cultural properties (*jyuuuyou bunkazai*) designated in Tokyo, and explains that city's historic preservation scene. The search for political protests in the preservation community will then be investigated. While these activities and protests became more small-scale, diffuse and effective in the 1970s and 1980s, no iconic preservation battle around a famous structure was seen in the country's preservation history that was widely enough known and supported to raise the awareness of heritage preservation. Therefore, it is important to investigate how local activists were preserving what they found important to discover their

motivations. In the last part of this chapter, the focus will turn to the railway heritage that Tokyo has endeavored to save. This will shed light on the country's railway culture and the parties that became involved in railway heritage preservation.

The Japanese Designation and Registration System

Traditionally, preservation in Japan mainly dealt with wooden structures. To solve the problem of the material's decaying, preservation treatments included the regular renewal and remodeling of the property in addition to the commonly undertaken practices, such as preservation, restoration and reconstruction. Shinto shrines, which were periodically renewed with the same type of wood that grew from the same area as the materials been used previously in a manner consistent with the original design. Usually, a series of sacred rituals accompanied this renewal procedure as part of the religious practice. Restoring a building to an earlier state or undertaking total reconstruction, on the other hand, played a significant role in case that the building was damaged due to fire, earthquake or other disasters, which were quite common in Japan. Later modification was usually discarded to regain an earlier state of the structure's most historically significant period or a period that lack of representative buildings. These treatments were based heavily on the archaeology and documentation. Because of the regular renewal and the wooden structure's vulnerability to many disasters, temples and shrines tend to well preserve their original design and construction, and building techniques have been carefully preserved in the process as well.

The first action of Japanese government to protect ancient antiquities occurred in 1871, after a period of neglect of its ancient and traditional culture due to the significant political and social upheavals as well as the influx of western techniques and culture. The Meiji government

started to allot funds for the preservation of ancient shrines and temples in 1880, and carried out a survey to create an inventory of treasures in 1888. With the enactment of the Law for the Preservation of Ancient Temples and Shrines in 1897, religious buildings were provided with designation and fund for protection, but it was not until the enactment of the Law for the Preservation of National Treasures in 1929 that this protection was expanded to objects of art and historic buildings including castles, teahouses, and residences.⁴

Shortly after World War II, the reorganization of the designation system built up the current structure of Japan's historic preservation system with the Law on Protection of Cultural Properties (*bunkazai hogohou*) enacted in 1950. The law, amended several times, has grown to include new categories of items. In the amendment of 1975, for the first time historic districts were introduced to allow the protection of a group of historic buildings. In 1996, in addition to the designation system that had more strict regulations on the property owners, a registration system was introduced through another amendment of the law so that historic structures, especially modern buildings in urgent need of protection, could be listed as registered cultural properties instead of going through the strict designation process, and without passing too much burden and regulation on the buildings and their owners. Under the registration system, the owner can still make alterations to the building, provided that the process is reported to and guided by the commissioner. This registration system effectively enlarged the number of historic structures being protected. By the end of 2014, 9951 structures were already listed under this newly introduced registration system⁵, in only 19 years, while the historic structures that have

⁴ Siegfried R C T Enders and Neils Gutschow, 1999, *Hozon: Architectural and Urban Conservation in Japan*

⁵ In January 2015, the Agency for Cultural Affairs celebrated the 10000th structures registered under the system in Kobe University.

been designated under the traditional designation system so far is still less than 5000⁶. As shown in Table 3-1, very few modern structures have been designated as Important Cultural Properties or National Treasures. The registration system tends to provide recognition and protection to important structures built after the Meiji Restoration as long as the structure was built over 50 years ago. Once a registered structure is designated as Important Cultural Property at any level, it will be removed from the registration list. Registered structures can also be removed from the list if there is any change of status quo or loss due to natural disasters. So far, 100 registered structures were removed because of the latter reason. Table 3-2 illustrates the current cultural properties system in general, including both designation and registration systems.

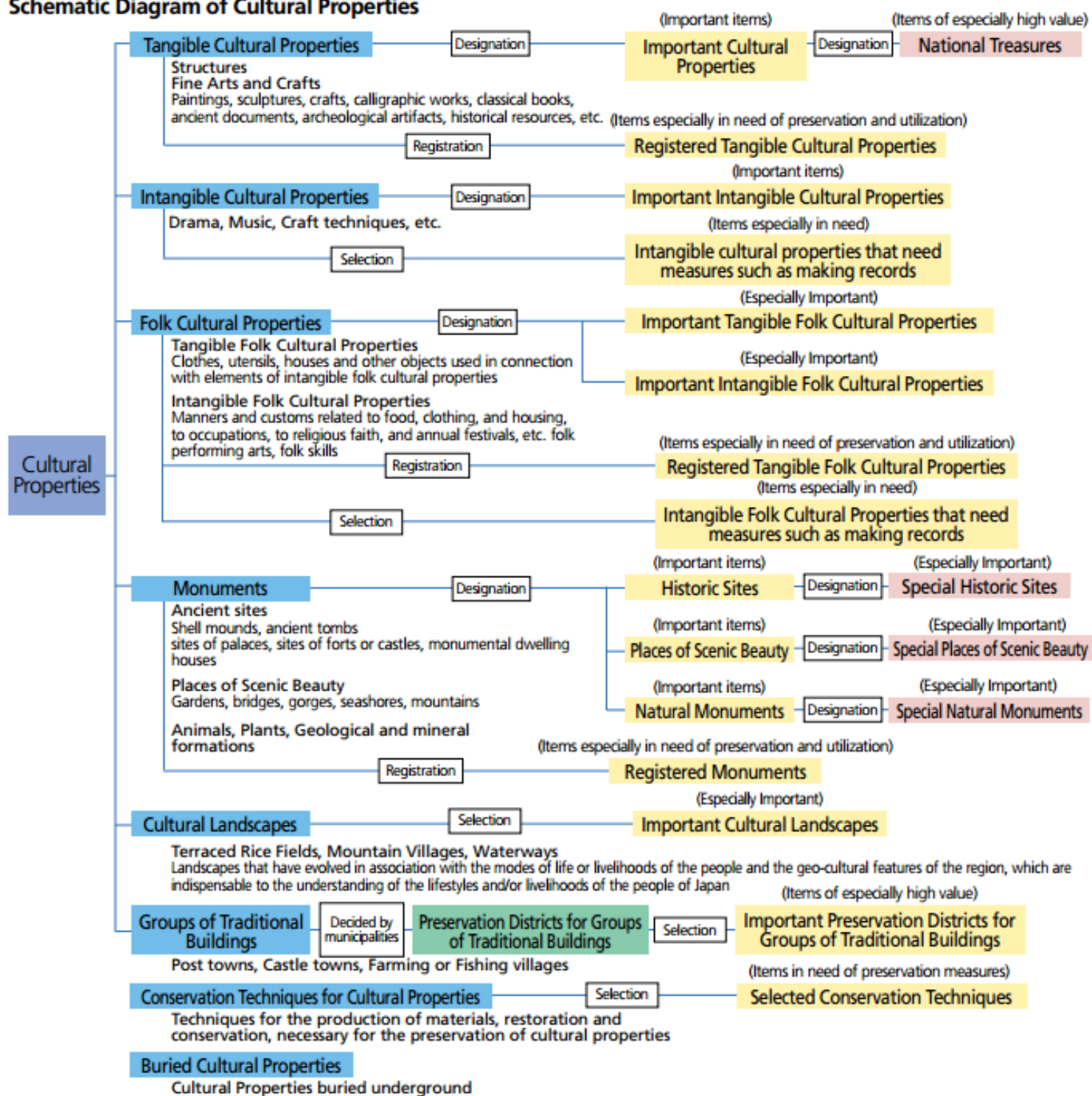
Table 3-1. Comparison of Designated and Registered Cultural Properties by Different Periods (Source: based on the data from the Agency for Cultural Affairs as of April 2015)

	Edo Period or Earlier (Before 1868)	Meiji Period (1868-1912)	Taisho Period (1912-1926)	Showa Period (1926-1989)
Designated Cultural Properties	2016	269	93	50
Registered Cultural Properties	1730	3223	2078	2920

⁶ The number of designation of Important Cultural Properties is 2428 (sites) as of April 1st, 2015, and the designation consists of 4695 historic structures in total.

Table 3-2. Current Cultural Properties System of Japan (Source: Agency for Cultural Affairs)

Schematic Diagram of Cultural Properties



Although the selection process used in the designation gives priority to representative examples of regions where no buildings or very few have been designated so far, the cultural properties designated are concentrated in those historic cities, such as Kyoto, Nara and Shiga. The number of designation in the top 5 prefectures, which all clustered around the area of Kyoto and Nara, accounts for 39% of the total designation nationwide (Table 3-3). Tokyo only ranks at the 9th with 77 entries. By contrast, the number of designed historic structures built in Tokyo after the Edo period weighs much more heavily. They make up over half of the total number of designations. By comparison, in the entire country, 83% of the buildings were built before the Meiji Period. Fourteen out of 50 designated historic structures in Japan were constructed during the Showa Period (1926-1989) are located in Tokyo.

Table 3-3. Top 5 Prefectures with Most Designated Cultural Properties (Source: based on the data from the Agency for Cultural Affairs as of April 2015)

	Region	Number of designation	Ratio to total designation
1	Kyoto	295	12.1%
2	Nara	262	10.8%
3	Shiga	183	7.5%
4	Hyogo	108	4.4%
5	Osaka	99	4.1%

Table 3-4. Number of Designations and Percentage of the Total Designation by Different Periods in Tokyo and Japan (Source: based on the data from the Agency for Cultural Affairs as of April 2015)

	Edo Period or Earlier (Before 1868)	Meiji Period (1868-1912)	Taisho Period (1912-1926)	Showa Period (1926-1989)	Total
Tokyo	35 (45.5%)	19 (24.7%)	9 (11.7%)	14 (18.2%)	77
Japan	2016 (83%)	269 (11.1%)	93 (3.8%)	50 (2.1%)	2428

The registered cultural properties seem to be more dispersed over the entire country and not concentrated in the area around Japan's two old capital cities. Kyoto ranks at the 4th place of prefectures with most registered historic structures, while Nara even falls out of the top 10. The

number of cultural properties registered in the top 5 prefectures accounts for only a quarter of total registration (Table 3-5), and most prefectures have over 100 cultural properties registered already. Tokyo again ranks 9th with 340 registered cultural properties. Table 3-5 compares and contrasts the registered cultural properties in Tokyo and Japan in terms of their period of construction. It is very conspicuous that more than half of the registered historic structures in Tokyo were built in the recent Showa Period, while only 30% of the registered structures in the country were historic structures from this period.

Table 3-5. Top 5 Prefectures with Most Registered Cultural Properties (Source: based on the data from the Agency for Cultural Affairs as of April 2015)

	Region	Number of registration	Ratio to total registration
1	Hyogo	595	6.0%
2	Osaka	583	5.9%
3	Nagano	471	4.7%
4	Kyoto	451	4.5%
5	Aichi	418	4.2%

Table 3-6. Number of Registration and Ratio to Total Registration by Different Periods in Tokyo and Japan (Source: based on the data from the Agency for Cultural Affairs as of April 2015)

	Edo Period or Earlier (Before 1868)	Meiji Period (1868-1912)	Taisho Period (1912-1926)	Showa Period (1926-1989)	Total
Tokyo	43 (12.6%)	59 (17.4%)	52 (15.3%)	186 (54.7%)	340
Japan	1730 (17.4%)	3223 (32.4%)	2078 (20.9%)	2920 (29.3%)	9951

The registration system provides moderate protective measures primarily for historic structures of the modern period. Their protection is increasingly necessary due to land development and changes in lifestyles. The Agency for Cultural Affairs identifies registered cultural properties that need to be preserved and adaptively reused. The owner of any registered historic structure has the obligation to inform the Agency of any change or damage to the property. The Agency for Cultural Affairs would then provide guidance, advice and

recommendation on any alteration of the property's exterior. This does not burden the change of the property's status quo like the designation system does, but, on the other hand, the subsidies that the government provides are also limited to the design and supervision fees related to the repair and restoration of the structure. The economic incentive the agency provides especially stresses that the projects aim to stimulate regional development through the reuse of any registered cultural properties. Half of the funding for these projects could be provided by the agency's subsidies to the registered cultural properties.

The standards set by Agency for Cultural Affairs for registration, in addition to the "50-year" rule, include: (1) structures that contribute to the country's historic landscape; (2) structures that are the model of a particular type of structure; (3) structures that could not be easily reproduced. While this registration system is comparable to the National Register of Historic Places in the US, the criteria for structures to be registered are quite different. In the Japanese system, none of the events, persons, or information potential could be significant factors of registration. Instead, the Japanese emphasize the exterior look and style of the properties, whether they are representative and unique. The change of status quo of the registered property, which requires the owner to submit notification to the agency, is defined as any change of the roof, exterior, or floor plan of the structure that can be easily seen from outside. If the alteration takes place at the area that is not 75% exposed to the public's sight, for example, it is blocked by a neighboring building, or if it is an interior alteration, the notification is not required.⁷

The design of Japan's designation system tends to value pre-modern cultural properties and protect a much higher percentage of historic structures constructed before the Meiji

⁷ Agency for Cultural Affairs, "Guide of Registered Tangible Cultural Properties", March 2011, http://www.bunka.go.jp/seisaku/bunkazai/shokai/yukei_kenzobutsu/pdf/bunkazai_pamphlet_6_ver02.pdf

Restoration. Because Tokyo is primarily a post World War II municipality, this designation system is not protecting very much of the city. The registration system, by comparison, plays a more important role in the historic preservation in the capital city by offering expansive protection on modern architecture. Still, this registration only provides moderate protection to the exterior of historic properties and relies on voluntary protection of cultural properties by their owners. Although the owners of registered cultural properties can benefit from reduction of residential property tax and appraised value of inherited properties, the registration system does not benefit commercial properties in a way that the owner would consider reusing the structure. The utilization of any cultural property encouraged by the Agency for Cultural Affairs providing financial support to repair and restore a property requires the project to be open to the general public and able to encourage the region's economic development. Many modern buildings reused for commercial development cannot take any advantage of these subsidies. The nature and the difference between the designation and registration systems leaves a substantial gap for cities like Tokyo, where a significant amount of the cultural heritage is of the modern period, which is not effectively covered by the national government's protection system. This gap thus needs to be filled by the efforts of the local government and local communities.

Local Designation, Protests and Preservation Activities in Tokyo

Based on the Law on Protection of Cultural Properties of 1950, the Tokyo Metropolitan Government enacted its local version of the historic preservation law in 1956. The metropolitan Board of Education was given the right to designate tangible and intangible cultural properties, folk cultural properties, monuments, preservation techniques, and buried cultural properties, in a similar way as the Agency for Cultural Affairs designates national cultural properties. The

designation needs to be approved by the property owner. Similar to the national designation, the protection at the local government level also favors pre-modern historic structures. Forty-two of the 58 designated sites of Tokyo Metropolitan are structures that were constructed before the Meiji Restoration, while 4 of them are from Meiji Period, 3 from Taisho Period, and 9 from the most recent Showa Period⁸. It is not within the scope of this local designation process to give extensive coverage of protection to properties, especially modern structures, which the national system does not cover. It can be regarded as a system that designates cultural properties of less significance than those that are designated nationally. The total amount of designated sites, locally and nationally, is only about 130. With another 340 nationally registered historic structures, the sum is still less than the number of National Register of Historic Places designated in Manhattan, which is over 500, whereas the area of Manhattan is only 4% of that of Tokyo Metropolis.

Given the fact that local government has been comparatively inactive in the preservation of Tokyo's historic structures and landscapes, the destiny of many of these properties depends on grassroots preservation activities. These activities came to life with a series of environmental battles and local quality-of-life issues in the 1970s. Prior to that time, few sociopolitical developments and large-scale protests were directed to improving the preservation climate and environment for making use of the city's past.

The conflicts between workers' unions and the companies' management during the 1960s gradually ensured workers, mainly those in large corporations, of steady wage increases, job security and humane treatment. During the two decades that followed, many households stepped

⁸ Source: Tokyo Metropolitan Board of Education, Tokyo Metropolitan Government Division of Lifelong Learning, Community Education Support Division, Office of Education, Tokyo Metropolitan Government, <http://bunkazai.metro.tokyo.jp/>; http://www.kyoiku.metro.tokyo.jp/gijiroku/gi_bunkazai.htm

up to the middle-class. National policy promoted homeownership and the protection of private rights, and the nuclear-household formed in this period typically consisted of a husband working in the city and a full-time housewife taking care of the children at their suburban home. As the high-speed growth slowed, the social and environmental cost of this rapid economic development became more evident. Attentions of the society shifted from political issues to economic justice, deterioration of the environment, and quality of life issues. For example, protests occurred against polluting factories, high-rise buildings, and military bases that directly affected the quality of life. Most urban mobilizations were led by environmental groups or other activist groups, scholars, or writers, building the network of people who distributed information. Discussion was stimulated at the municipal or local level through magazines, symposiums, and/or local community development activities. The subsequent departure of heavy manufacturing industries and emerging service and information society led Tokyo into a period of deindustrialization and hi-tech transformation. The improvement of air quality due to the relocation of factories allowed the commercial interests to attract international tourists. Tokyo provided a different kind of “attractiveness” from global cities like Paris or New York with its crowds and profusion of irregular and unplanned spaces, which reminded the capital city to look for its locality and uniqueness.

The transformation, meanwhile, started to drive up the land price drastically and triggered speculation in the 1970s. In the suburban areas, the once ideal “nuclear-household” model spurred urban sprawl problems. The horizontal sprawl of single-family housing on the periphery and limited investment in public transportation shifted the emphasis to vertical growth of office buildings and apartments in the central districts around 1974.⁹ Naturally, big real estate

⁹ According to geographer Matsubara Hiroshi, as cited in Jordan Sand’s book “Tokyo Vernacular”

developers began to construct high-rise buildings, both residential and commercial, with new building technology and materials in response to the increase of land price and intensive speculation on land development. Inevitably, the height regulations that many districts in Japan used to have, the *hyaku-shaku seigen* (hundred-Japanese-foot¹⁰ restriction), had to be loosened with the new introduction of Floor-Area Ratio (FAR) regulations in the amendment of the Building Standard Law. These high-rise constructions undoubtedly altered the city's overall skyline and thus stimulated heated debates over the preservation of the traditional urban landscape and aesthetics.

The protests and activism in Japan's old capital, Kyoto, were especially vigorous and attracted the attention of the entire nation, reaching UNESCO in Paris. Kiyomizu Temple, one of the National Treasures with longest history in Kyoto, had to purchase a piece of land with one billion Japanese Yen to stop a nearby high-rise construction project to avoid the deterioration of the surrounding landscape. Two major debates over the controversy extended over a decade with active citizen's protests in the form of articles published in newspapers and periodicals, forums and symposiums, and councils and unions established to spread the influence of the activism.¹¹ In Tokyo, the financial district, the Marunouchi area, witnessed the construction of a 100-meter office tower in the 1970s, which also generated similar dispute over the preservation of skyline and landscape around the Imperial Palace. In this case the discussion was within a group of concerned architects and did not receive the constant and intensive attentions of public activists that Kyoto experienced.

By the 1980s, historic preservation became a common part of *machizukuri*, the term for community development activities that arose in the 1970s at the local level. Especially in the so-

¹⁰ Approximately 31 meters

¹¹ Manpei Kimura, 2007, *Kyoto Hakai ni Koshite* (Resisting the destruction of Kyoto)

called *Shitamachi*, it was commonly associated with rows of wooden structures and the feeling of Edo era that still existed. Local historians, writers, scholars, and feminist groups in particular, endeavored to collect oral history, explore hidden historic features, local stores and restaurants of the district, and publish their findings and guide maps in local magazines that sometimes became popular among travelers and residents. Their activities aligned with the rising consciousness about the commodity culture, and at the same time provided a platform for the local community to stress their concerns, especially for property owners to deal with the developers that penetrated into these districts to seek money-making opportunities. By the late 1980s, at the time of the zenith of speculation on real estate, local property owners were frequently being approached by developers who wanted to redevelop their land. Through the efforts of the local preservationists, the owners who were not willing to sell their land received support and their stories were spread by the mass media. These local activists, without any help or guidance from the municipal or ward governments, created a model for their activism and preservation efforts, engaged the residents, met the demand of domestic and even international tourists, invented and assembled from everyday life a locality and an identity of the community. It was their activities that in turn influenced on some of the local governments to pay attentions to the historic districts.¹²

Preservation of Railway Heritage and Stations in Japan

The preservation of historic railway structures remains a challenging and complex area, compared with saving many other forms of industrialization. Many of the railway sites of primary importance are still fully in use today, and thus the main purpose of the structures is to

¹² Jordan Sand, 2013, Tokyo Vernacular

serve transportation needs. As increasing demands require obsolete facilities to be upgraded, these structures actually burden the transportation system. Redundant railway structures sometimes occupy high-value urban land. Similar to the fate of many urban factories that go out of service, they face either adaptation to new uses or demolition. The argument for preserving these abandoned railway structures might be based on their aesthetic and landscape value, however, the continuing maintenance burden of the preservation while maintaining a basic standard of public safety cannot be ignored. In the context of Japan, while the above statements hold true, the national preservation system originally was not designed to spread extensive protection over modern structures. Among the 73 sites designed as important cultural properties under the category of transportation and engineering structures in the modern period, which is less than 3% of the total designation, only 9 designated sites are related to railway development. Three of them are railway station buildings, including Tokyo Station's Marunouchi Station Building. The responsibility of preservation has been largely placed on the owners of these railway structures in the context of the privatization of Japanese National Railway Companies and the existence of many private railroad operators in Japan.

The nation nevertheless has great interests in its railway heritage. The very dense network of railroads and intensive use of train services, especially in metropolitan areas, make the railway system one of the most popular means of transportation for commuting and traveling. This has contributed to a sympathy and concern because the railway lies at the heart of many people's daily life. The history of railway development and its importance is recognized by the Ministry of Railways, which first planned a railway museum in 1911, 15 years after the first railway museum in the UK was opened. The Japanese Railway Museum opened to general public on October 14, 1921, the 50th anniversary of the opening of Japan's first railway line between

Shimbashi and Yokohama. There was also an anniversary celebration of a railway shrine and a monument in honor of workers that died for railroad construction. Since then, that date in October has been designated as “*Tetsudo no hi*”, Railway’s Day.¹³ It was not until the last two decades that a wave of railway museums, railway villages, and other exhibition facilities has emerged all over the country. Many abandoned station buildings, for both JR and private railway companies, have been redeveloped into facilities to exhibit their history and related items. Currently, there exist about 90 railway exhibition facilities in all forms around the country. After the privatization of Japanese National Railway Company in 1987, the East JR Company, which manages the railway services in a large area of eastern Japan, including Tokyo Metropolitan Area, established East Japan Railway Culture Foundation to take in charge of railway museums and promote social connection through its railway culture.¹⁴

The registration system for National Registered Important Cultural Properties has seen a large number of railway structures listed, contrary to the number of railway structures been designated. Two hundred forty three railway-related structures, including 73 station buildings and platforms, bridges, tunnels, and even toilets in a station, which are owned by JR, local governments, or private railway companies, have been registered under the category of transportation. The railway structures account for over 60% of transportation facilities that have been registered, and most of them were constructed in the Showa period. This large amount of registration does not, however, faithfully represent the strong awareness of preserving railway structures in every place. Sometimes, when a railway line or a railway station is recognized by the registration system, a group of structures are altogether listed as registered important cultural properties. As a result, although a number of railway structures have been registered, they

¹³ Asahi Shimbun, 1921-4-19, 鉄道五十年祭 十月十四日

¹⁴ East Japan Railway Culture Foundation, <http://www.ejrco.or.jp/aboutus/index.html>, last accessed in July 2015

concentrated at only a few places, and many of them are bridges, tunnels, and abandoned facilities in rural areas, which face no threat by other uses. In Tokyo, not a single railway structure is found in the list of registered cultural properties. The active use of urban railway structures and/or the high value of the land these structures occupy as mentioned previously may be the explanation. This situation reveals the challenge for preservation of railway heritage and lack of protection for these structures in the urban area.

Conclusion

The government's initial action for the preservation of ancient temples and shrines during the Meiji Era was a response to the decline of traditional culture in the face of the Western culture that flooded into Japan. Although the cultural properties designation system established after World War II kept including new categories of protection, pre-modern structures remained the main targets for designation. The preference for pre-modern structures has led to a lack of mechanisms for the protection for modern buildings. Urgent needs to preserve modern structures arose as the nation's economy developed rapidly with people's lifestyle constantly changing. The intention of the registration system introduced in 1996 under the cultural properties designation system was to provide moderate protection mainly for modern structures, and to give economic incentive for voluntary preservation. No hard regulations or burdens, however, are placed on the owners of these registered properties, and more importantly, although owners of residential buildings may benefit from reduction of property tax and inheritance tax, the registration system does not offer strong incentives for the preservation of commercial structures.

While the national preservation law does not provide strong protection for historic structures of the modern period, neither does Tokyo Metropolitan government have a designation

system that includes many properties built since Meiji Restoration. The local designation system followed the philosophy of the national system without any readjustment to fit into Tokyo's unique history and context. As a result, the local grassroots' preservation efforts play a more important role in saving endangered buildings. The local activism is using personal resources to generate a wider attention through the media. Local activist groups, scholars, artists, and writers seek greater recognition of their uniqueness and identity. These local efforts give rise to favorable local preservation climate, although they remain quite moderate in contrary to Tokyo's aggressive real estate development.

The preservation of railway structures, in particular, has proved to be a complex problem. Especially in urban areas, the railway facilities are still actively in use and thus have to accommodate increasing pedestrian travel demands and freight transportation services. Redundant or obsolete structures, if occupying high-value urban sites, will immediately face intensive pressure for redevelopment. Their private ownership determines that the decision whether the structure would be preserved or not is largely due to the railway company's discretion. Railway companies in Japan, including JR and other private operators, are paying increasing attention these days to commemorating the railway culture by establishing museums, making social contributions and connections, and taking good care of their railway heritage. The high recognition of railway development at both national and local level would definitely benefit the preservation of any railway heritage. While railway structures on the land where there is limited competitive use can be protected as registered cultural properties, unfortunately the railway facilities on high-value land in large cities like Tokyo are unlikely to be designated or registered. The restored *Marunouchi Ekisha* at Tokyo Station has been the only listed railway structure under the cultural properties system, even though Tokyo is the city where the nation

first started its railway development. The preservation of railway stations in Tokyo thus faces a mix of challenges and opportunities, given the preservation climate of the capital city.

CHAPTER 4: EVOLUTION OF MARUNOUCHI DISTRICT AND REDEVELOPMENT OF TOKYO STATION AREA

The dynamic scene associated with Marunouchi District's evolution and the redevelopment of the Tokyo Station area will be investigated based on the framework constructed in previous chapters. The case study of Tokyo Station area's redevelopment combines visions of different stakeholders for the district's future development and their own core interests in this process. The history and development of Tokyo Station will be first introduced from the perspectives of the railway company, JR-East (formerly JNR). The research on Marunouchi District's evolution and redevelopment plans provides an insight into the metropolitan government's strategy to stress the role of the city's urban core in order to solve urgent problems the government thought the capital city was facing, and to respond the changing economic condition of Tokyo as well. The government envisioned this development of the urban core through its long-term master plan. Meanwhile, decisions of major developers also strongly shaped the development of the district, especially when the real estate development rose in its importance among industries and when the economic bubbles collapsed and the developers were struggling through the crisis. Besides, the role of the most active preservation group called "Citizens who love the red-brick Tokyo Station" (*akarenga no Tokyo-eki wo aisuru shimin no kai*) in this decision-making process reflects how their campaigns and advocacy could influence the process when the group was able to establish effective platform of communication with the railway company and express their opinions with extensive support and nationwide media coverage.

Brief History of Tokyo Station, and Its Recent Development

Tokyo Station opened in December 1914, about 40 years after the first railway line was built in Japan. The station building on the Marunouchi side, the *Marunouchi Ekisha*, was designed by the leading Japanese architect of the modern period, Kingo Tatsuno. The ground plan was laid out so that the railway lines generally extended north to south, and the station buildings on the two sides face to the east and the west respectively. *Marunouchi Ekisha* is the one facing the west, leading on a straight avenue to the eastern side of the Imperial Palace. On the other side, the first Yaesu station building was completed in 1929, connecting to a prosperous commercial district called Nihonbashi, close to the famous Ginza commercial area. The *Marunouchi Ekisha* was named after the district where the building was located. This district used to accommodate military facilities and a courthouse at the beginning of Meiji era. It was later transformed into a financial district with Japan's first office street developed by the Mitsubishi Estate, known as Mitsubishi Village.

The station building survived the Great Kanto Earthquake in 1923, but was devastatingly damaged due to an air-raid attack during World War II. The 3rd floor, the entire roof and the two attached domes were almost all burned beyond repair. The post-war revitalization gave priority to the recovery of the railway system's transportation capacity. The repair work of the station building did not restore most of the 3rd floor and neither of the two domes on top, but left the building with a new hipped roof, different from its original design, in order to restart the operation as soon as possible. The recent restoration work reversed the post-war repairs and rebuilt both of the lost domes and the 3rd floor.

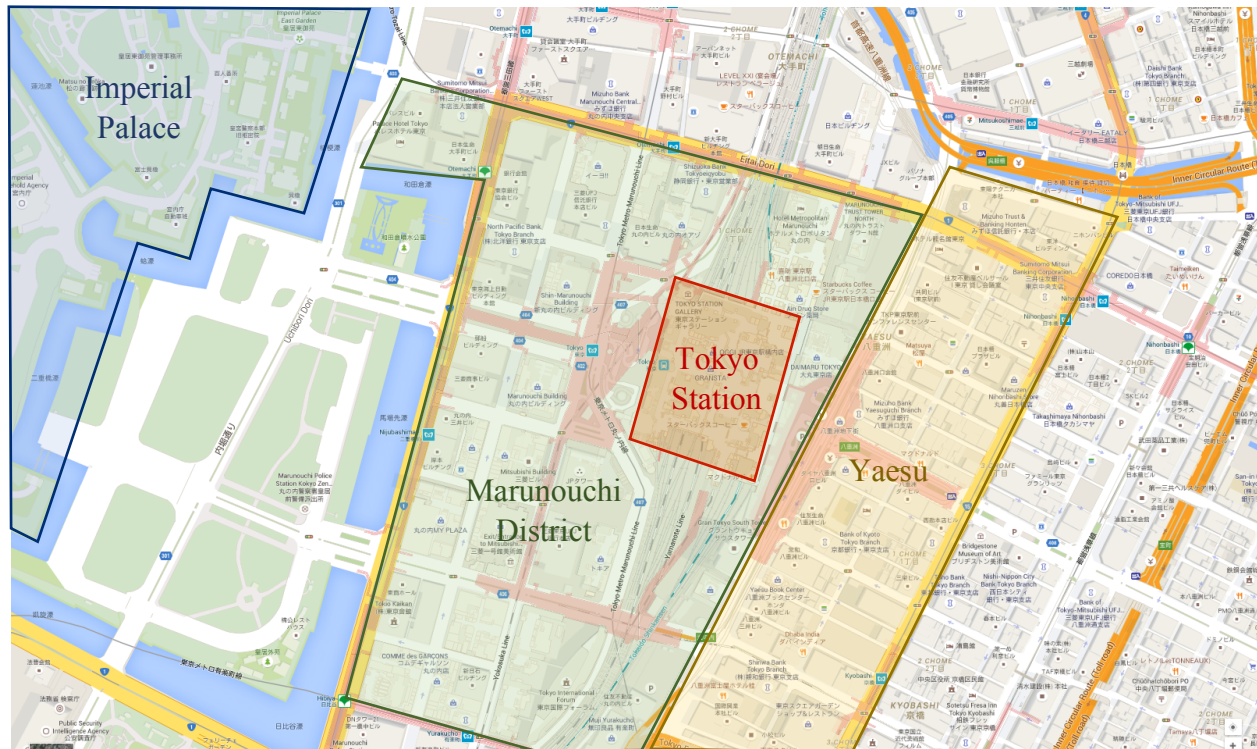


Figure 4-1. Map of Tokyo Station and Its Surrounding Area (Source: Google Map, May 2015)

Upon the completion of Tokyo Station in 1914, it replaced Shimbashi Station, the former terminal of Tokyo-Yokohama line, as the new central terminal of Tokyo. The station was designed in the form of several island platforms that trains pass through, described as a “broiled eel” style in Japanese. This is different from many terminals in Europe and North America that were designed as a dead-end station, a “comb” style, where trains depart and arrive at bay platforms. Tokyo Station expanded from 4 platforms and 8 rail lines during the pre-war period, to 7 platforms and 16 rail lines in 1961 before Shinkansen, the bullet train system, was introduced. Two new platforms and 4 standard-gauge railways were added on the Yaesu side of the station when the first Shinkansen started operation in 1964. *Tetsudo-Kaikan*, the complex served as the station building on the Yaesu side, was expanded from 6 to 12 floors. This high-rise station building comprised of not only station facilities, but also retail stores and office space on top of the station, which was a typical model of the so-called “Public Station” (*Minsyu-Eki*).

These public stations were funded through “public and private sector collaboration”, partially by private stakeholders that had interests in the local station and would take advantage of the retail and office facilities. This was because JNR did not possess enough money to repair and redevelop station buildings, which were not on the priority list for the rehabilitation of railway services. In 1971, the restriction on JNR to run commercial facilities was removed, and more work to improve the structures became possible. On the Marunouchi side, the change of the station’s configuration was not that significant, except for the introduction of several metro lines and the development of underground space. Currently, Tokyo Station has more platforms and lines than any other station in Japan. This includes 10 platforms and 20 rail lines above the ground, half of which serve Shinkansen lines, and another 4 underground platforms with 8 lines serving east bound trains connecting Tokyo with Chiba prefecture.

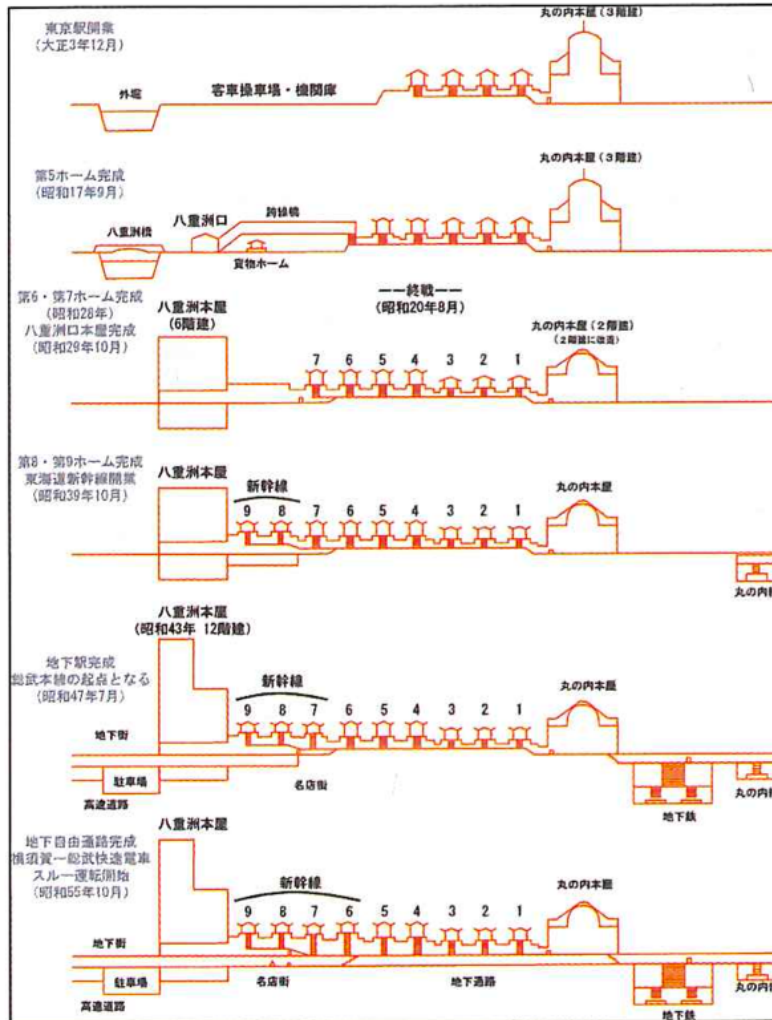


Figure 4-2. Evolution of Tokyo Station's Station Buildings and Tracks from 1914 to 1980. Left Side: Yaesu Station Building; Right Side: Marunouchi Station Building; From Top to Bottom: 1914, 1942, 1953, 1963, 1972, 1980 (Source: Tetsudo Kaikan)

Tokyo Station, however, is not the largest railway facility in Tokyo in terms of the passenger volume. The number of passengers that enter or exit at Tokyo Station falls greatly behind that of the major transit stations, such as Shinjuku, which is the world's busiest station. Still, Tokyo Station serves the largest number of Shinkansen passengers and in total about 1 million people in 2010, making it the 5th busiest stations in Tokyo. Table 4-2 provides the number of passengers getting on trains at several major stations of the JR lines (JNR before 1987). Daily commuters who use the train services to commute between home and workplace

tend to use commuter pass for entering the station, while other passengers might purchase tickets to board the trains. The table clearly illustrates that the growth of number of passengers with tickets significantly outranked the growth of the number of passengers with commuter passes since 1980. Back in the 1960s, the number of passengers increased dramatically due to the rapid economic growth, and the number of commuters grew especially quickly. This increase of volume of passengers with commuter passes slowed down and even reversed when economic growth stagnated after the oil crisis and the deflation of economic bubble. The number of commuters tended to flatten out since late 1990s as the aging population caused the number of people working began to stagnate as well. Meanwhile, the growth of passengers with tickets became more stable, and thus the main source of overall growth of ridership. Tokyo Station was transformed from a station that served mainly commuters before 1990, when the number of passengers using commuter passes doubled the number of passengers using tickets, to a station where an almost equal amount of passengers with commuter passes and with tickets are boarding the trains. The number of passengers with commuter passes entering Tokyo Station once outranked all other major stations in the 1960s, but was gradually surpassed by the major sub-cores like Shinjuku, Ikebukuro, and Shibuya, when the government tried to solve the problem of over-density at the urban core and redistribute some of its functions. The relocation of Tokyo Metropolitan Government Office from Marunouchi area to Shinjuku in 1991 especially altered the kind of passengers and resulted in a significant decrease of commuter pass users at Tokyo Station. The area surrounding Tokyo Station regained its position as one of the major office streets as a recent “return to urban core” policy encouraged the redevelopment of the area and several new redeveloped office towers were completed. As a result, the number of passengers with commuter passes entering Tokyo Station increased slightly after 2000. Compared with the

above mentioned sub-core stations, in both “commuter pass” and “tickets” sectors, Tokyo Station has seen a more stable positive change in the passenger volume since the 1990s.

Table 4-1. Ranking of Daily Passenger Volume of Tokyo’s Major Railway Stations (source: Nikken Sekkei ISCD Study Team, 2010)

Rank	Station	Daily Passenger Volume
1	Shinjuku	3.5 million
2	Shibuya	3 million
3	Ikebukuro	2.5 million
4	Kitasenju	1.5 million
5	Tokyo	1.1 million
6	Shinagawa	0.95 million

Table 4-2. The Annual Passenger Volume and Volume of Commuters and Non-Commuting Passengers at Tokyo’s Major Railway Stations, in thousands (source: Ministry of Land, Infrastructure, Transport and Tourism, 1960-2013)

	2013	2012	2011	2010	2005	2000	1995	1990	1985	1980	1975	1970	1965	1960
TOKYO ALL STATIONS														
Total	3317344	3273538	3225866	3232332	3152399	3110256	3181349	3074781	2647785	2522556	2572807	2239000	2258422	1721025
Commuter Pass	1962690	1929235	1917516	1929709	1881021	1906289	2004562	1961465	1714059	1650138	1644923	1438481	1476567	1055721
Tickets	1354654	1343261	1308359	1302623	1271379	1203967	1176787	1113315	933726	872418	927684	800519	781855	665304
TOKYO STATION														
Total	151807	146831	139445	139322	138463	136003	146257	143830	120332	124704	138942	125056	144660	121751
Commuter Pass	79939	77619	77458	78011	77908	78602	88706	93020	83485	85386	90500	79988	100672	82615
Tickets	71867	69212	61987	61311	60555	57401	57551	50810	36847	39318	48442	45068	43988	39136
SHIBUYA STATION														
Total	138167	150383	147412	147196	154718	156280	151198	151289	132503	121613	119541	108191	104186	85616
Commuter Pass	74103	79425	78704	79209	82669	85710	85632	87858	76752	72991	71316	65756	64989	48155
Tickets	64064	70959	68709	67987	72049	70570	65566	63432	55751	48622	48225	42433	39197	37461
SHIJUKU STATION														
Total	274122	271134	268701	268901	272994	275134	272198	258964	242307	228383	238867	172587	142241	108338
Commuter Pass	146379	144489	143807	144412	147040	153258	160145	152766	146180	138128	149046	95822	80444	55902
Tickets	127743	126646	124893	124490	125954	121876	112053	106198	96128	90255	89821	76765	61797	52436
IKEBUKURO STATION														
Total	200878	201026	199383	198641	206104	208143	222248	215525	175948	161285	163383	154239	144996	89649
Commuter Pass	117525	117421	116865	117166	121142	126650	139490	136564	108642	97693	101245	102233	92884	49059
Tickets	83353	83605	82518	81475	84962	81493	82758	78962	67306	63592	62138	52006	52112	40590

SHINAGAWA STATION														
Total	122516	120333	118545	117425	110545	92555	85350	75203	56530	52327	34806	27591	28330	22878
Commuter Pass	70658	69675	69485	69163	66486	61368	59285	51861	41167	38046	20831	17985	18746	12301
Tickets	51859	50658	49061	48261	44059	31186	26065	23342	15362	14282	13975	9606	9584	10577

The area around Tokyo Station is accessible through other metro stations, including the Ootemachi and Yuraku-cho stops on the Marunouchi side and the Nihonbashi and Kyobashi stops on the Yaesu side. Together with the metro station called Tokyo underneath Tokyo Railway Station, these stations served a total number of 841000 passengers daily in 2013, which was a significant increase from the number in 2012. Similarly, the percentage of passengers that use a commuter pass to enter these metro stations is declining.

Development of Marunouchi District and Its Changing Economic Outlook

During the Edo Period, the Marunouchi District accommodated the *Buke* class, a group of warriors and samurais that had authority over military affairs and governance, who lived in a cluster of their residences called *Buke-yashiki*. These houses were demolished after Meiji Restoration, and the district became the army's barracks and parade ground. Because of the district's proximity to the Imperial Palace (see Figure 4-1), when the Meiji government introduced town planning (*shiku-kaisei*) to provide public improvements and regulate the land use in the capital city, the use of Marunouchi District was debated within the government. It was important to balance the need of industrialization with the symbolism of the Emperor's symbolism. With this consideration, the entire area of 135,000 *tsubo* (one *tsubo* equals to approximately 3.3 m²) under the control of the Army was sold to Mitsubishi, one of the three

major financial cliques, known as *Zaibatsu*, encouraged by the government. Mitsubishi then developed Marunouchi District into Japan's first office street.

The district, however, was not transformed into the space as it is today with its modern characteristics until the completion of Tokyo Station and the Great Kanto Earthquake, which devastated some of the older commercial districts of Tokyo. The opening of Tokyo Station after Japan's victory over Russian in the Russo-Japanese War with various ceremonies occurred in front of the *Marunouchi Ekisha* marked the rise of the modern nation as a newly industrialized power. The station therefore became a symbol of the nation's industrialization and the emperor's power. The economic boom that followed increased the demand for office space. In addition, the unexpected earthquake destroyed almost the entire Nihonbashi District, a prosperous commercial district near the Yaesu side of the station, and consequently, the economic center shifted toward the Marunouchi District. The Imperial Palace, Tokyo Station, and the modern office buildings developed by Mitsubishi, especially the Marunouchi Building, an architectural masterpiece, together formed a representative modern urban space of the center of Tokyo. This modern image has been deeply embodied into Marunouchi District since then and has important implication for its later development and transformation.

During the post-war era, as the business center, Marunouchi District experienced three major waves of redevelopment that generated extensive debates. The first comprehensive redevelopment plan of Marunouchi was initiated in the middle of Japan's economic miracle in the 1950s and 1960s. The rapid economic growth and the Tokyo Olympics of 1964 created enormous demand on higher buildings with more usable space, resulting in a construction boom. The new Floor-Area Ratio regulation was introduced in the amendment of Building Standard Law in the early 1960s, and replaced the previous regulation on building height, known as

hyakushaku-seigen, which limited the height of building to 100 shaku (approximately 30.3 meters). As a result, Marunouchi district was largely transformed with the appearance of many high-rise buildings. The second wave of redevelopment occurred during the economic bubble period in the late 1980s. As the real estate market became overheated and developers aggressively invested in commercial real estate, Mitsubishi proposed a plan that would imitate Manhattan, aiming to transform the Marunouchi District into a global financial center comparable to New York City's numerous super high-rise office towers. The plan was seen as a reaction of the new generation of the leaders in the corporation to the rapidly increasing land price in Tokyo as well as the district's declining competitiveness due to the government's multi-core strategy. Although the corporation was able to foresee some emerging demands for office space and the need to renew the financial district in order to sustain its position, the "Manhattan Plan", especially when the demolition of Tokyo Station's Marunouchi Station Building was revealed to the public, received severe criticism and failed to be implemented. The most recent redevelopment plan resulted in the demolition of the old Marunouchi Building, the most representative office building in the district, and Japan Central Post Office, is interpreted as the continuation of the previously unsuccessful attempt. Many suburban office buildings suffered severely from the crisis. The collapse of economic bubble in 1991 proved the importance of the central location where location of the office building is feasible and profitable. While the overall demand for office space shrank significantly, the new and large office buildings that had good locations became the main target of corporations in the rental market and those developers quickly recovered. The effect of globalization on the emerging information society became more apparent in the 1990s. The significance of urban core as a place where the headquarters of corporations can cluster and the exchange of information rapidly takes place was again

recognized. Both developers and the metropolitan government had urgent need to redevelop Marunouchi District and improve its outdated buildings and facilities to accommodate the emerging demand. The preservation activities associated with the previous work of saving Tokyo Station did not effectively reshape the redevelopment decisions made in the district. Mitsubishi apparently learned from its failure with the “Manhattan Plan” and actively communicated with the government and local stakeholders from the beginning of the process and tried to interpret the history of the district by itself.

While the first redevelopment wave mainly involved the discussion of the landscape and building height surrounding the Imperial Palace, the early proposal to redevelop the station building of Tokyo Station into a high-rise complex was criticized because it was not appropriate to construct tall buildings that allow people to look down into the Imperial Palace from above. The discussion reminded people of the presence of the Imperial Palace and the meaning of its presence adjacent to the financial district. The investment in the real estate market in Tokyo at the time was believed to be without any risk, and investors believed that the land value would rise in perpetuity, especially the land at the urban core. The price of commercial land in central Tokyo rocketed higher than the rest of the city. In 1986, the land price of commercial use grew by 56.2% in the Chiyoda Ward, where the Marunouchi District is located (Table 4-3), while Tokyo increased in its land price by 8.7% for all types of land and 19.2% for commercial land¹⁵. As the demand of domestic and international corporations on office space in the urban core of Tokyo continued to increase, the problem of land shortage in the city center became more severe and the real estate industry requested the government to relax the Floor-Area Ratio regulations and sell the land of the Japanese National Railway Company to provide enough supply of office

¹⁵ Asahi Shimbun, 1986-4-1, 地価上昇率、再び上向き 地方安定、都心商業地は50%超す

space in the urban core and normalize the land price growth.¹⁶ The central government also attempted to have control over the land price that had been soaring too rapidly. Consequently, on July 23rd of 1986, the Minister of Construction, after meeting with representatives and experts of real estate industry and architecture industry, first revealed a proposal by an architect to reconstruct the station building of Tokyo Station into a high-rise complex and sell the air rights above the station platforms and railroads to construct 20 40-floor high-rise buildings in the Marunouchi District. This was one of the three redevelopment districts where the government planned to increase the land supply to cool down the price of land.¹⁷ This proposal was further discussed within a government committee focusing on the issue of Tokyo Station's redevelopment. The Rinkai Sub-core, another redevelopment district that was a waterfront area near Tokyo Bay partially created by land reclamation, was later given priority for redevelopment due to its land ownership. Still, by combining the use of the land previously owned by former Japanese National Railway Company and the old JNR main office building, a large amount of land in the Marunouchi District would be made available to the real estate market for redevelopment after railroad privatization in 1987. The ambition of Mitsubishi Estate was to acquire these lands and launch a comprehensive redevelopment plan for the entire district, where the corporation already held over 30 office buildings. The so-called "Manhattan Plan" of Mitsubishi was announced in January 1988, and a committee of landowners in Marunouchi and adjacent districts, "Ootemachi-Marunouchi-Yurakucho District Redevelopment Plan Promotion Council" was established in July. The Council, through its survey and a comparison with New York's Downtown and Midtown area, stressed that a regulation relief of the Floor-Area Ratio in Marunouchi District would be required to provide more office and residential space that were

¹⁶ Asahi Shimbun, 1986-4-1, 不動産業界は乱戦模様 賃貸料高騰し、新規参入相次ぐ

¹⁷ Asahi Shimbun, 1986-7-24, 民活で東京駅高層化と東京湾岸再開発 天野建設相が構想

necessary for the city center's regeneration as an international business district. The Council also stated that, to plan for Tokyo's future within the context of globalization, the polarization (*ikkyoku syuuchyuu*) of multiple functions in the urban core might be inevitable and the district had to be able to accommodate global corporations¹⁸.

Table 4-3. Land Price Growth of 3 Central Wards in Tokyo (Source: Nomura Research Institute)

	1983	1984	1985	1986
Chiyoda Ward	8.6%	24.7%	29.7%	56.2%
Chuo Ward	9.1%	19.7%	32.0%	55.9%
Minato Ward	8.1%	20.7%	29.4%	48.3%

The Tokyo Metropolitan Government, however, in the 1980s, sought to redistribute some of the urban core's functions to sub-cores of the city to solve its problem caused by this polarization of too many functions in the city center. In addition to the preservation groups that advocated to save the Tokyo Station, the metropolitan government also expressed their distaste towards the redevelopment plan promoted by Mitsubishi, which it thought may enhance the agglomeration of functions in the city center.¹⁹ In Tokyo's second long-term master plan published in 1987, the government pictured the capital city in the 21st century to be a balanced multi-core city. Overconcentration of business functions in a single urban core was identified as the cause of high land price, long-distance commuting, and unbalanced regional development, and therefore needed to be suppressed. While higher-level business, such as finance and information industry, should remain at the urban core, regenerating the central area and connecting with global cities like New York and London, functions of research & development and information processing would be redistributed to sub-cores. These include existing commercial centers like Shibuya, Shinjuku, and Ikebukuro, as well as emerging sub-cores like

¹⁸ Asahi Shimbun, 1989-10-25, 丸の内に経済機能の1極集中を「マンハッタン」調査委が報告

¹⁹ Asahi Shimbun, 1988-7-21, 地権者が集まり協議会設立「一極集中あおる」都は反発

Rinkai sub-core, Oosaki, and Ueno-Asakusa (Figure 4-3). In the third long-term master plan published in 1991, a similar statement to “promote the proper dispersion of functions” could be found with an emphasis on “business core cities” that referred to Tokyo’s neighboring cities, such as Yokohama and Chiba, instead of only sub-centers within the boundaries of Tokyo (Figure 4-4). The planning of Tokyo’s Central Business Zone encouraged the siting of central management functions, international finance and information center functions, and cultural functions appropriate to a world metropolis, while sub-centers will be developed systematically to share business functions concentrated in the center and also to serve as regional bases in the surrounding areas. By that time, the ripple effect of overheated real estate market in the urban core already spread over to the entire metropolitan region.

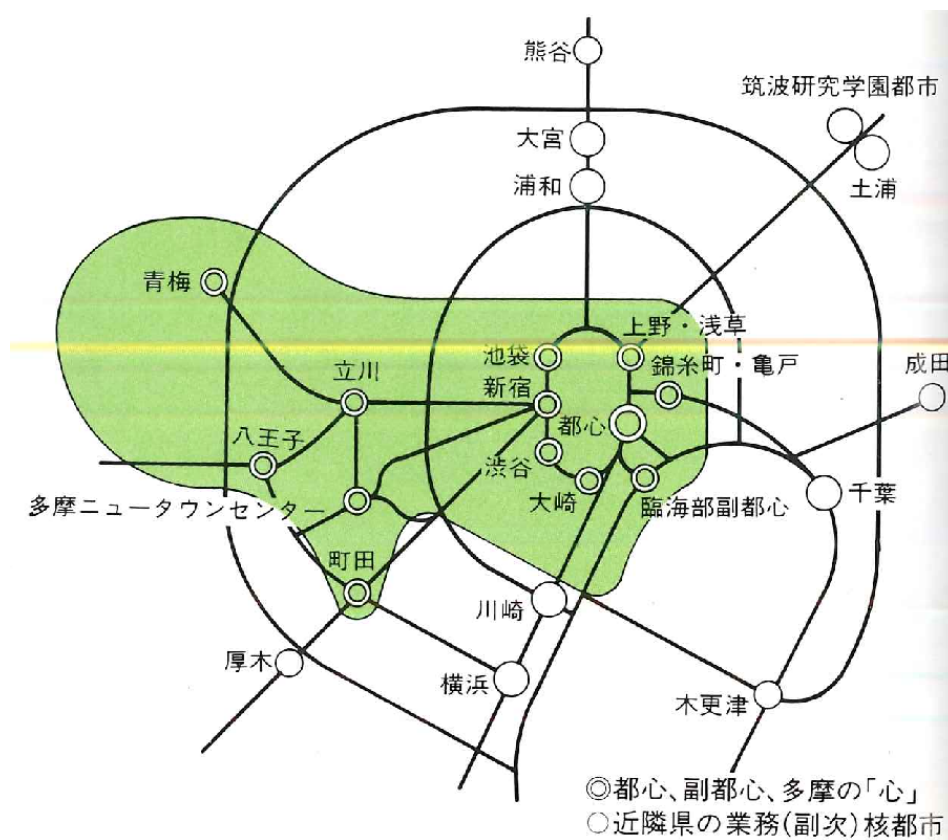


Figure 4-3. Development Model of Tokyo Metropolitan Region 1987 with the larger double circle showing the urban core and the smaller double circles and other circles showing subcores and other centers (Source: The 2rd Long-Term Master Plan of Tokyo, 1987)

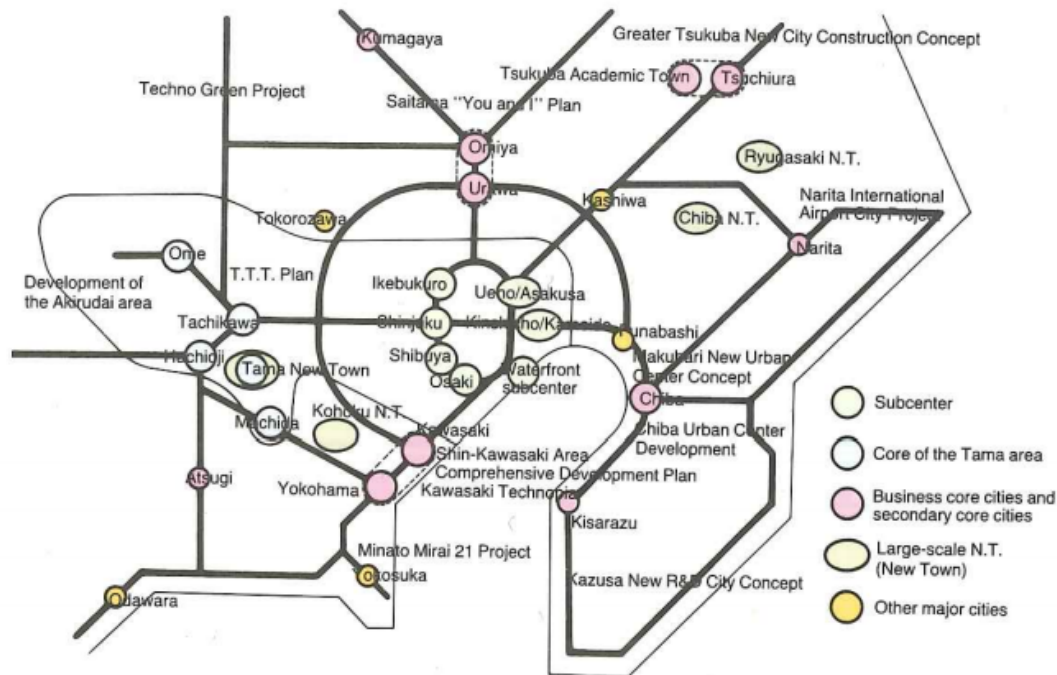


Figure 4-4. Development Model of Tokyo Metropolitan Region 1991 (Source: The 3rd Long-Term Master Plan of Tokyo, 1991)

In 2000, a new master plan published by Tokyo Metropolitan Government called “Tokyo Plan 2000” reversed the previous views on the importance of the dispersion of city functions. In the chapter titled “Image of Metropolis”, the plan called for the necessity of a new urban structure and began the discussion with “the limit of multi-core city”. The plan listed three problems raised by the multi-core city model. First, although this model overemphasized the efficient deployment of business function of a city, it overlooked the city’s diverse functions of commerce, culture, and accommodation. Second, it is hard for a multi-core city to realize the merit of agglomeration while avoiding the problem of disorder and crowdedness. Third, to maintain the vitality of a society that has a declining population and compete with other international cities, Tokyo cannot rely on a multi-core city model to maximize its overall social and economic functions. As a result, the metropolitan government illustrated a skeletal urban

framework of Tokyo Metropolitan Region (Figure 4-5) that emphasized a circular megalopolis with a center core area, a link of water and green, a city axis of waterfront and airport site, and an axis connecting core cities. The “center core area” included the entire region within the central circular route and the plan stressed the inner link between the urban core and sub-cores to form a highly concentrated international business center with commercial, cultural and residential functions.

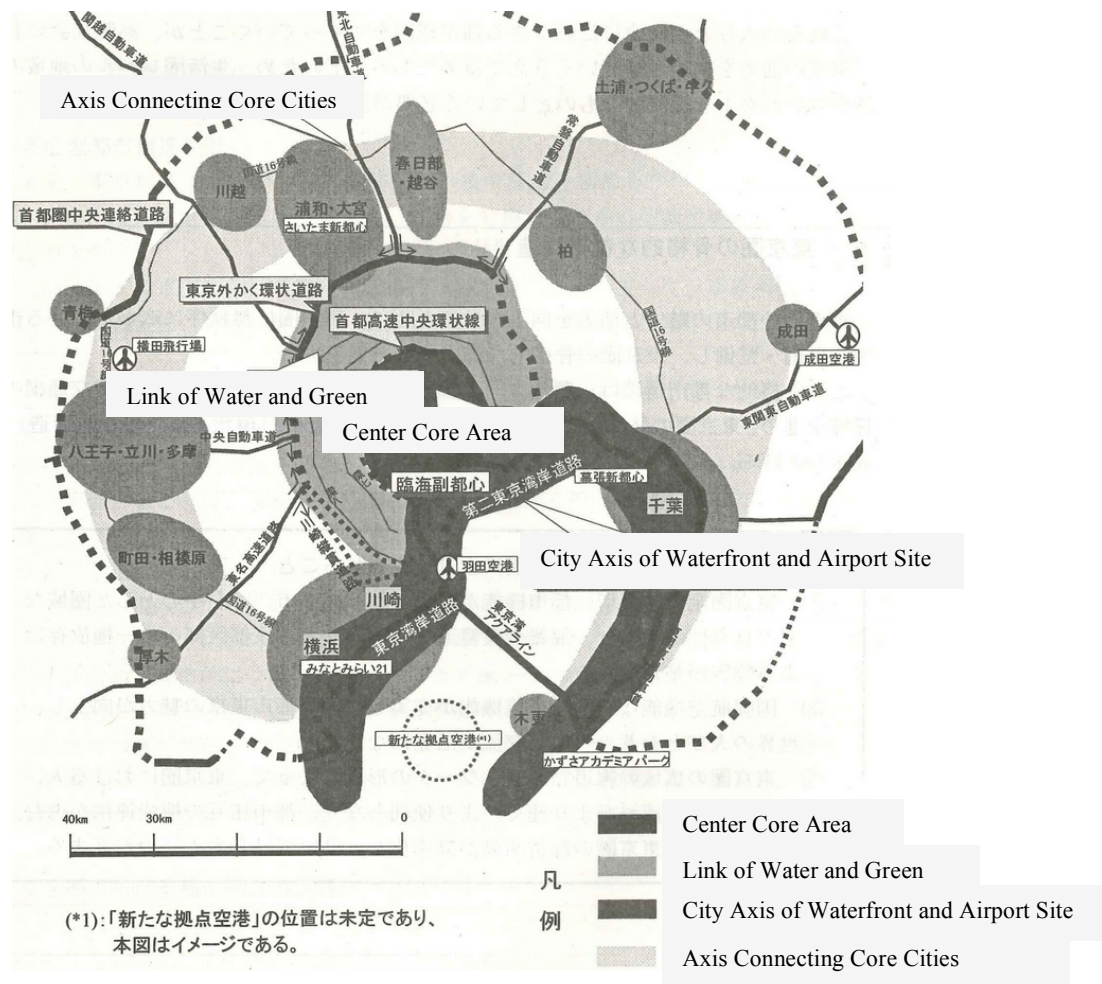


Figure 4-5. Development Model of Tokyo Metropolitan Region 2000 (Source: Tokyo Plan 2000)

Starting from 1992, the land prices of the entire nation came into a state of “free fall”, especially for the commercial real estate. It was not until 1996 that the vacancy rate of Tokyo’s office real estate began to improve. Many properties in the suburbs and other secondary locations could not generate rental income and the overall rental rate of the entire office market kept declining. New Class-A office buildings that were sited close to the city center started to see increasing rent rate by 1996. By 2000, the vacancy rate of office space in the 5 wards of central Tokyo dropped to 3%, and the vacancy rate for A-Class office building was close to 1%. Among these 5 wards, Chiyoda Ward, where Marunouchi District is located, showed a much lower vacancy rate than the average from 1995 to 2011 (Table 4-4) and a higher rent rate than average from 1997 to 2011 (Table 4-5). Even during the recessions of 2003 and 2008, office buildings in the Chiyoda Ward performed better than other central wards. In February 1998, Mitsubishi Estate successfully acquired the previous JNR-owned land of 12,129 m² near the North Exit of Marunouchi Station Building, paying over 300 billion Japanese Yen, the highest price ever seen in the country’s history. This acquisition allowed Mitsubishi to develop a comprehensive commercial zone with multiple office buildings and hotels and to improve the connectivity of the district with the neighboring Ootemachi District.

Table 4-4. Commercial Real Estate Vacancy Rate of 5 Central Wards in Tokyo 1995-2011 (source: Miki Shoji Company, 1996-2012)

	Chiyoda	Chuo	Minato	Shinjuku	Shibuya	5 wards average
2011	8.21%	8.55%	9.86%	10.00%	8.00%	9.01%
2010	8.05%	8.61%	9.51%	9.40%	9.59%	8.91%
2009	6.20%	6.89%	9.63%	9.38%	9.84%	8.09%
2008	3.64%	4.06%	5.83%	5.13%	5.21%	4.72%
2007	1.59%	1.82%	4.02%	2.81%	2.88%	2.65%
2006	1.67%	2.74%	4.08%	3.13%	2.76%	2.89%
2005	3.22%	4.38%	5.51%	4.11%	2.95%	4.22%
2004	4.70%	6.58%	6.87%	7.33%	5.13%	6.10%
2003	6.94%	7.71%	9.49%	8.81%	7.34%	8.12%

2002	5.03%	8.71%	9.05%	7.19%	6.98%	7.36%
2001	3.14%	4.75%	4.51%	3.77%	4.28%	4.03%
2000	2.38%	4.10%	3.83%	2.79%	2.27%	3.17%
1999	3.54%	6.19%	6.17%	4.88%	4.09%	5.04%
1998	3.38%	6.03%	5.74%	6.52%	5.13%	5.17%
1997	2.49%	5.52%	4.08%	4.12%	2.52%	3.77%
1996	2.46%	5.27%	5.00%	5.18%	2.44%	4.11%
1995	3.94%	6.10%	8.04%	7.46%	5.78%	6.14%

Table 4-5. Commercial Real Estate Rent Rate of 5 Central Wards in Tokyo in Japanese Yen/Tsubo 1997-2011 (source: Miki Shoji Company, 1998-2012)

	Chiyoda	Chuo	Minato	Shinjuku	Shibuya	5 Wards Average
2011	18196	16222	17718	14343	17476	16932
2010	19688	17077	18111	15196	18417	17585
2009	20159	18189	19670	16600	19693	18978
2008	22696	22025	23091	19231	23431	22186
2007	22896	20590	23566	19040	24507	21998
2006	19675	18457	20635	17410	21248	19406
2005	18778	17431	18183	15876	18860	17844
2004	18537	17498	17794	15543	17918	17577
2003	18629	17891	18063	16171	18629	17954
2002	20133	19513	19271	17721	19467	19310
2001	21187	19891	20020	18297	20062	19998
2000	21446	19815	19497	17574	19643	19754
1999	21935	20289	19087	17402	19158	19844
1998	22544	21405	20563	18741	19852	20858
1997	23947	22352	21277	18912	20435	21616

The redevelopment promotion council led by Mitsubishi was strategically reformed into Ootemachi-Marunouchi-Yurakucho Districts Community Development Council, official known as “The Council for Area Development and Management of Ootemachi, Marunouchi, and Yurakucho”, and published Ootemachi-Marunouchi-Yurakucho Districts Basic City-Planning Agreement in 1994. To align the interests of stakeholders in the Ootemachi-Marunouchi-Yurakucho Districts, including local and city governments, JR-East, land owners, and developers, The Council for Area Development and Management established an Advisory Committee on

Ootemachi-Marunouchi-Yurakucho Area Development together with Tokyo Metropolitan Government, Chiyoda Ward Government, and East JR Company (Figure 4-6) in September 1996, as a platform for members to discuss the future development of the districts. The Committee was also important as public-private partnerships emerged in the City Planning Institute of Japan’s “Regeneration of Marunouchi” proposal. The Advisory Committee published its tentative guideline in 1998, and first “redevelopment guideline” in 2000, which has been amended and modified four times. In addition to actively collaborating with public sector and related organizations, the committee also deliberately made its own interpretation of the history and the historic value of the districts and their historic buildings in the redevelopment guideline (Figure 4-7).

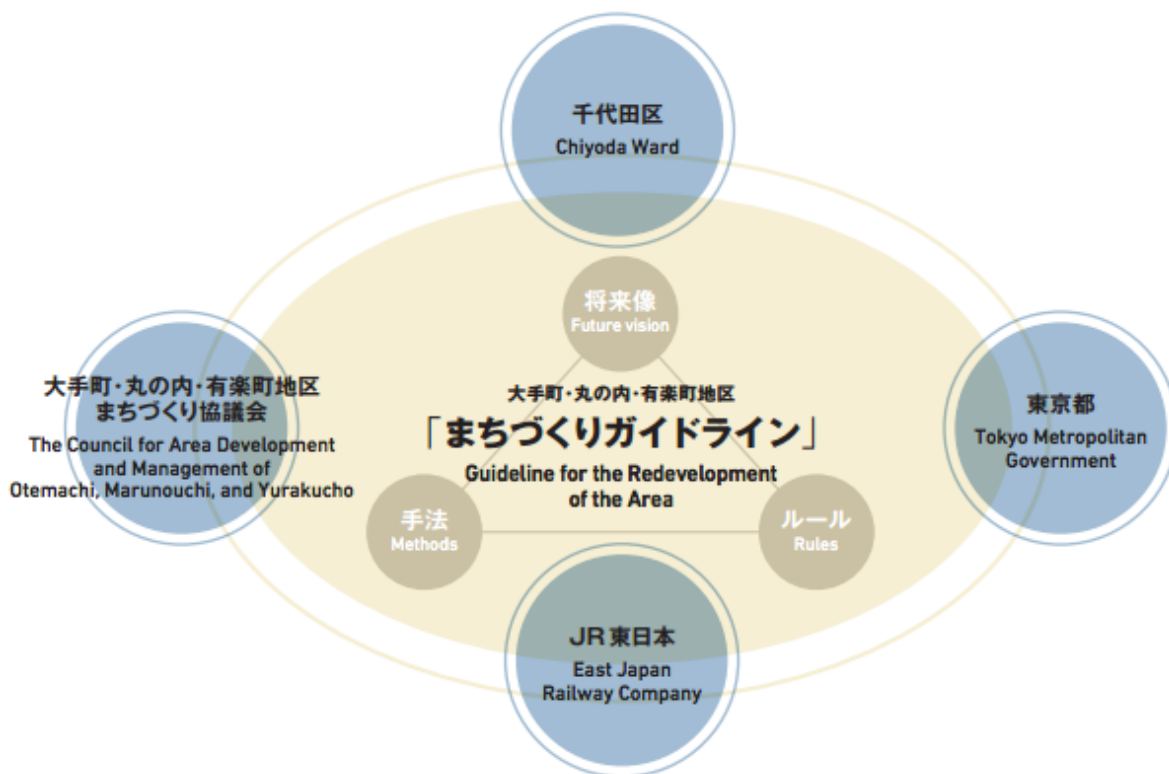


Figure 4-6. Organizational Structure of the Advisory Committee on Ootemachi-Marunouchi-Yurakucho Area Development (Source: the Advisory Committee on Ootemachi-Marunouchi-Yurakucho Area Development, 2014)



Figure 4-7. Facilities for landscape/style and cultural exchange within redevelopment district (Source: The Council for Area Development and Management of Ootemachi, Marunouchi, and Yurakucho, 2014)

Preservation Efforts and the Preservation Group “Citizens who love the red-brick Tokyo Station”

While the redevelopment plan of Marunouchi District did not really attract nationwide attention nor generate broad discussion of related issues, the preservation efforts to save Tokyo Station and the process of its restoration had active participation of citizens. Unlike JR-East, the government, and the developers, the preservation groups did not have a direct stake in the redevelopment of Tokyo Station and its surrounding areas. They had been excluded from the decision-making mechanisms from the beginning. Whether the red-brick station building should be preserved or demolished became a heated issue for debate within the Investigation Committee of Redevelopment of Tokyo Station area, a committee established in 1987 by Ministry of Transportation, Ministry of Construction, Tokyo Metropolitan Government, and JR groups to discuss and plan the strategy for the redevelopment.

The initial founders of the preservation group, “Citizens who love the red-brick Tokyo Station”, were all female and mostly housewives, including Ms.Maeshima, a 66-year-old housewife from Toshima Ward of Tokyo, and Ms.Tani, who was working in the Marunouchi Building at that time. The idea of forming this preservation group was initiated in August 1987 after Ms.Tani attended a study group’s meeting initiated by Prof. Maeno from Tokyo Fine Arts University that discussed about the redevelopment of Tokyo Station area and the potential demolition the station building was facing. The group submitted a request to preserve the Tokyo Station and to restore the Marunouchi Station Building to its original pre-war design to the head of East Japan Railway Company on Oct 13th, the Railway’s Day of that year, 1987. Meanwhile, the group managed to collect signatures in support of the preservation of Tokyo Station from over 100,000 people by May 1988, and submitted another request letter of preserving Tokyo Station to the National Diet.

“Citizens who love the red-brick Tokyo Station” successfully advocated for the preservation of Tokyo Station and received the support of not only the citizens and architects, but also from politicians and roof slate producers. The Investigation Committee published its survey report in April 1988 on the redevelopment of Tokyo Station area, favoring the preservation of the form of the station building at the current location. The Committee disapproved the proposal to reconstruct a high-rise tower to replace the red-brick station building. In June 1988, the Ministry of Culture also proposed to designate Marunouchi Station Building as one of the Important Cultural Properties. Meanwhile, the East Japan Railway Company, although it expressed its willingness to follow the suggestion of the survey report and the preservation group, stated that the restoration of Tokyo Station would be financially difficult for the company due to the enormous cost of the project.

“Citizens who love the red-brick Tokyo Station” thereafter continued to organize symposiums, lectures, and exhibitions and concerts in the station building, and to publish booklets and CDs, in order to raise the public’s awareness of its importance, until the decision to restore the station building was made by JR-East and Tokyo Metropolitan in the late 1990s. Tokyo Station’s station building on the Marunouchi side, the *Marunouchi Ekisha*, was designated as National Important Cultural Property in 2003. While the group continued its active involvement, it maintained a good relationship and frequently communicated with the JR-East Company. The president of the company, Mr. Matsuda, was supportive and recognized the efforts of the preservation group. The regular meeting of the group served as a platform for the railway company and citizens to exchange opinions and ideas in purpose of preserving and restoring Tokyo Station.

Conclusion

The redevelopment of Tokyo Station area has been closely related to the evolution of Marunouchi District where the station is located, known as the urban core and a significant business center. The completion of Tokyo Station as the central passenger station of the city significantly altered the economic scene of its surrounding regions, and especially boosted the development of Marunouchi District as a central financial district. Tokyo Station, the Imperial Palace next to Marunouchi District, and the modern office buildings together created a unique modern urban landscape of the capital city.

For the railway company, Tokyo Station serves as one of the major stations serving over 1 million passengers every day. It is the largest Shinkansen station of the country. Given the increasing importance of small and medium business and service industries in Tokyo as well as

the changing passenger composition, especially after the relocation of Tokyo Metropolitan Government's office building to Shinjuku, the East Japan Railway Company needed to capture the revenue created by the increasing number of tourists and non-commuters by diversifying the use of space and developing retail and other functions in the station building. While the railway company recognized the historic value of the red-brick station, it had trouble in financing the preservation and restoration work that was advocated by the government and preservation groups.

Mitsubishi Estate, as the top developer and landowner of Marunouchi District, identified the potential challenge raised by emerging information society and the need to regenerate its office buildings with a comprehensive redevelopment of the entire district earlier than any other stakeholders. Rapidly climbing land price of Tokyo's city center and the declining competitiveness of Marunouchi District as a business center urged a new generation of leaders in the company to respond to this transformation by making decision to encourage more efficient use of its assets and developing up-to-date office space to accommodate the headquarters of both domestic and international corporations. Consequently, Mitsubishi Estate created an alliance of local landowners and proposed its "Manhattan Plan" to develop multiple high-rise office towers in order to stress on its interest in the district.

The initial redevelopment plan of the redevelopment council led by Mitsubishi Estate did not succeed in getting approval and support from the government and citizens. The master plan of Tokyo Metropolitan Government did not reconfirm the significance of the urban core and reverse its previous strategy to develop a multi-core city model to solve the problem of city center's overconcentration of functions until the late 1990s. After the collapse of Japan's economic bubbles and when the emerging information society and discussion over "global cities" began to have full effects in Tokyo, the importance of central location that is close to major

transit and the advantage of agglomeration were again recognized by both the government and investors. Meanwhile, the Mitsubishi Estate learned a lesson from its previous failure to promote the “Manhattan Plan” and started to actively communicate with the government and other stakeholders as well as interpret the historic value of the district in its redevelopment plan. The Advisory Committee established by Tokyo Metropolitan Government, Chiyoda Ward Government, the local redevelopment council, and JR-East managed to collaboratively lead the redevelopment process through its community development guidelines. Preservation groups that succeeded in saving Tokyo Station lacked effective tools and negotiation power to react to the urgent need of developers and the government to regenerate the central district and produce high-quality office space, and thus failed to influence the decisions made by this alliance.

The advocacy on the preservation of Tokyo Station was made possible due to both the preservation activities of “Citizens who love the red-brick Tokyo Station” and the alignment of interests of the local government and JR-East. Through the submission of a request, collection of signatures, and other active campaigns led by the preservation group, nationwide attention and media coverage was generated. In the late 1980s, as mentioned, Tokyo Metropolitan Government still wanted to redistribute some of the city center’s business functions to sub-centers of the city. The survey report of the Investigation Committee on the Redevelopment of Tokyo Station Area indicated its support to balance the need to preserve and to develop by saving the station building. The East Japan Railway Company, on the other hand, while recognizing the historic value and significance of its Tokyo Station, only faced challenges in financing the restoration, which was later solved by the transfer of development rights. The attitude of the property owner and the support from the president of JR-East became an important factor to realize the restoration of Tokyo Station. It is also noticeable that the

symbolic meaning of Marunouchi Station as a representation of the country's modernization and the unique urban landscape it creates together with the Gyoukou-Doori Avenue that connects the station with the Imperial Palace makes the preservation of this station building and its value a strong argument against the rapid development even within the capital city's central district. The preservation of Marunouchi Building and the Japan Central Post Office Building, both demolished due to the district's redevelopment, did not receive any support from their owners, Mitsubishi Estate and Japan Post, both of which were aggressively in need of renovation of their existing facilities and the cash flow from the rent income. Architect groups and the Ministry of Culture advocated to save the two buildings and valued their architectural aesthetics. Due to the modern characteristics of these two buildings, their preservation also failed to appeal to a wide range of citizens that appreciated their value and generated limited discussion and attention from the public.

CHAPTER 5: THE RESTORATION OF TOKYO STATION AND COMPARISON WITH THE REDEVELOPMENT OF UENO AND SHIBUYA STATION

Although the survey report of the Investigation Committee in 1988 concluded that Tokyo Station should not be replaced with a high-rise office tower and needed to be preserved at its original location, it was not until the late 1990s, when the government adopted the policy of “return to the urban core” and formalized the transfer of development right in the Tokyo Station area, that the restoration of Tokyo Station’s *Marunouchi Ekisha* was confirmed by the Tokyo Metropolitan Government. The JR-East’s redevelopment project, named “Tokyo Station City”, was not simply a restoration of the station building to its original form, but also included the new construction of two underground floors, which accommodate shops and restaurants and connect to the surrounding commercial buildings by subway passages. In addition, two high-rise complexes on the Yaesu side of the station use part of the development rights transferred from the restored *Marunouchi Ekisha*. The air rights above the station building were also sold to other developers to construct three office towers in the redevelopment district that exceeded the maximum Floor-Area Ratio allowed by right. The designation of the *Marunouchi Ekisha* in 2003 as a National Important Cultural Property qualified the restoration project to benefit from the policy of the Ministry of Culture and make use of the funding from the authority. The project then began in 2004.

The first part of this chapter aims to review this restoration project and its impact on the redevelopment of entire Tokyo Station area. This is based on a brief summary of the transformation of railway industry, the changing economic outlook, and the preservation activities observed in both Tokyo and the Marunouchi District, and how the restoration of Tokyo

Station was able to reflect and respond to these trends. While Tokyo Station is an important asset of JR-East and its restoration must be consistent with the company's development strategy, the station's privileged location in the central business district underlines the imperative that its redevelopment needs to be coordinated with the district's general redevelopment plan. The chapter will argue that the preservation and restoration of Tokyo Station was made possible only because the outcome of the project successfully satisfied the needs of all the major stakeholders, namely, the railway company, the developers of the district, and the government. The preservation activities would not have made a difference unless they were synchronized with the urgent problems raised by the changes in the environment. The second part of the chapter compares two other redevelopment projects of Tokyo's Ueno Station and Shibuya Stations. These will demonstrate how the different economic conditions and transportation scenes can result in very different treatments towards the station building.

Review of Tokyo Station's Restoration and the Redevelopment Project

The preservation group, "Citizens who love the red-brick Tokyo Station", continued to advocate for the restoration of *Marunouchi Ekisha* after the government and JR-East determined not to demolish the station building by the end of 1980s. Both the National Diet and the railway company, although they agreed to save the station building, indicated the difficulty in financing the restoration, which might cost approximately 50 billion Japanese Yen. In 1990, JR-East rejected the request from the preservation group to designate the *Marunouchi Ekisha* as Important Cultural Property. The railway company demanded a comprehensive plan to coordinate the transportation service, development, and preservation so that the high property value could be effectively used. This position implied that, without a creation of economic

incentive and regulatory support, JR-East did not have sufficient motivation to simply designate the station and restore the building.

In spite of a series of preservation activities organized by “Citizens who love the red-brick Tokyo Station” in the early 1990s, the discussion revolving around Tokyo Station’s restoration did not make any real progress until 1996, when the Tokyo Metropolitan Government started to shift the direction of its policy towards the urban core and actively support the formation of an Advisory Committee with the developers and JR-East. From 1996 to 1998, the national government, Tokyo Metropolitan Government, and the Chiyoda Ward government all published documents regarding the redevelopment plan of Tokyo’s urban core. In October 1999, the governor of Tokyo and the president of JR-East announced the decision to restore Tokyo Station’s *Marunouchi Ekisha* to its original design when completed in 1914, three years after the Advisory Committee was formed and one year after its first tentative planning guideline was established. The progress was accelerated thereafter, as the Advisory Committee provided a platform for the developers and the officials to exchange opinions. The City Planning Law and the Building Standard Law were both amended in 2000 to introduce a new system of “Special Floor-Area Ratio Applicable District” to formalize the policy that guided the transfer of unused development rights. From 2002 to 2004, governments at all levels supplied the redevelopment of Marunouchi District and the restoration of Tokyo Station with supportive policies, including the relaxation of the Floor-Area Ratio and rezoning.

The JR-East project on the redevelopment of Tokyo Station officially started in 2004, one year after the station building was designated as the National Important Cultural Property, which qualified JR-East to partially finance the restoration with the funding provided by the Ministry of Education, Culture, Sports, and Science. As illustrated in Table 5-1 and Figure 5-1, in addition

to restoring the *Marunouchi Ekisha* on the Marunouchi side of the station, the project was planned to demolish the station building on the Yaesu side and replace it with an open space and a grand roof connecting two high-rise office towers, and to construct another office building, Sapia Tower, close to Nihonbashi Exit of the station. The development of the twin office towers, named “Gran [sic] Tokyo North Tower” and “Gran [sic] Tokyo South Tower”, applied in total 79,500 m² of Floor-Area transferred from the unused development rights of *Marunouchi Ekisha*. JR-East collaborated with Mitsui Fudosan, a major developer in the Nihonbashi and Yaesu district, on this development. While JR-East provided the land and the transferred floor area from *Marunouchi Ekisha* that allowed Mitsui Fudosan to develop the office space, it became the co-owner of the towers after their completion. Within the station building, in the *ekinaka* area, which means “inside the station”, in addition to the existing 1st and 2nd floor and the restored 3rd floor, 2 underground floors were added to accommodate the so-called “GranSta” (“Grand Station”), a shopping area with 81 restaurants and shops. The underground floors were also connected with surrounding commercial buildings and other underground passages to increase the accessibility of each building and encourage the travellers to visit the “GranSta”. Above the ground, besides an upgrade of the station facilities, JR-East also revived the Tokyo Station Hotel and a exhibition gallery in the station building to encourage the tourism and cultural activities.

Table 5-1. Schedule of JR-East’s “Tokyo Station City” Redevelopment Project (Source: JR-East)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Marunouchi	Marunouchi Ekisha’s restoration design			Construction works of preservation and restoration						
Yaesu	North Tower Phase I				North Tower Phase II					
				Demolition of Tetsudo Kaikan	Construction works of Station Front Plaza					
	South Tower Phase I					Construction works of Gran-Roof				
Nihonbashi	Construction works of Sapia Tower									
Ekinaka			Construction works of Gran-Sta							

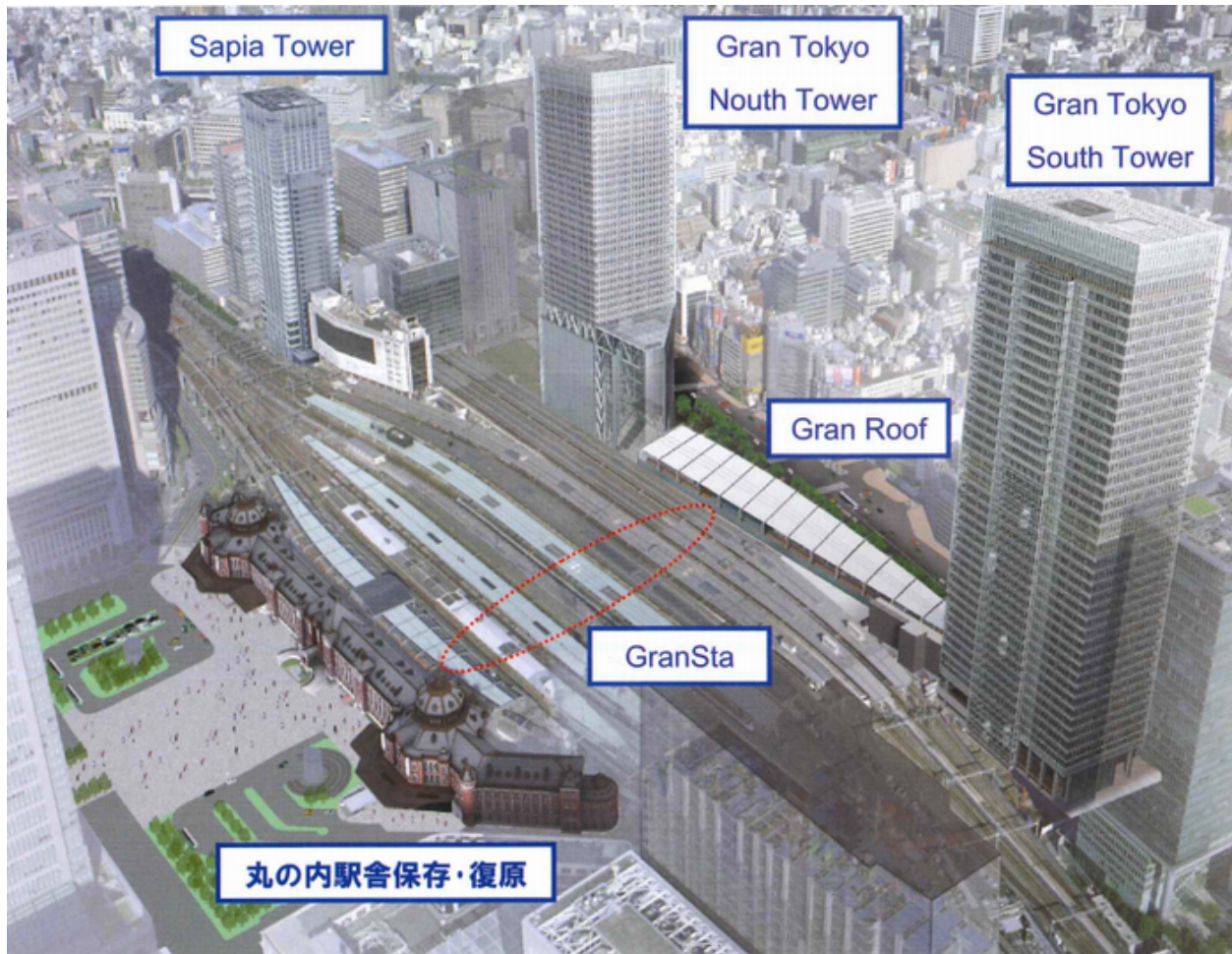


Figure 5-1. “Tokyo Station City” Redevelopment Plan (Source: JR-East, 2009)

The unused development rights above the restored *Marunouchi Ekisha* were transferred to develop three other office complexes within the “Special Floor-Area Ratio Applicable District” surrounding Tokyo Station as determined by the metropolitan government in 2002. The total transferrable floor area of *Marunouchi Ekisha* was 238,000 m², given the site area and the standard Floor-Area Ratio regulated by the planning ordinance (Figure 5-2). 79,500 m² of this 238,000 m² was applied to JR-East’s own redevelopment project on the Yaesu side of the station as mentioned. Except for 28,500 m² of the transferrable development rights that has not been used for any development, the rest of the transfer went to Mitsubishi Estate’s commercial real

estate in the district. 15,500 m² was transferred to Marunouchi Park Building, 21,600 m² to Tokia Building, and 36,600 m² to Shin-Marunouchi Building, as illustrated in Figure 5-2. The transferred floor area allowed Mitsubishi Estate to construct these three office towers with Floor-Area Ratio that exceeds the standard Floor-Area Ratio, 1300%, regulated in the ordinance. JR-East sold the transferable development rights from *Marunouchi Ekisha* to Shin-Marunouchi Building and Marunouchi Park Building for approximately 45 billion Japanese Yen in total.²⁰ This sale income covered 90% of the total cost of the restoration. Regarding the transfer of development rights to the Tokia Building, JR-East exchanged the transferable floor area for the co-ownership of the office tower. The result of these transfers enabled Mitsubishi Estate to increase the office supply as it desired in order to respond to the increasing demand for office space in the urban core, and at the same time allowed JR-East to fund the restoration of the station building and also generate cash flow from the operation of the office towers it co-owns.

²⁰ Ministry of Land, Infrastructure, Transport, and Tourism, 首都高速の再生に関する有識者会議 財源について
のこ□提案

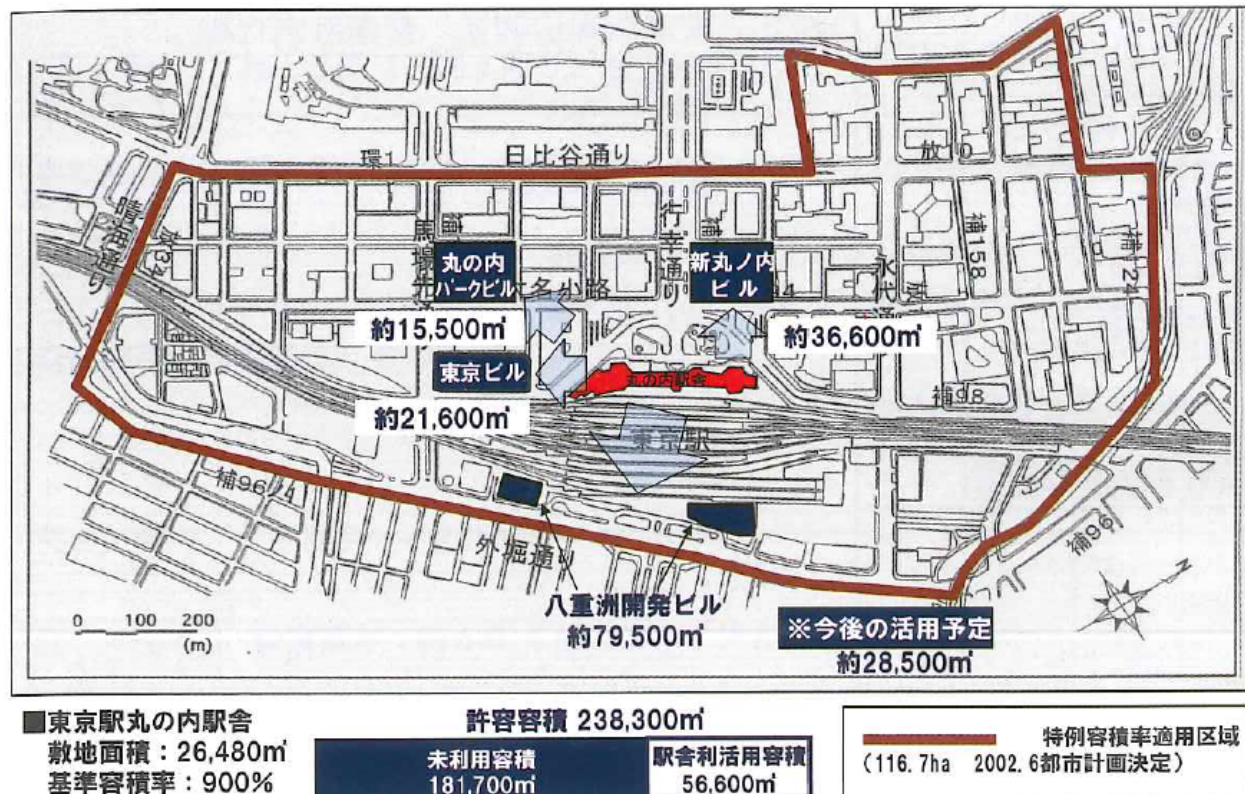


Figure 5-2. Tokyo Station Special FAR Applicable District and Transfer of Development Rights (Source: JR-East, 2009)

Both JR-East and Mitsubishi Estate endeavored to expand the retail space in the redevelopment project of the Tokyo Station area. The reason why business operators in the district all pursued uses of the space other than for office could be explained through the changing economic structure of Tokyo since the 1970s. The urban core increasingly relied on the service industry to continuously support its economic growth in the recent economic transformation. While the manufacturing sector kept declining in its share of the total economy after Japan's economic miracle in the 1950s and 1960s, small and medium retail shops, real estate firms and finance businesses made up the share that the manufacturing lost, as suggested in the second chapter. Meanwhile, Marunouchi District was diagnosed by both the government and the developers with its problems of lacking visitors and vitality after 5 pm on weekdays and during the weekend. The difference between the daytime population and the nighttime

population of the district was believed to be over 1.5 million.²¹ It was clear that the single use of Marunouchi District as an office cluster would affect the developers' profits and interests in this district when the urban core declined in its importance in the 1980s. The financial district needed a new combination of corporations that operated in its office buildings to correspond to the economic transformation and solve the challenges it faced. The same thing happened to JR-East. When the main offices of Tokyo Metropolitan Government and JR-East were relocated to Shinjuku and the percentage and number of passengers holding tickets instead of commuter passes increased in the 1990s, the railway company sought to capture the value created by this trend. As Chapter 1 pointed out, although the number of passengers carried by the railroad stopped declining and remained at a reasonable level by the 1990s, the railway company could hardly expand its business and expect any growth from the operation of the transportation service. Therefore, JR-East learned from the experience of many private railway companies in Japan, who developed mixed-use real estate on their land next to or on top of the stations, from shopping malls to residences, to diversify their business and portfolio. JR-East, in this redevelopment project, strategically placed the development of retail and office space at an important position.

This redevelopment project also emphasized the main avenue in front of *Marunouchi Ekisha*, which connects Tokyo Station to the outskirt of Imperial Palace. This street, known as Gyoukou-doori Avenue, has been recognized by the government as a symbolic road, where foreign ambassadors, when visiting the emperor in the palace, would ride on a horse carriage and enter the Imperial Palace from this direction. As explained in last chapter, the Imperial Palace, Tokyo Station, and modern office buildings like Marunouchi Building together constitute the

²¹ Tokyo Metropolitan Government, Tokyo Plan 1971 - *Hiroba to Aozora no Tokyo Kousou* -

modern image of Marunouchi District. Gyoukou-doori Avenue connects all these elements and thus becomes an extremely important symbol of the district. Refining this avenue helps enhance the identity of the entire redeveloped area as a place, which has been an important part of all stakeholders' redevelopment plan. Tokyo Metropolitan Government became involved with the re-equipment of this thoroughfare by improving its infrastructure and walkability. While restoring the historic landscape of the lined maidenhair trees along the roadside, the government increased the pedestrian area and installed new lighting and fences to provide better walking experiences for visitors. In addition, the station-front area was transformed into an open plaza. The 73-meter-wide avenue now has a 30-meter central belt in the middle of the road exclusively for walking pedestrians.²² This improvement has allowed visitors to gain better access different places within the district on foot, and to visit the events that take place on the station-front plaza, such as the illumination shows.

The Tokyo Station Area's redevelopment turned out to be a comprehensive project that involves both public and private sectors, and satisfies all of the major stakeholders' urgent needs and the core interests in the district. While the advocacy of the preservation group in the early 1990s could not persuade JR-East to designate and restore Tokyo Station given the company's financial crisis and unwillingness to restrain the station's future development, the introduction of the system that formalized the transfer of development rights enabled JR-East to exchange the unused floor area of *Marunouchi Ekisha* with co-ownership of nearby office towers and capital for the railway company to restore the station building. The designation of the station building as Important Cultural Property, once a burden on the railway company, now became a helpful source of funding as the restoration was qualified to use the Cultural Agency's budget. The

²² Ministry of Land, Infrastructure, Transport and Tourism
<http://www.mlit.go.jp/road/sisaku/dorokeikan/pdf/004.pdf>

restoration of Tokyo Station also extended the usable space inside the station and allowed JR-East to insert valuable retail space to capture the value created by expanding service industries and increasing general passengers and tourists. Mitsubishi Estate, the leading developer that initiated the redevelopment, became the major beneficiary of the development rights transfer to construct higher office tower that exceeded the maximum Floor-Area Ratio with the unused floor area purchased from JR-East. Mitsubishi joined the railway company to provide more retail stores in the district, and was able to negotiate with the government to earn extra development rights through creating cultural facilities. Diversifying the use of the space in Marunouchi District also benefits the local government by reviving the urban core for more activities after the business hours. Each component of this redevelopment of Tokyo Station, which has been described as the main gateway to the capital city, corresponded to the transformation of the economy and transportation industry. The restoration of *Marunouchi Ekisha*, as an integral part of the redevelopment, generated effects that were beyond the scope of a usual preservation project.

Comparison of the redevelopment of Tokyo Station with Ueno Station and Shibuya Station

The previous discussions suggest that the transformation of the railway industry and the country's evolving economic structure affect the use of railway land. These necessitate changes in the configuration and functions of stations in response. Tokyo Station, located in the central business district that was most sensitive to these changes, became the frontline of a few skirmishes among developers, preservationists and the government. The approach to renovating other station buildings might be very different from what happened to Tokyo Station, depending on the land value, the government's strategic goals, and the strength of local preservation groups.

Therefore, the tension between the developers and the civil society might differ significantly in different districts.

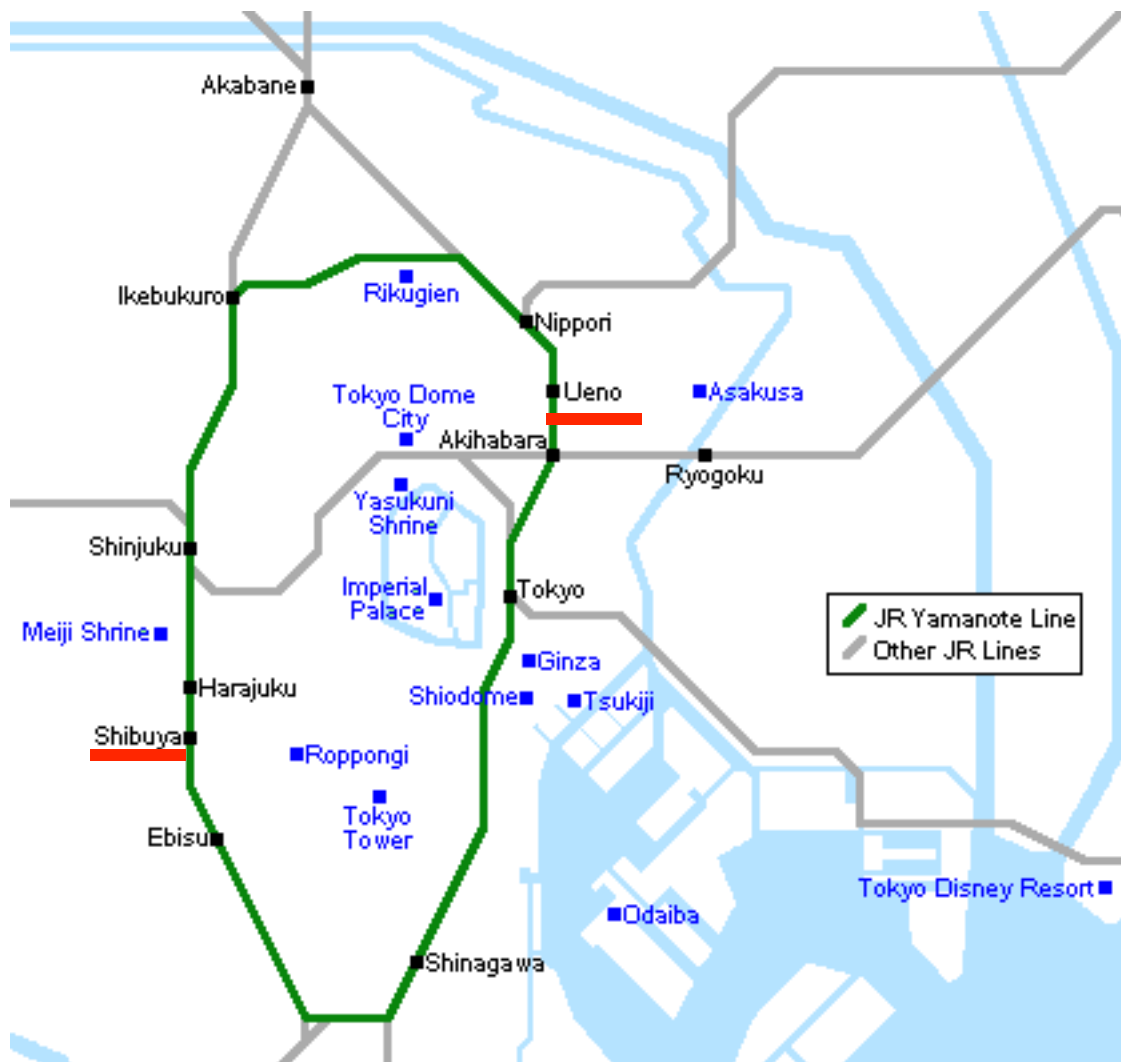


Figure 5-3. Ueno and Shibuya Stations Highlighted in the Map of Tokyo (Source: http://www.japan-guide.com/g5/2017_01.gif)

In the case of Ueno Station, the absence of a powerful developer in the district and the presence of relatively active preservation groups result in the preservation of the station building and little trace of high-rise redevelopment in the station area. The current station building of JR's Ueno Station, designed by Saichi Sakem and completed in 1932, is the second-generation design, with a reinforced concrete structure and functionalist appearance. The earliest station

building was destroyed in the Great Kanto Earthquake. In addition to its importance as a historic station building, Ueno Station was famous as the terminal of trains through which thousands of young people from the rural area came to Tokyo for employment to support Japan's post-war economic recovery (Figure 5-4). It is known as the "North Gateway" to the capital city. In 1984, after the Ueno Station began its Shinkansen services, the local ward government and community association submitted a letter to the Japanese National Railway Company requesting the construction of a new station building that would be "suitable" to the new Shinkansen service and "change the negative image associated with Ueno Station due to the period of chaos right after the war ended".²³ In 1988, after the privatization of JNR, JR-East revealed its proposal to demolish the obsolescent station building of Ueno Station and construct a 60-floor high-rise complex, designed by a famous Japanese architect, Arata Isozaki. During this period, the land price was roaring in the capital city (Figure 5-5). The planned redevelopment that consisted of a hotel, conference space, and office space, however, was not what the local business owners expected. The local civil society welcomed the construction of a new terminal station building, but at the same time did not want JR-East to bring any competition to small business owners in the district, who expected the redevelopment plan would focus on the improvement of the connectivity between the station and local commercial streets.²⁴ As a result, the proposed reconstruction of the station building was not realized. When the economic bubbles deflated in the early 1990s, the railway company lost its motivation to push forward the plan. In the 2000s, when JR-East initiated its "Station Renaissance" project to regenerate JR's major station buildings, the commercial facilities and retail space inside Ueno Station were renovated and improved, but the station building was not reconstructed.

²³ Asahi Shimbun, 1984-12-12, 新幹線に似合う上野駅新駅舎をきょう国鉄に要望

²⁴ Asahi Shimbun, 1989-2-18, 商店街に人流す工夫を 上野駅ビル改築計画で住民シンポ



Figure 5-4. Large Group of Young People from Rural Areas Arriving at Ueno Station to Support the Rapid Economic Growth in the 1950s and 1960s (Source: <http://www.sankei.com/column/photos/150125/clm1501250010-p1.html>)

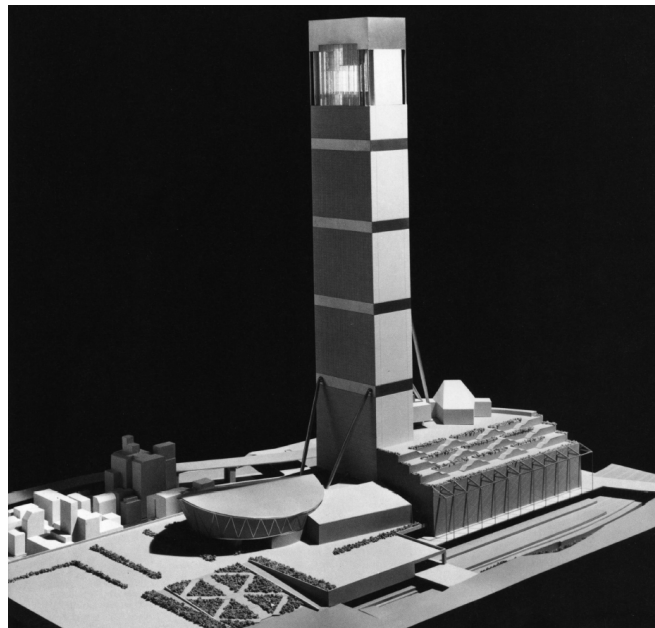


Figure 5-5. Arata Isozaki's New Ueno Station Building Model (Source: Japan Architect Magazine 1993/4)

Unlike the case of Tokyo Station, where a powerful and sophisticated developer was highly motivated to redevelop the entire district and upgrade the office space that might generate enormous profits for the corporation, in Ueno District, there has been more local small business support and stronger civil societies have a larger role. Small business owners were able to voice their concerns and perspectives in a manner that was very different from major developers or JR-East. Although the price of the commercial land adjacent to Ueno Station was approximately 20 million Japanese Yen per square meter during the period of economic bubbles, it was not as high as other major business districts such as Yurakucho or Shibuya (Table 5-2). In addition, the land with high value in the Ueno District was limited to a relatively small area surrounding the railway station, while, in the case of Tokyo Station, the entire Marunouchi District and nearby Yurakucho and Ootemachi Districts had a very high land value that attracted investors' capital. In the East Ueno District, only a few kilometers away from the Ueno Station, the land price was only 10% of the price of the commercial land in those major business districts. This situation determined that a large-scale redevelopment of the station area might be less profitable and appealing to developers than the redevelopment in the Tokyo Station Area. Besides, Ueno District and its neighboring Yanaka District are Tokyo's historic and cultural districts that have been related with Edo's traditional Shitamachi region. Starting from the 1980s, the so-called "Shitamachi boom" brought a lot of attention to this region's authentic and traditional architecture, culture and lifestyle to celebrate Tokyo's uniqueness and locality. The preservation activists successfully saved many historic stores and residences, and reversed the decision to construct a parking lot under the Shinobzu Pond in Ueno Park. The district was a major cultural center in the government's master plan. Ueno Park, which is adjacent to the station, is the capital city's largest cluster of cultural facilities, including Tokyo National Museum, National Museum

of Western Art, and Ueno Zoo. It has been designated as an educational and cultural district that restrains the development of cinemas, theaters, or clubs, which are considered inappropriate to the district's function. Therefore, the demand of the government as well as the developers over the Ueno District is dissimilar with their demand on the Marunouchi District, but the power of preservation groups and local associations are stronger. As a result, Ueno Station did not experience the struggle to preserve its station building as seen in the case of Tokyo Station's restoration.

Table 5-2. Tokyo Land Price in 1000 Japanese Yen/m² (Source: Asahi Shimbun, 1990-1993)

	1990	1991	1992	1993
Ueno	-	-	23800	19600
East Ueno	2650	2650	2650	2360
Yurakucho	35000	35000	33500	27100
Shinjuku	26400	27200	25400	19300
Ginza	28100	28400	27000	21500
Shibuya	28300	30000	28600	22700

The redevelopment of Shibuya Station area presents a case similar to Tokyo Station, in which its advantageous location and good performance of the commercial real estate encouraged the developers to provide more office space in the district to meet the demand. Shibuya District is one of Tokyo's busiest commercial districts and a fashion center particularly for many young people, where creative industries concentrate. The vacancy rate of office space and its rent rate in Shibuya District, as shown in Table 4-4 and Table 4-5, suggest that its office space performs better than the average of Tokyo's 5 central wards and has been competitive in the recent two decades. The government identifies the district as a major commercial sub-core that leads domestic and international fashion trend and creates life culture. Shibuya Station is Tokyo's second largest terminal, serving three million passengers on average every day. The station is a major transportation hub that accommodates eight railway and metro lines, including the services

of JR-East and two private railway companies, as well as Tokyo's largest bus terminal. Tokyu Corporation, one of the private railway companies that provides railway services at Shibuya Station, is a major real estate developer that has a over-50-year history of running multiple commercial facilities in the station area with its headquarter located in the Shibuya District. The railway companies and the metropolitan and local ward government together established the Shibuya Station District Infrastructure Development Committee to discuss on the renewal of the Shibuya Station precinct after the district was designated as an urban renewal emergency development area in 2005. Both the private sector, including the railway companies and other developers, and the public sector shared their vision in reinforcing the transport node function of the station, establishing a better pedestrian network that connects the services of different railway companies, and readjusting the land use to enhance the district's commercial function. The major stakeholders aligned their interests in the station area to improve Shibuya's appeal as the base for disseminating lifestyles and popular cultures to strengthen its international competitiveness. The government sought to enhance the Shibuya District's performance as a fashion and commercial center, while the developers, especially Tokyu Corporation, intended to invest on the district's highly valued land to meet the demand in its commercial real estate market. On the other hand, Shibuya Station did not have a historic station building comparable with Tokyo Station or Ueno Station. Some of the station buildings above the ground are Tokyu Corporation's department stores completed after World War II, which replaced previous station buildings. One of the historic structures, a station building with barrel vaults (Figure 5-6), which accommodated the platforms of Tokyu Electric Railway's Toyoko Line that had served for 85 years, was demolished in 2014 to make space for future real estate development. The result of this redevelopment of Shibuya Station area, as shown in Figure 5-7 and Table 5-3, will include

the already completed Shibuya Hikarie, a mixed-use commercial tower that has a department store on its first 5 floors, café and restaurants on 6th and 7th floor, and theatre and office space on the top, as well as three other high-rise complexes in Shibuya Station district, Dogenzaka district to the west of the station, and Shibuya Station south district.



Figure 5-6. Demolition of Shibuya's Station Building of Toyoko Line (Source: <http://livedoor.blogimg.jp/bluestylecom/imgs/9/e/9e1b5a9d.jpg>)

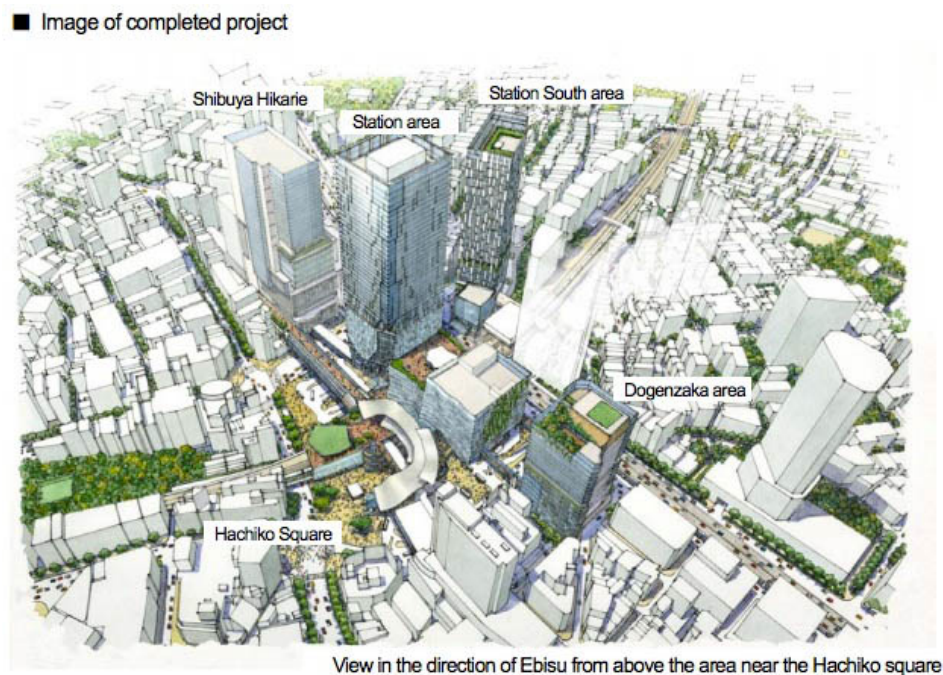


Figure 5-7. Shibuya Station Area Redevelopment Plan (Source: Tokyu Corporation Urban Planning Proposal, 2013-1-23)

Table 5-3. Summary of Four Major Redevelopment Projects in Shibuya Station Precinct (Source: based on the research of Nikken Sekkei, 2012)

Project Name or Location	Height of the Building	Site Area	Total Floor Area	Completion Year
Hikarie	182.5m	9,640m	144,000m	April 2012
Shibuya Station District	230m	15,300m ²	270,000m ²	2027
Dogenzaka District	120m	3,300m ²	59,000m ²	2018
Shibuya Station South District	180m	7,100m ²	117,500m ²	2017

Conclusion

Although “Citizens who love the red-brick Tokyo Station”, the preservation group that advocated for the restoration of Tokyo Station, continued to make efforts in communicating with JR-East and the government and organize various activities to involve citizens into the campaign, the designation of *Marunouchi Ekisha* as an Important Cultural Property and its successful restoration were not confirmed until the government, the railway company, and the developers together established an advisory committee to discuss on the redevelopment plan and reconciled the needs of each stakeholder. The redevelopment was able to make significant progress as the government adopted the strategy of “return to the urban core” in order to increase the competitiveness of Tokyo as a global city and thus provided policy support for Mitsubishi Estate and JR-East to trade the air rights above Tokyo Station. As a result, the redevelopment project emphasized on the creation of sufficient office space through the transfer of development rights, and at the same time helped restore the *Marunouchi Ekisha*, the significant symbol of the district and the center of Tokyo. Through the restoration of Tokyo, JR-East was able to expand the retail space within the station to capture the value created by increasing number of non-commuting passengers and tourists. The transfer of development rights allowed the railway company to raise enough fund for the station building’s restoration, and at the same time diversify its source of income by investing on commercial real estate in the station area. The developers, mainly

Mitsubishi Estate, benefited from the system as well because they could purchase the development rights from Tokyo Station's unused floor area to develop more office space than the regulation normally allowed.

Table 5-4 highlights the comparison of Tokyo Station's redevelopment with two other stations' redevelopment. The result suggests that these three stations, even though they are all major terminals located in the capital city's city center or sub-core, have seen very different redevelopment processes and treatments over the station buildings. Ueno District, unlike Marunouchi District, has been a historic and cultural district of Tokyo that possessed less valuable land, and therefore was not a major target for urban renewal in the official plan and not in major developers' best interest to invest. A strong presence of local civil society and preservation groups enabled the local community to negotiate with JR-East and voice their concerns. As a result, the Ueno Station was not demolished and redeveloped into a high-rise complex, and renovation within the station was made to stress the importance of improving the commercial facilities inside the station in response to the trend observed for the railway industry. The redevelopment of Shibuya Station area has been a comprehensive regeneration of multiple commercial buildings that is similar to the case of Tokyo Station. The vacancy rate and rent rate in Shibuya District indicates that its office space was very competitive among Tokyo's central wards during the last two decades. Major developers had strong motivations to redevelop the station area to readjust the land use and upgrade the facilities, while the government also identified the district as a leading commercial district of the capital city. Consequently, the redevelopment project demolished obsolescent station buildings to make room for new construction of high-rise complexes in order to create new commercial facilities and office spaces. The comparison, therefore, suggests that the result of the redevelopment of station areas

and the treatments of station buildings could be very different because of the differences in terms of the district's role in the government's planning, the value of the land the station is located on, and the power of local developers and preservation societies. It further confirms that the restoration of Tokyo Station was an important preservation success in the center of a big global city, where the highly valuable land made it difficult to keep the low-rise station building as it was. The solution was made possible by the interaction of the government, the land owner, the developers, and the preservation groups.

Table 5-4. Comparison of Redevelopment Projects at Tokyo Station, Ueno Station, and Shibuya Station (Source: Author)

		Tokyo Station	Ueno Station	Shibuya Station
Redevelopment Project Summary				
Treatment on Station Building		Restoration /Demolition	Preservation	Demolition
Scale of Redevelopment Project		Large; Redevelopment of Marunouchi, Ootemachi and Yurakucho Districts	Small; Renovation inside the station	Medium; Redevelopment of station precinct
Main Content of Redevelopment Project		Improvement of commercial space within the station and walkability within the district; Development of three office towers and GranRoof; Readjustment of station-front plaza and main avenue connecting to Imperial Palace; Transfer of development rights to nearby commercial real estate	Improvement of commercial facilities within the station and connectivity with surrounding area	Improvement of transfer between lines and walkability of the district; Development of four multipurpose towers and replacement of old station buildings;
Influences from Major Stakeholders				
Local and City Government	Role of the district	Central business district; Urban core	Cultural and educational district; Sub-core	Commercial and fashion center; Sub-core
	Vision	“Return to urban core” strategy; Cluster of corporation headquarters; Global financial center	Cultural center; historic district that disseminate Tokyo’s tradition of “Shitamachi”	Fashion and cultural base for disseminating lifestyles and popular trends
Developers	Major Developers or Driving Force of Development	Mitsubishi Estate on the Marunouchi side of the station; Mitsui Fudosan on the Yaesu side of the station	Local community and business associations	Tokyu Corporation
	Power	Strong	Weak	Strong
	Vision	Urgent needs to increase and	Increase the ability	Improve the

		upgrade office facilities to sustain the district's competitiveness and continuously serve as the financial center of the city	of the station to direct visitors to local commercial streets	pedestrian circulation for easier transfer and expand office and commercial space to meet the demand
Presence of Preservation Groups		“Citizens who love the red-brick Tokyo Station” was active from 1987 to early 2000s; Able to attract nationwide attention and communicate with JR-East and politicians	Strong preservation climate; Previously successful preservation experiences at Yanaka District and Ueno Park	Lack of traces of preservation groups and historic structures with architectural and historic values

CONCLUSION

This thesis examined the restoration of Tokyo Station, the gateway to the capital city and one of its major terminals. Its historic station building on the Marunouchi side, *Marunouchi Ekisha*, located in Tokyo's central business district, Marunouchi District, remains a spectacular symbol of the nation's early modernization and thus an important symbol of not only railway industry but also Japan's Meiji Restoration and industrialization. The discussion of Tokyo Station involves the economic changes that have been observed in Japan, Tokyo, and the Marunouchi District as much as the transformation of the railroad industry. This paper has shown that, to fully understand the preservation of Tokyo Station and the redevelopment of its surrounding area, it is necessary to analyze the development of the transportation industry, the transformation of the economy of Japan and its capital city, and the preservation climate due to the station's multi-faceted nature.

The first three chapters of this thesis explored this context, in which the redevelopment plan of Tokyo Station area was first initiated and gradually evolved over time in response to the changes of the general environment. This can be summarized as followed: (1) The national railroads in Japan, once centrally controlled by the Japanese National Railway Company, received less effective policy support from the government in the post-war period, and were finally privatized in 1987. By the time the discussion on the redevelopment of Tokyo Station arose in the 1980s, the railway industry had already lost much of its share of transport to motor vehicles in terms of both freight and passenger transportation, but it remained relatively competitive in the passenger volume carried, especially with the success of some of its bullet train services.

(2) After Japan's rapid economic recovery in the 1950s and 1960s, manufacturing became the major sector that supported the nation's economic growth. The service industries, however, soon caught up with the manufacturing industry in the nominal GDP in the 1970s and 1980s. As a result, the need for Tokyo to transform into a service-sector-driven economy and an information society became urgent and conspicuous. As heavy manufacturing industry departed the capital, the retail and wholesale, real estate, finance, and other services industries continued to grow and became the economic base. Meanwhile, the polarization of various functions in the Tokyo Metropolitan Region caused a large percentage of the population to migrate to the capital city and its neighboring areas, which placed a significant demand on land and increased real estate development of residences and office space.

(3) Having experienced a number of failures using the strategy of mass mobilization, activists in Tokyo became more sophisticated and applied pressure in an informal way to advocate for a better environment and quality of life for the local community. Historic preservation was associated with the issue of quality of life and community development beginning in the 1970s. While Tokyo, as the center of the nation's industrialization, possesses more valuable modern heritage, the designation and registration system under the national preservation law did not give protection to these modern properties. When the threats to historic structures arose from high land values in the 1980s, the grassroots tended to play a more important role in preserving them and defending the local culture. In the case of railway heritage, the increasing awareness of the importance of the railway culture helped to identify and preserve valuable historic railroad-related structures.

The understanding of this general environment provides a useful insight into what happened with Marunouchi District and Tokyo Station during the redevelopment process from

the late 1980s to early 2000s. JR-East endeavored to sustain its passenger service by improving station facilities and the bullet train services. Meanwhile, it attempted to expand its profits from other businesses that grew significantly in the capital city, such as retail and real estate. In the Tokyo Station, this strategy was applied also to respond to an increasing number of non-commuting passengers and tourists. Mitsubishi Estate, the top developer in Marunouchi District, decided to comprehensively redevelop this financial district to provide new high-quality office space that would be suitable for this emerging information society and meet the increasing demand, given the fact that the capital city was being transformed. The government, at the beginning, disapproved the redevelopment plan initiated by Mitsubishi Estate, because it sought to reduce the concentration of functions in the city's single urban core and redistribute its business functions to sub-cores. The end of the economic bubble and a continuous recession, however, upset the metropolitan government's plan and forced a reevaluation of the role of Tokyo's urban core. Corporations sought to locate their headquarters in Marunouchi District, which allowed them to exchange information and take prompt action, and developers were willing to invest in the office space in this district that was proven to be profitable even during the recession. The government shifted to a "return to the urban core" policy and actively negotiated with stakeholders to redevelop the Marunouchi District, a district that now became more significant than ever in its planning strategy.

The most active preservation group, "Citizens who love the red-brick Tokyo Station", advocated for the restoration of Tokyo Station at the time when the government and the developers had not yet come to a consensus on how the redevelopment of the Tokyo Station area should proceed. It was helpful to the cause that the preservation group reached a nationwide audience through its activities and maintained its communication with the railway company and

the politicians, but we also have to realize how JR-East was reluctant to restore the Tokyo Station and designate the *Marunouchi Ekisha* as Important Cultural Property when its financial trouble was unsolved, and how the preservationists' later efforts to preserve Tokyo Central Main Office and Marunouchi Building failed when the developers aligned their interests with the government. It is therefore reasonable to argue that, without the transfer of development rights and other methods that satisfied the urgent needs of major stakeholders and met their core interests in the district, the preservationists would be seriously limited in their ability to alter the outcomes. Preservationists, however, should not be pessimistic about the influence they can have on the fate of historic structures. Understanding the problems and the needs of stakeholders, the historic values of the structures, the opinions of citizens, and gaining media coverage all helped the activists to be in a better position to negotiate. This is evident from the design guidelines of Ootemachi-Marunouchi-Yurakucho redevelopment district in which the culture, the history, and the unique identity of a place were considered by the developers and the government.

This research focused on the preservation of railway heritage, the preservation in the urban core of a global city, and the preservation in Japan's capital city. These three elements could not be separated. This paper tends to suggest that the location of Tokyo Station in the urban core of the city has a dominant effect over the other two factors, because the high-value urban core is a concentrated reflection of the capital city's economic transformation and the power of major real-estate developers. Although small comparative studies have been included in the last chapter to demonstrate this point, the arguments in this thesis would definitely be strengthened if a comparison could be made with the preservation of other types of historic structures in the urban core or similar cases in other Japanese cities. In addition, while the official documents are accessible in many forms, the real-estate data in Tokyo collected in this

research are limited. To provide a more comprehensive understanding of the market and the effect of the restoration of Tokyo Station, more property-specific information would have been helpful. Due to this limitation, the thesis provides a weak argument on how the restoration has affected the real estate development and the redevelopment of the area. This paper, therefore, encourages further research into the preservation of other types of modern architecture in major urban areas of Japan. It would also be in the preservationists' core interest to understand how they could play a role in the process of the negotiation between the government and the developers, and what might allow them to be included in this negotiation so that the decision could be made in favor of both development and preservation.

BIBLIOGRAPHY

- Aoki, Eiichi, 2000, *A history of Japanese railways, 1872-1999*, Tokyo: East Japan Railway Culture Foundation
- Brumann, Christoph, and Cox, Rupert A, 2010, *Making Japanese Heritage*, New York: Routledge
- Brumen, Peter, and Stratton, Michael (ed.), 1997, *Conserving the Railway Heritage*, London: Chapman & Hall
- Enders, Siegfried, and Gutschow, Niels, 1998, *Hozon: architectural and urban conservation in Japan*, London: Edition Axel Menges
- Harada, Katsumasa, 1987, *Eki no shakaishi: Nihon no kindaika to kokyo kukan*, Tokyo: Chuo Koronsha
- Kasai, Yoshiyuki, 2003, *Japanese national railways: its break-up and privatization*, Kent, England: Global Oriental
- Kimura, Manpei, 2007, *Kyoto hakai ni koshite: shimin undo 20-nen no kiseki*, Kyoto: Kamogawa Shuppan
- Kin, Seijun, 2013, *Fudosan toshi shijio no kenkyu: 1992-nen kara 2011-nen no shijo hensen to toshi kodo no nijyunenshi*, Tokyo: Toyo Keizai Shinposha
- Kingston, Jeff, 2011, *Japan in transformation, 1945-2010*, New York: Longman
- Matsuhashi, Tatsuya, 2012, *Modan Tokyo no Rekishi Shakaigaku: "Marunouchi" o meguru sozoryoku to shakai kukan no henyo*, Kyoto: Mineruva Shobo
- Mikasanomiya, Akiko, 2013, *The Past, Present, and Future of Cultural Asset*, Kyoto: Miyaob Shuppansha
- Miura, Shumon, 1992, *Akarenga no Tokyo-Eki*, Tokyo: Iwanami Shoten
- Mori, Mayumi, 1988, *Akarenga no Tokyo-eki: watashitachi no randomaku*, Tokyo: Yanesen Kobo
- Nakamura, Kenjiro, 2007, *Wakariyasui bunkazai hogo seido no kaisetsu*, Tokyo: Gyosei
- Nishi, Kazuo, and Hozumi, Kazuo, 1985, *What is Japanese Architecture?*, New York: Kodansha International
- Nozaki, Tetsuo, 2012, *Shinka suru tokyoeiki: machizukuri kara ekinaka kaihatsu made*, 2012, Tokyo: Kotsukenkyukyokai
- Ohama, Mayu, 2003, "Preservation planning for early modern architecture: comparing the New York Grand Central Terminal and Tokyo Station"
- Sand, Jordan, 2013, *Tokyo Vernacular: Common Spaces, Local Histories, Found Objects*, Berkeley: University of California Press

- Straszak, A., 1981, *The Shinkansen program: transportation, railway, environmental, regional and national development issues*, Laxenburg, Austria: Institute for Applied Systems Analysis
- Tanaka, Kakuei, 1972, *Building a new Japan: a plan for remodeling the Japanese Archipelago*, Tokyo: Yomiuri Shimbun Sha
- Tipton, Elise K., 2002, *Modern Japan: a social and political history*, New York: Routledge
- Tomlan, Michael, 2015, *Historic preservation: caring for our expanding legacy*, New York: Springer
- Bunkacho (Agency for Cultural Affairs), 2014, *Policy of Cultural Affairs in Japan*, Tokyo: National government publication
- Bunkacho Bunkazaibu, 2006, *Bunkazai hogo kankei horeishu*, Tokyo: National government publication
- Bunkazai Hogo linkai, 2000, *An overview of Japan's policies on the protection of cultural properties: FY 1998*, Tokyo: Agency for Cultural Affairs
- Cushman & Wakefield, 2015, "Investment Marketbeat: Tokyo", Q1 2015
- Mizuho Bank Corporation, 2014, "Real Estate Market Report", May 2014
- Tetsudo Kaikan, 2009, *Gransta: Shinkasuru tokyoeki to Tokyo station City*, Tokyo: Tetsudo Kaikan
- Tetsudo Kinenbutsu Kenkyukai, 2014, *Tetsudo hakubutsushi*, Tokyo: Nihon Tosho Senta
- Tokyo Metropolitan Government, 1981, *Tokyo at a Glance: Facts and Figures 1981*, Tokyo: Tokyo Metropolitan Government
- Tokyo Metropolitan Government, 1987, *2nd long-term plan for Tokyo metropolis: "my town Tokyo" a new evolution toward the 21st century*, Tokyo: Tokyo Metropolitan Government
- Tokyo Metropolitan Government, 1990, *Tokyo Industry: A Graphic Overview 1989*, Tokyo: Tokyo Metropolitan Government
- Tokyo Metropolitan Government, 1991, *3rd long-term plan for the Tokyo metropolis: "My Town Tokyo" for the dawn of the 21st century*, Tokyo: Tokyo Metropolitan Government
- Tokyo Metropolitan Government, 2000, *Tokyo koso 2000: senkyaku banrai no sekai toshi o mezashite*, Tokyo: Tokyo Metropolitan Government
- Advisory Committee on Ootemachi-Marunouchi-Yurakucho Area Development, 1998, "Yuruyakana gaidorain"
- Advisory Committee on Ootemachi-Marunouchi-Yurakucho Area Development, 2012, "Ootemachi-Marunouchi-Yurakucho Area Development Guideline 2012"
- Hazuma, Toshinori, 2002, "Ueno-Eki station renaissance ni tsuite", *JREA*, vol.45 no.4
- Hein, Carola, 2010, "Shaping Tokyo: Land Development and Planning Practice in the Early Modern Japanese Metropolis", *Journal of Urban History*, Vol.36 No.4

- Ishikawa, Kazuki, 2003, “Station Renaissance no saikin no eki kaihatsu nit suite”, *JREA*, vol.45 no.4
- Isozaki, Arata, 1993, “Construction Site”, *Japanese Architect*, vol.68 no.4
- Ito, Motoshige, 2004, “The Transformation of Marunouchi”, *Japan Echo*, Vol.31 No.1
- Ito, Takatoshi, 1996, “Japan and the Asian Economies: A ‘Miracle’ in Transition”, *Brookings Papers on Economic Activities*, http://www.brookings.edu/~media/Projects/BPEA/1996-2/1996b_bpea_ito_weinstein.PDF, last accessed on 2015/10/26
- Kido, Ewa Maria, 2012, “Elements of the Urbanscape in Tokyo”, *Teka Kom. Arch. Urban Studies*, Vol.3 No.1
- Kido, Ewa Maria, 2013, “Historical and Modern Structures at the Railway Stations”, *Kokudo Bunka Kenkyusho Annual Report*, No.11 2013-05
- Nikkei architecture, 2009/5/11, “Tokyo chuo yubinkyoku—seijika no hozon katsudo mo hanekaesu keizai no kaba”
- Osawa, Akihiko, 2011, “Nihon ni okeru yosekiritsu seido no seitei keii ni kansuru kousatsu”, *Tochi Sogo Kenkyu*, vol.19 no.1
- Scott, Geoffrey R., “Cultural Property Laws of Japan: Social, Political, and Legal Influences”, *Pacific Rim Law & Policy Journal Association*, Vol.12 No.2
- Tahara, Yukio, and Shimizu, Masahito, and Shimizu, Satomi, 2013, “Design Process for the Restoration Work of Tokyo Station Marunouchi Building”, *AIJ J. Technol.Des*, Vol.19 No.43
- Tokyu Corporation, 2013/1/23, “Urban planning proposal for areas surrounding Shibuya Station”, http://www.tokyu.co.jp/ir/upload_file/ENtop_01/9005_2013032817342804_P01_.pdf, last accessed on 2015/10/26
- Yamane, Takashi, 2014, “Redevelopment of Shibuya Station and Area Surrounding the Station”, *Japanese Railway Engineering*, No.184 2014
- Agency for Cultural Affairs, <http://www.bunka.go.jp/>, last accessed on 2015/10/26
- Agency for Cultural Affairs’s Database of National Designated Cultural Properties, http://kunishitei.bunka.go.jp/bsys/index_pc.html, last accessed on 2015/10/26
- Asahi Shimbun, accessed via Kikuzo II Visual, <http://database.asahi.com.proxy.library.cornell.edu/library2e/main/start.php>, last accessed on 2015/10/26
- Cabinet Office, Government of Japan, <http://www.cao.go.jp/index.html>, last accessed on 2015/10/26
- East Japan Railway Culture Foundation, <http://www.ejrcf.or.jp/>, last accessed on 2015/10/26
- East Japan Railway Company, <http://www.jreast.co.jp/>, last accessed on 2015/10/26
- Japan Railway & Transport Review, <http://www.jrtr.net/>, last accessed on 2015/10/26

Miki Shoji, <http://www.e-miki.com/>, last accessed on 2015/10/26

Ministry of Education, Culture, Sports, Science and Technology, <http://www.mext.go.jp/>, last accessed on 2015/10/26

Ministry of Health, Labour and Welfare, <http://www.mhlw.go.jp/>, last accessed on 2015/10/26

Ministry of Land, Infrastructure, Transport and Tourism, <http://www.mlit.go.jp/>, last accessed on 2015/10/26

Statistics Japan (Statistics Bureau, Ministry of Internal Affairs and Communications of Japan), <http://www.stat.go.jp/>, last accessed on 2015/10/26

Statistics of Tokyo, <http://www.toukei.metro.tokyo.jp/>, last accessed on 2015/10/26

Tokyo Cultural Properties Database, <http://bunkazai.metro.tokyo.jp/>, last accessed on 2015/10/26