

Japanese Transit-Oriented Development: The Framed Market and the Production of  
Alternative Landscapes

A DISSERTATION  
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF MINNESOTA  
BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

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May 2010

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## **Acknowledgements**

The completion of this dissertation would not have been possible without assistance. I would like to thank the National Science Foundation and the Japan Foundation for fellowships used for the research and writing stages of the project. The SSRC Japan Studies Dissertation Workshop was another valuable source of support and encouragement.

I would like to thank the following mentors for their help in various stages: Judith Martin and Roger Miller, who served as advisors for my graduate education and as readers of this dissertation; Ann Forsyth, who sponsored me through various research assistantships and agreed to be a reader; and Rod Squires, who chaired the examination. I also thank Abdi Samatar, whose research development class was instrumental in preparing the research proposal for this dissertation.

My graduate school colleagues have been a tremendous help in encouraging me and offering their guidance. Although there are many I could name, I would especially like to thank Max Handler, Jonathan Schroeder and Tim Mennel.

In Tokyo, I have benefited from the guidance of my faculty advisor at the University of Tokyo, Junichiro Okata, as well as Hideki Koizumi and Rikutarō Manabe. I also appreciate the help of various librarians at the University of Tokyo, especially the Department of Urban Engineering Library, as well as the National Diet Library and Setagaya Ward Central Library.

Finally, I am most thankful and appreciative of my family for their encouragement and support. I owe a great deal of gratitude to Judith Musick, who helped

with the maps and proofreading. Issei's permanent smile provided the perfect antidote to the work of writing. Most of all, this dissertation would not have been possible without Yukari. Thank you for all you have done and all that you help me do.

## **Dedication**

*For Yukari*

## **Abstract**

America's dominant pattern of automobile-dependent suburban land use is the target of much criticism. Transit-Oriented Development (TOD) has emerged as an alternative to the *status quo*, but has also launched a polarized debate on whether TOD is a necessary market correction or inefficient government meddling in the "free market." In Japan, however, TOD-style metropolitan landscapes are the rule rather than the exception and, paradoxically, have emerged with little in the way of state-led land use planning and private, rather than public, transit systems. This dissertation analyzes the development of transit-oriented development in Japan, with specific attention to the role of government, via railway policy, urban planning policy and other institutional factors, in enabling and shaping ostensibly "free" market forces.

## Table of Contents

<b>List of Tables</b>	<b>vii</b>
<b>List of Figures</b>	<b>viii</b>
<b>Notes on Japanese Terms and Spelling</b>	<b>x</b>
<b>Chapter One: Introduction</b>	<b>1</b>
1.1 Futako Tamagawa	2
1.2 The Conundrum	13
1.3 Thesis Outline	19
<b>Chapter Two: Literature Review</b>	<b>25</b>
2.1 Planning vs. Markets	25
2.2 The Standard Debate	39
2.3 Economic Institutionalism	51
2.4 The Framed Market	62
<b>Chapter Three: Methodology and Sources</b>	<b>70</b>
3.1 Methodology	70
3.2 Setagaya and Tōkyū	74
3.3 Notes on Sources	89
<b>Chapter Four: The Beginnings of Japanese Transit-Oriented Suburbia</b>	<b>101</b>
4.1 Early History of Edo	101
4.2 1870s and 1880s	108
4.3 1890s	124
4.4 1900s	132

4.5	The Era of Incipient Suburbanization	149
<b>Chapter Five: The Peak of Japanese Transit-Oriented Suburbia</b>		<b>154</b>
5.1	1910 to 1923	154
5.2	The Great Kantō Earthquake	178
5.3	1923 to 1930	182
5.4	1930 to 1945	203
5.5	The Era of Peak Suburban Growth	215
<b>Chapter Six: The Maturation of Japanese Transit-Oriented Suburbia</b>		<b>221</b>
6.1	1945 to 1950	221
6.2	1950s	232
6.3	1960s	254
6.4	1970s	277
6.5	The Era of Suburban Maturation	281
<b>Chapter Seven: Conclusion</b>		<b>286</b>
7.1	Market or State?	286
7.2	Learning from Japanese Transit-Oriented Development	297
<b>Bibliography</b>		<b>306</b>
<b>Appendix A: Alternative Theories of Urban Policy</b>		<b>326</b>

## **List of Tables**

Table 1.1: Tōkyū's Profitability by Sector, Fiscal Year 2009	9
Table 3.1: Differentiation of Three Research Scales	73
Table 4.1: Total Length of Railway Lines, 1880-1890, in miles	113
Table 4.2: Total Length of Railway Lines, 1890-1900, in miles	126
Table 4.3: Total Length of Railway Lines, 1898-1905, in miles	134
Table 5.1: Zone and Height Restrictions in the 1919 City Planning Law	166
Table 5.2: Population Increase in Tokyo Prefecture, 1920-1929	197
Table 5.3: Population Increase in Setagaya, 1920-1940	210
Table 6.1: Population of Tokyo Prefecture, 1945-1960	237
Table 6.2: Indexed Population Growth at Five Scales, 1950-1960	252
Table 6.3: Population of Tokyo Prefecture, 1960-1970	258
Table 6.4: Population Growth at Six Scales, 1955-1970, indexed from 1955	268
Table 6.5: Population Growth at Six Scales, 1955-1970, indexed from 1955	282

## List of Figures

Figure 1.1: Conceptual Drawing of Future Futako Tamagawa Station (Tōkyū Land Corporation 2009a).	2
Figure 1.2: Retail and Office building adjacent to Futako Tamagawa Station of Futako Tamagawa Station (Tōkyū Land Corporation 2009a).	2
Figure 1.3: The Galleria at Futako Tamagawa (Tōkyū Land Corporation 2009a).	4
Figure 1.4: Interior View of the Galleria (Tōkyū Land Corporation 2009a).	4
Figure 1.5: Residence Towers viewed from the south (Tōkyū Land Corporation 2009b).	5
Figure 1.6: Model of the final project, with phase II (Tōkyū Corporation 2009a)	6
Figure 1.7: Map of Tokyo Metropolis, highlighting Setagaya Ward	7
Figure 1.8: Map of Tōkyū lines in the Tokyo Metropolis (Tōkyū Corporation 2009a)	9
Figure 1.9: Tokorozawa Station area (Arai 2005)	12
Figure 3.1: Political Units of Tokyo Prefecture	80
Figure 3.2: Center City Wards (Dark Grey) and Suburbs (Light Grey) in Tokyo Prefecture, showing Yamanote Train Line	84
Figure 3.3: Map of Setagaya Ward, showing train lines	88
Figure 4.1: Railways in Tokyo 1895 (adapted from Yamamoto 1993, 119)	125
Figure 4.2: Setagaya Ward in 1912 (Tōkyū Corporation 2009b)	148
Figure 4.3: Early growth of Setagaya (Japanese Statistics Bureau 2009b)	151
Figure 5.1: Railways in Tokyo, 1920 (adapted from Yamamoto 1993, 119)	157
Figure 5.2: Plan for Tamagawadai (Nihon Jutaku Sōgō Centā 1984)	185
Figure 5.3: Downtown Wards and Peripheral Wards in Tokyo	201
Figure 5.4: Population change, 1920-1930 (Tokyo Prefectural Statistics Bureau 2006)	202
Figure 5.5: Railways in Tokyo, 1940 (adapted from Yamamoto 1993, 119)	207

Figure 5.6: Population change, 1920-1940 (Tokyo Prefectural Statistics Bureau 2006)	216
Figure 6.1: Aftermath of aerial bombing of Tokyo (Selden 2007)	221
Figure 6.2: Plan for the Reconstruction of Tokyo (Hoshino 1946, 6).	226
Figure 6.3: The Pacific Belt	236
Figure 6.4: Schematic diagram showing through service between three separate lines	251
Figure 6.5: Futako Tamagawa Station area prior to redevelopment, ca. late 1950s (Tōkyū Corporation 2009b)	254
Figure 6.6: Railways in Tokyo, 1960 (adapted from Yamamoto 1993)	264

## Notes on Japanese Terms and Spelling

Japanese words can be rendered in different ways in English. I have chosen to use macrons, or long vowel marks, to represent cases in which there are two consecutive vowels in Japanese. For example, the company “とうきゅう” is translated here as “Tōkyū,” even though the more literal translation of each character would be “Toukyuu.” The literal translation, when pronounced in English, would be significantly different from the sound in Japanese, however. The macrons above the o and the u are used in the standard Hepburn translation system to indicate slight elongations of those vowels without doubling. The result is a more accurate reading in English. Some other translations omit the macrons entirely, resulting in “Tokyu,” but this can cause problems in some words when such a spelling would conflate the intended word with another one.

However, I have not used the long vowel marks for names of cities and other terms that are commonly used in English. For example, though the urban region of Tokyo and the city of Osaka should be translated as Tōkyō and Ōsaka, they are widely known to English speakers as just Tokyo and Osaka and have been left in that form.

## **Chapter One: Introduction**

This thesis analyzes the success of transit-oriented development (t.o.d.) in Japan and its historical, political and geographical development. It is especially concerned with the “free market” paradox of Japanese t.o.d. in which the private sector has built, managed and profited from this type of transportation and land use pattern, contrary to views of transit-oriented development in the United States which generally maintain that t.o.d. can only come about with the help of government-led planning. To restate this as a research question, how did private industry led, transit-oriented development come about in Japanese suburbs, given that the U.S. debate holds that t.o.d. is inherently an anti-market phenomenon? To answer this question, I have adopted an institutionalist approach focusing on how markets are formed and maintained, and which calls into question mainstream understandings of the terms “free market” and “government intervention.” Unlike Liberalism and Keynesianism, the two political perspectives that dominate current debate, institutionalism holds that markets and states are not conflicting, autonomous entities, but rather that markets are inextricably embedded in state structures and take their shape from conditions supplied and determined by the public sector. From this perspective, the key to understanding the differential success of t.o.d. in the two contexts is the connection between governmental regulation and market forces in each case, or as I call it, the “framing” of market forces by governmental regulation.

## 1.1 Futako Tamagawa

### 1.1.1 Futako Tamagawa Rise



**Figure 1.1: Conceptual Drawing of Future Futako Tamagawa Station (Tōkyū Land Corporation 2009a).**



**Figure 1.2: Retail and Office building adjacent to Futako Tamagawa Station of Futako Tamagawa Station (Tōkyū Land Corporation 2009a).**

The Futako Tamagawa train station area in Setagaya Ward<sup>1</sup> in the southwestern suburbs of Tokyo exemplifies the success of t.o.d. in Japan. Approximately 110,000 passengers use the facility every day, riding on two suburban rail lines, the Tōkyū Oimachi and Tōkyū Denentoshi, which connect the suburb to the urban core in less than thirty minutes (Tōkyū Corporation 2009a). The station itself is a bustling place, with a few small cafés, restaurants, a travel agency, and multiple newsstands located near the ticket gates. The station building is clean, safe and convenient at all times of the day, and handles the morning rush hour with perfect efficiency. Just outside one of the main east exits, a large bus turnaround enables feeder busses to drop off passengers right in front of the ticket gates and to pick up returning commuters for the next stage of their journeys home. Just outside the main west exit is a small collection of restaurants, a bakery and a dry cleaning service.

It is currently undergoing a renovation project whose scale dwarfs what Americans typically think of as a transportation hub. The station, as large and lively as it is, is just one small part of a massive new development being built at Futako Tamagawa. The Tōkyū Corporation, which runs the two train lines that stop at the station, is currently building “Futako Tamagawa Rise,” a multi-stage, mixed-use project that is scheduled for first stage completion in late 2010, with more development to follow. The 16-story tall Rise Office building, which should open in December 2010, totals 107,000 m<sup>2</sup> of usable floor area and has 11 floors for offices above five floors for retail outlets. The commercial space, named the Galleria, features a large atrium with a mixture of small,

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<sup>1</sup> A ward is a sub-division of metropolitan government in Japan.

independently owned boutiques as well as regional and national chain stores. When completed, the office and retail space will be just a stone's throw from the station's ticket gates, and will be connected by street-level and above-ground pathways.



**Figure 1.3: The Galleria at Futako Tamagawa (Tōkyū Land Corporation 2009a).**



**Figure 1.4: Interior View of the Galleria (Tōkyū Land Corporation 2009a).**

Farther to the east are two more sections of the redevelopment project. Phase II, which lies immediately to the east of Rise Office, is still in the preliminary planning stages, but early forecasts call for 169,000 m<sup>2</sup> of mixed retail and office space, along with

a major hotel. Phase II will feature one giant tower of approximately 40 stories, flanked by several structures in the six to eight story range. Phase III, set for completion in March 2011, will be residential and will include three towers, one 42 stories high and two at 28 stories high, embedded in parkland. Lower elevation condominiums will be interspersed among the towers. All together, Phase III will feature 1033 planned units and over 133,000 m<sup>2</sup> of residential floor space in the towers and condominiums. Units range between small 30 m<sup>2</sup> studios and 100 m<sup>2</sup> three-bedroom apartments. Most residential units will have a view of the Tamagawa River below and to the south, and a few others overlook a six-hectare park. There will also be some commercial space allotted to the ground floors of the condominiums and three other low-rise buildings, for small-scale office use such as doctor and dentist offices and small companies. All residents and other tenants will be within a five-minute walk of the station and have scores of shops, cafés and other daily services close-by.



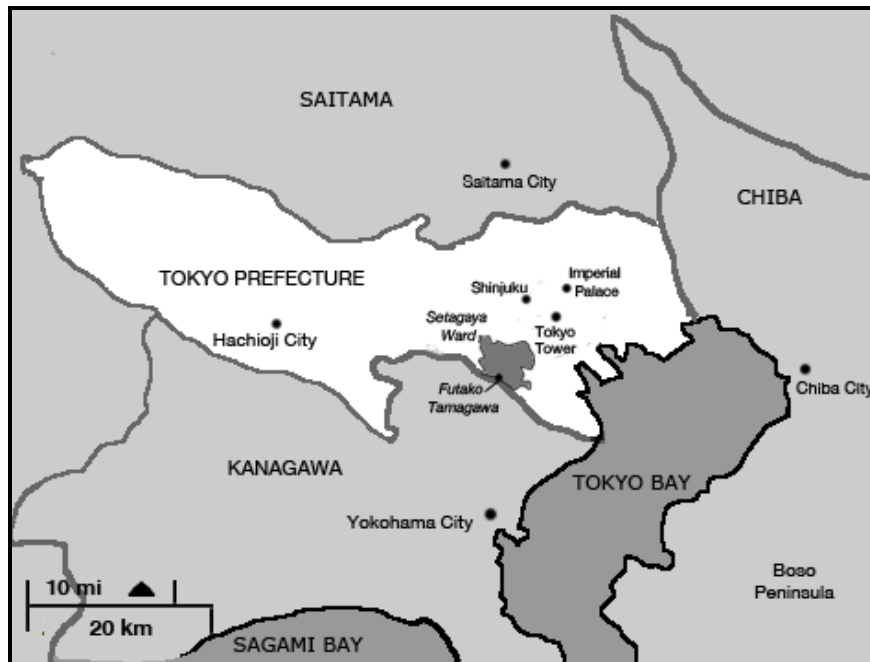
**Figure 1.5: Residence Towers viewed from the south (Tōkyū Land Corporation 2009b).**

### 1.1.2 The Tōkyū Group



**Figure 1.6: Model of the final project, with phase II (Tōkyū Corporation 2009a)**

Tōkyū is expecting large profits from the project, based on previous success with similar large-scale redevelopment plans in this affluent section of Tokyo. Tōkyū owns residential, office and retail properties throughout Setagaya, including the 75-story Carrot Tower, built on top of Tōkyū's Sangenjaya station to the north of Futako Tamagawa. Tōkyū's extensive real estate holdings in Setagaya are just some of the corporation's large real estate empire. Tōkyū also has many real estate holdings in Shibuya Ward, which lies adjacent to Setagaya's northeastern edge, including the Shibuya 109 building and Cerulean Tower, a 48-story office complex. A subsidiary company, Tokyo Commercial Development Corporation, owns hundreds of commercial properties throughout the greater Tokyo metropolis and elsewhere in Japan. Tōkyū Real Estate and Tōkyū Community, meanwhile, are involved in small-scale residential real estate development and sales (Tōkyū Land Corporation 2009c; Tōkyū Dentetsu Kaisha 2009).



**Figure 1.7: Map of Tokyo Metropolis, highlighting Setagaya Ward**

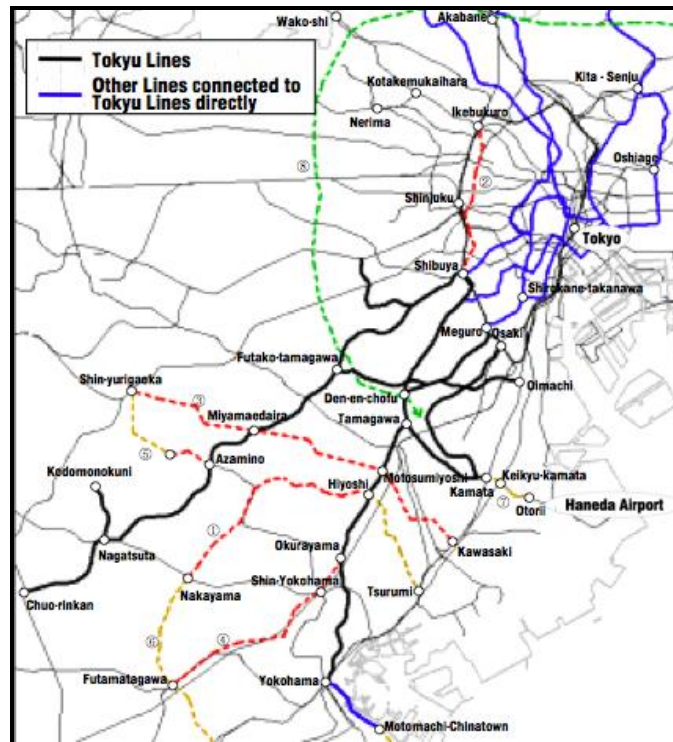
Tōkyū’s other lines of businesses are quite varied; all in all, there are 168 subsidiaries and 22 other affiliates.<sup>2</sup> In the retail sector is the Tōkyū Department Store chain, which includes eleven other department stores in Japan and international branches in Thailand, Singapore and Hong Kong (Grant 2007). In 1976, Tōkyū started a chain of do-it-yourself and variety stores, called Tōkyū Hands, and there are now fifteen domestic and five more international outlets (Tōkyū Land Corporation 2009c). Tōkyū also runs grocery stores, with 70 branches throughout Japan, and countless numbers of small retail shops, such as newsstands and convenience stores in and around their train stations. Leisure and tourism is another important business sector. Tōkyū owns two domestic hotel chains and has additional hotel properties in Hawaii and Southeast Asia. Hotel reservations can be made through Tōkyū’s own travel agency, the Tōkyū Agency, which

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<sup>2</sup> Separate companies in which Tōkyū holds a significant (at least 25%) portion of stock.

not coincidentally also offers trips to golf courses and ski resorts developed and owned by Tōkyū Recreation. Tōkyū Construction Corporation handles the construction of these facilities, and is further supported by Tōkyū Security, one of Japan's largest security firms. Tōkyū is also the largest shareholder in Japan's largest airline company, Japan Airlines, a position it attained after its own start-up, Japan Air Systems, merged with JAL in 2001 (Tōkyū Dentetsu Kaisha 2009).

Despite the broad reach of Tōkyū's land development businesses, its transportation oriented enterprises are the most well-known parts of the business empire. Tōkyū owns nine railway lines in the Tokyo/Yokohama metropolitan area, mostly linking the city center with southwestern suburbs of Tokyo prefecture. A few of these continue on to Kanagawa Prefecture and Yokohama City. Tōkyū's lines pass through some of the most popular residential areas of the Tokyo metropolis, and in fact, Tōkyū serves five of the top nine places where people most wanted to live, including numbers two, three and four, which was Futako Tamagawa (Tōkyū Corporation 2009a, 6). At the end of 2008, Tōkyū ranked first out of Tokyo's eight private railways in total revenue, with over 14.4 billion US dollars, and number of yearly passengers, with 1.05 billion passenger trips (Japanese Private Railway Association 2009).



**Figure 1.8: Map of Tōkyū lines in the Tokyo Metropolis (Tōkyū Corporation 2009a)**

The extensive rail holdings are supplemented by many other transportation-based subsidiaries, including numerous urban and long-distance bus lines, dozens of taxi services, and a rental car company. All together, Tōkyū’s transportation sector has been very profitable: in the fiscal year ending March 2009, it earned 272 million dollars in operating profits. This made it the most profitable of Tōkyū’s five main sectors (Tōkyū Corporation 2009a, 33).

**Table 1.1: Tōkyū’s Profitability by Sector, Fiscal Year 2009**

Sector	Revenue (\$)	Operating Profits (\$), FY 2009
Transportation	2.09 Billion	272 Million
Real Estate	1.46 Billion	248 Million

Retail	6.54 Billion	115 Million
Leisure and Services	1.85 Billion	23.3 Million
Hotels	1.01 Billion	7.2 Million
Other	1.64 Billion	21.2 Million
Total	14.61 Billion	686 Million
Source: (Tōkyū Corporation 2009a). Note: 100 yen =.95 US\$		

### 1.1.3 Tokyo, Transit Metropolis

Tōkyū’s project at Futako Tamagawa brings together many of the corporation’s various businesses including real estate planning, construction and sales, retail businesses and hotels, all centered on existing transportation investments. Even though Tōkyū’s train operations are profitable, that is hardly their sole function. Most importantly, the train is a delivery system of workers, customers and residents for its other businesses, which all together bring in profits far beyond what Tōkyū earns from selling train tickets. This model is also in place in Shibuya, the urban terminal for Tōkyū’s suburban train lines. Shibuya is one of Tokyo’s most vibrant commercial areas and is home to several large office buildings, many Tōkyū-owned shops, a Tōkyū hotel and the flagship store of its department store chain. Both Futako Tamagawa and Shibuya follow a successful and symbiotic business model in which transit operations and real estate development are mutually reinforcing: the train system conveniently delivers customers, residents and workers to shops, houses and offices, while the successes of those development projects

ensure a steady stream of railway passengers. The integration of these businesses achieves a level of profitability beyond what either element could achieve alone.

Other examples of cooperative transit and real estate business operations in suburban Tokyo and in suburban areas of other Japanese cities, both big and small, abound. Tokyo's seven other private railways make frequent use of the same development model exemplified by Tōkyū at Futako Tamagawa and Shibuya, thereby creating a virtual galaxy of such nodes throughout one of the world's most populous and expansive urban regions. The Seibu Company, which operates several lines in the western and northwestern suburbs, has major real estate and retail investments centered on its train stations throughout its system. For example, at Tokorozawa, a suburb 30 kilometers west of central Tokyo, Seibu has seemingly created a city out of thin air. Tokorozawa is the junction for Seibu's two main lines, and to take advantage of this location, Seibu has built dozens of apartment towers along with hundreds of smaller apartment complexes and subdivisions of single-family houses. In addition, Seibu operates department stores and multiple smaller retail outlets around the station, as well as recreational facilities such as a domed baseball stadium, an indoor ski hill, and an amusement park (Hast 1992; Havens 1994).



**Figure 1.9: Tokorozawa Station area (Arai 2005)**

Tokorozawa, like Futako Tamagawa and hundreds of other suburbs across Japan, is a case of near total monopoly of mass transit, retail commerce and housing by one particular company. On a smaller scale, there are hundreds more communities with diverse private development around the station instead of one company having a dominant position. At Chōfu on the Keio line, for example, the stations contain a few Keio kiosks, but other companies and individual proprietors operate hundreds of businesses encircling the station. There is a strong density gradient at such nodes, with intense development right in front of the station's main entrance/exit that decreases as one moves farther away. Within this development zone, mixed-use prevails. Although the particularities of course differ from case to case, generally one can emerge from a Japanese train station and find taxis and buses immediately outside, and a wide selection of restaurants, shops and offices within a short walk. Apartment buildings are often interspersed with these commercial buildings. Additionally, many buildings with commercial uses on the lower floors also have residential units above. Outside of the

immediate station surroundings, more small retail and shorter, but still multi-storied, apartment buildings are typical. This medium-density pattern then generally gives way to lower density development of one and two-story structures beyond a few minutes walk of a station.

## **1.2 The Conundrum**

### *1.2.1 Transit-Oriented Development in Two Places*

This development pattern, which I call Japanese transit-oriented development (t.o.d.), represented by Futako Tamagawa, Tokorozawa and Chōfu, is so common in Japanese suburban areas that its presence is taken for granted. In an American context, however, such patterns might be noted as perfect examples of a planning movement that has gained considerable attention over the past twenty years: Transit-Oriented Development (TOD).<sup>3</sup> Briefly described, TOD is a planning strategy that integrates public transportation investments, usually light rail transit, but also buses, with mixed-use zoning to create walkable, diverse neighborhoods in both urban and suburban settings – precisely the type of transportation and land use patterns that dominate in Japan.

TOD's modern revival has grown out of frustration with America's stereotypical development pattern of separated use nodes connected by automobile, a phenomenon most pronounced in American suburbs. TOD has taken off in recent years, and successful cases have been built in a number of American metropolitan regions, but it is currently

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<sup>3</sup> Throughout this paper, I use the capitalized version, as well as the matching acronym to refer to the American philosophy and its supporters, whereas I use the non-capitalized version to refer to the generic practice.

viewed as an exception to the American norm, rather than the norm itself.<sup>4</sup> Even factoring in recent federal investment in high-speed rail corridors in several regions across the country, full-scale adoption of a more Japanese style of urban and suburban development for the United States is still a long way off. For one, there are powerful and embedded interest groups with stakes in the current *status quo* of American transportation planning, such as state highway commissions, automobile manufacturers, dealers and workers, oil companies and highway construction firms. There is also the inherent challenge of political change in the United States, especially in this era of intense partisanship and gridlock, which can make major policy shifts difficult even when substantial popular majorities would seem to favor them.

Another source of resistance to the adoption of TOD has been ideological. The move towards more transit-oriented development has been countered with arguments, mainly from political conservatives, that it represents government meddling in the “free market” of transportation and land use. The arguments themselves should be familiar, as they seem to be yet another iteration of a larger debate in the United States about the proper roles of the state and the market. TOD opponents promote limited government involvement in the economy, and generally argue that when the government involves itself in questions of where people live and work, it produces alternatives inferior to what the market alone can deliver. TOD supporters disagree, but nevertheless legitimize the opposition by countering that such meddling is justified as a necessary market correction.

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<sup>4</sup> To clarify, not all Japanese urban and suburban areas follow the model I have sketched above just as not all American cities and towns are defined by the opposite stereotype. There is considerable diversity in both locales, and examples exist of American transit-oriented development and Japanese car-oriented development. In describing the basic patterns of development in the two places, however, the distinction holds.

TOD proponents argue that the market is producing outcomes with deleterious impacts on the environment, social justice and community well-being, and can be altered to produce better outcomes. TOD implementation in the United States has been slow and contentious for tangible, practical reasons and abstract, philosophical ones.

### *1.2.2 Choices and Contexts*

It is extremely unlikely that TOD will ever take root in the United States as t.o.d. has in Japan. Yet comparing the two can be constructive for future discussions of TOD in the United States. Why, for example, has Japanese t.o.d. proven so popular among consumers? Has the Japanese political system managed to overcome the obstacles that American policy makers face, or perhaps, have the same obstacles not been present in the Japanese context? While the basic argument over TOD in the U.S. stems from its portrayal as a government intervention into transportation and land use markets, the typical Japanese transit-oriented landscape has come about *without* a great deal of state-led planning. In fact, “free market” forces have played a greater role in shaping Japanese suburban land use patterns than in the United States. Japanese developers have a much freer hand to build what they wish: planning regulations, building codes and mandated development additions such as public space or parking space requirements in Japan are extremely weak compared to the United States. Furthermore, the few significant planning regulations that do exist are relatively recent, and usually have generous “grandfather” exceptions for pre-existing structures and uses. In terms of transportation, the train system in Tokyo and other cities in Japan are by and large privately run. There are mass

transit systems in Japan in which governments have a strong presence,<sup>5</sup> but suburban train companies such as Tōkyū, Seibu, Keio and other operators are fully private and not subsidized by the government. The development patterns of Futako Tamagawa, Shibuya, Tokorozawa, Chōfu and literally thousands of other places in Japan are not the products of government agencies mandating certain outcomes, but of private interests, who have planned, built and managed such places in the search for profits. In sum, Japanese t.o.d. would seem to be the product of a “free market” at the same time American TOD is seen, both by its proponents and opponents, as the opposite.

If it is not planned by the government, then what accounts for the popularity of transit-oriented development in Japan? One possible explanation could be cultural – that Japanese consumers choose differently because of cultural preferences for mixed-use development, for train travel over car travel or for dense living. Since Japanese consumers are not bound by strong governmental directives, it stands to reason that these choices must reflect their desires to some degree. This argument is problematic, however, in that it is circular (people choose X because they like X; we know that they like X, since that is what they chose), and furthermore, it does not address the origin of these cultural preferences. There is nothing in Buddhist theology that steers people in Japan to choose higher density living, for example, nor is there any cultural taboo against driving in a country whose awesome record of post-War economic growth was partially based on

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<sup>5</sup> Tokyo’s two subway companies, for example, both began as municipal utilities. Currently, the Tokyo Metro system (usually called *Eidan*) is a private company but one in which the Japanese national governments and the Tokyo Metropolitan Government together own most of the stock. The Toei system is also technically a private company, though the Tokyo Metropolitan Government is the sole holder of stock. Both systems receive public subsidies for construction, but not for operating costs (Eiichi Aoki et al. 2000; Terada 2001).

the success of its automobile manufacturing industries. The “cultural preference” argument is ultimately a dead end, since it cannot address how and why those preferences have taken the shape that they have. Furthermore, assigning a “cultural” explanation for an apparent affinity for higher density living or train ridership distracts from other, more functional explanations such as the necessity of higher density living in Japan or the practicality of taking the train over driving.

Is demography the reason behind these different sets of choices? After all, Japan is much denser at a national scale than is the United States, and even at the urban scale, Japanese cities are generally denser than American counterparts. There is also a sliver of truth in this argument, since t.o.d. is more workable in denser environments, while the American pattern is, by definition, suited for lower density environments. Like the cultural one, this argument is also circular in that cause and effect seem confused: transit-oriented development causes higher density just as much as it is a product of it, and the same is true with car-based American development patterns. What, then, is the source of this paired phenomenon? After all, while the image of Japan is of high population density, much of this density is confined to a narrow band of cities along the Pacific Ocean. The overwhelming majority of Japan’s total land area is actually low-density, and furthermore, is emptying out at an alarming rate (Japanese Statistics Bureau 2009a). Of Japan’s 47 prefectures, just fifteen experienced population growth between 2000 and 2005, while just seven had a growth rate higher than the national population growth rate of .7%. Rural to urban migration has been considered a national problem for much of the past century, and even today, people are moving towards the already dense areas, even

though there are more and more opportunities to live in lower-density environments, if they so desired. Part of the reason for the high density in Japanese cities has been approximately sixty years of governmental policy to encourage industrial and commercial job concentration, and thus population, in cities as part of Japan's national economic strategy. In this way, Japan's urban density is not a pre-existing condition, but a result of political choices.

Since the success of Japanese t.o.d. is not explainable by direct government mandate, inherent cultural preferences, or demographical circumstance, what accounts for its popularity with Japanese consumers? This is a difficult question to answer as long as the focus is on what people choose and why. There is only limited value in comparing choices across very different contexts, while the ultimate question of why people like what they like often leads to circular reasoning. Transforming the question, however, from one of choosers to one of choices is more productive. If, for instance, the set of options available to Americans regarding where to live, work and shop and how to go between those places is different than what is available to Japanese people, then differences in results cannot be described as mere reflections of differences in preferences. Instead, the different outcomes would be explainable by understanding the sets of options available to the two groups. Japanese and American consumers may want the same things or they may not, but the end product of what they have chosen does not necessarily indicate which, since they have not had the same choices. The underlying and more significant area of study is how the sets of choices available to each group were formed. In effect, the relevant question for understanding the differential levels of success

of transit-oriented development in the United States and Japan should not be “Why do people choose t.o.d. in Japan but not in the United States?” but rather, “What do people have *to choose from* in Japan, in contrast to what is available in the United States?” This is a subtle difference, but nevertheless an important one.

## **1.3 Thesis Outline**

### *1.3.1 Purpose*

This thesis has several goals. First, it will contribute to the scarce English-language literature on Japanese urbanism, suburbia and transportation and land use planning. This study will contribute to the empirically based literature on Japanese urban and suburban morphology, and will be the first known work to describe and analyze the development of Japanese transit-oriented development. Second, this research will inform a set of practical and reasonable suggestions that can assist the process of American suburban reform. The empirical and conceptual advances are valuable in-and-of themselves, but can also serve a practical purpose. An analysis of the secret to t.o.d.’s success in Japan should contribute valuable insights to the on-going push for more environmentally sustainable, less automobile dependent and more diverse U.S. suburban landscapes. This is not an argument that the Japanese experience with t.o.d. should be, or even could be, exported in whole to the United States, but rather, that there are lessons Americans can learn from Japan’s development patterns. Third, and most importantly, it offers a step forward out of a conceptual impasse regarding suburbia, sprawl and suburban reform in the United States. Alternatives to American suburban sprawl are

desperately needed, but the false dichotomy of “planning vs. the market” often derails these conversations and makes them overly contentious (see Levine, 2006). The Japanese case of t.o.d. presents an intriguing challenge to this pervasive but problematic binary, and calls into question significant conceptual issues of how market forces operate and the role of planning in ostensibly “free market” based societies.

### 1.3.2 Chapter Overview

The literature review for this dissertation is covered in two chapters. Chapter two reviews relevant discipline-specific literature in geography and urban planning, and theoretically oriented literature in economics, sociology and history. That chapter starts with a discussion of contemporary American debates over suburbia, roughly described as a debate between those advocating government interventionism in transportation and land use issues and those preferring a less regulated, *laissez-faire* approach. This beginning section first summarizes relevant literature in support of “Smart Growth” and “transit-oriented development,” and then counters these with a survey of market-oriented scholars and critics. Next, the chapter moves to a discussion of mainstream economic views that embody these specific perspectives in issues of transportation and land use, namely the Keynesian viewpoint on the one hand and the Liberal<sup>6</sup> viewpoint on the other. I discuss the main points of contention between these two orientations, but also offer an account of their similarity, especially assumptions that both viewpoints make regarding the origin of markets, and the roles that states play in creating markets. This discussion segues to

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<sup>6</sup> The terms used here are simplifications of the viewpoints. Chapter two contains a much more thorough discussion of the varieties of liberalism.

introducing a third viewpoint that I argue helps point the way out of an intellectual stalemate: institutionalism. I describe the origins of this perspective and show how it differs from the two mainstream views. This chapter concludes with an application of institutionalism to transportation and land use issues, as well as my definition of the “framed market,” the working theoretical lens I have used to examine the rise of Japanese transit-oriented suburbia.

Chapter three contains a description of this project’s research methodology as well as the second half of the literature review. This chapter begins with a description of my approach to the research process. Briefly, I have followed several historical threads at three scales. The first contains topics at a national scale: Japan’s political and economic structure, the development of the private railway industry and national patterns of urbanization and suburbanization. The second thread is an intermediate scale: the development of Japanese urban planning policy, the growth of the Tōkyū Railway group and Tokyo’s geographic and demographic morphology. The third thread is more specific and local: the history of Setagaya Ward and Tōkyū’s role in Setagaya’s development. In writing this paper, I have attempted to braid these three strands together to produce a logical narrative that shows how these strands, as well as the different topics within each strand, have interacted with one another. Next, I discuss my process of selecting which suburb and railway company to focus on, as well as relevant terminology for discussing Japanese suburbs. This chapter continues with another portion of the literature review, this time focusing on Japan-specific sources, not discipline-specific or theoretical sources, as in the previous chapter. I have used a mix of primary sources, almost always

in Japanese, and secondary sources, almost always in English, in this dissertation, and account for these sources at the end of chapter three.

Chapters four, five and six make up the heart of the thesis. Considered together, these chapters discuss the growth of Japanese transit-oriented development in three historical stages: the origins, the peak and the maturation. Chapter four covers the period from about 1870 until the middle of the 1910s. The beginning of this period includes the transformation from a feudal society to the foundation of the modern Japanese nation-state. Next, I cover early efforts to establish a national railroad policy based on public promotion of private construction. In addition, this chapter discusses the early origins of the large corporate conglomerates that would eventually play a major role in suburban development and private railways. Tokyo's modernization from feudal capital to modern, national capital is another prominent feature of this chapter, especially early attempts at urban planning and the formation of its intra-urban transportation system. The third major element of this chapter is a discussion of the first signs of suburbanization, including the first suburban settlements in Setagaya Ward. I refer to the latter part of this period as the "era of incipient suburbanization," in which a number of interrelated developments set the stage for later suburban settlement in a mass transit-oriented pattern.

Chapter five begins in the late 1910s and ends in the late 1930s. The focus on this chapter is the 1920s, the era of Japan's first major suburban boom, and the key period responsible for Japanese suburbanization taking its particular form of transit-oriented development. Due to the political developments and economic growth from 1910s to the early 1920s, and partially aided by the cataclysmic Great Kantō Earthquake of 1923,

suburban settlement skyrocketed, especially in nearby rural districts such as Setagaya. The 1920s were golden years for the private railway conglomerates, as well. Governmental subsidies for suburban railway lines ensured profits in that sector; railway companies made even greater profits by successfully meeting demands for private suburban real estate. Chapter five also analyzes the impact of Japan's first comprehensive set of planning laws, passed in 1919, and its legacy in creating a mixed land use pattern. This chapter ends with a discussion of growing militarization in the late 1930s, including the temporary nationalization of all business enterprises, including railways, in Japan.

Chapter six starts at the end of World War II and continues through the 1950s and 1960s before taking a brief look at the 1970s. The destruction of so much of Tokyo's built environment in the 1940s, combined with the promotion of suburban housing and suburban railways helped launch a second suburban boom which reinforced the transit-oriented development model. Extraordinary economic growth during the 1950s further contributed to suburban expansion, and once again, private railway companies were at the center of the process. In the 1960s, suburban growth had slowed and showed signs of maturation: changes to the suburban landscape were essentially quantitative and did not involve any major changes in basic form. This chapter, as well as the dissertation as whole, ends its historical account in the 1970s. By this time, the transportation and land use patterns of the Japanese suburban landscape were for all intents and purposes fully established.

Chapter seven concludes the dissertation. I summarize and analyze the development of Japanese transit-oriented development and the degree to which has been

a market-led or state-led phenomenon. I use the insights of institutionalism, as encapsulated in the idea of a “framed market,” to argue that it is not so simple a matter of weighing the market side versus the state side and determining which side is more responsible for the result. Rather, the growth of Japanese suburban t.o.d. complicates standard notions that market and state are autonomous, opposing forces in the realm of transportation and land use. A prime theme in the concluding chapter is comparative: the growth of Japanese suburbia is contrasted and compared to the American case. To understand the Japanese case and then compare it to the American case is not necessarily an argument for its superiority, or even an argument for an adoption of elements of Japanese transportation and land use policy. Rather, I argue, investigating the reasons behind Japanese transit-oriented development is useful for shifting the terms of the debate over suburbia in the United States. That alone would be a major step towards a more productive conversation on transportation, land use and American suburbs.

## Chapter Two: Literature Review

### 2.1 Planning vs. Markets

#### 2.1.1 *Contentious Suburbia*

For such a seemingly wholesome and gentle landscape, sprawling and automobile-centered American suburbia is nevertheless the subject of a contentious debate in the United States (Flint 2006; Gillham and MacLean 2002). The criticisms are multi-faceted. One critical approach has pointed to suburbia's negative impacts on the environment. Both the Sierra Club and the Natural Resources Defense Council, for example, have been consistent critics of suburban sprawl which, they argue, causes environmental degradation along many fronts: air and water pollution, loss of forest, wetlands and animal habitat, increased risk of flooding and higher energy use (Sierra Club 1998; Benfield, Raimi, and Chen 1999). This perspective has been supported by specific research which finds that the low-density pattern of suburbia leads to significantly higher outputs of carbon dioxide (Norman, McLean, and Kennedy 2006) and loss of animal diversity as native landscapes give way to lawns and concrete (Burghardt, Tallamy, and Shriver 2009). A significant factor in suburbia's environmental footprint is its inherent dependency on automobiles, which tends to implicate the suburban landscape and automobile together as threats to environmental sustainability. This is the theme of Peter Newman and Jeffrey Kenworthy's Sustainability and Cities:

Overcoming Automobile Dependence and Jane Holtz Kay's Asphalt Nation (Newman and Kenworthy 1999; Kay 1997; Roberts 2004).

Another stream of critique concerns suburbia's effects on health and well-being. Howard Frumkin, Lawrence Frank and Richard Jackson's Urban Sprawl and Public Health implicates the stereotypical suburban lifestyle as a cause of declining human health in the United States, as more and more people have adjusted to the sedentary life practically mandated by suburban living, a thought amplified by Joel Hirschhorn and his not so subtly titled book, Sprawl Kills: How Blandburbs Steal Your Time, Health and Money (Frumkin, Frank, and Richard Joseph Jackson 2004; Hirschhorn 2005). Douglas Morris in It's a Sprawl World After All sees suburbia as a cause of loneliness and loss of community, arguing that suburbia atomizes people and prevents the same type of necessary social interaction that was/is usually found in denser, more inter-dependent living arrangements (Morris 2005). Dave Goetz agrees, arguing that suburbia's affluence and social isolation can be a cause of spiritual degeneration and despair, which he calls "death by suburb" (Goetz 2007). In Suburban Nation: The Rise of Sprawl and the Decline of the American Dream, architects Andres Duany, Elizabeth Plater-Zyberk and Jeff Speck criticize American suburbia for its visual homogeneity and aesthetic blandness, and proposed in its stead the concept of New Urbanism, with more compact development, greater attention to sidewalks, front porches and shared spaces, as well as decreasing reliance on the automobile (Duany, Plater-Zyberk, and Speck 2000). James Kunstler's book, Geography of Nowhere, raises such critiques to a fever pitch, presenting American suburbia as soulless, stupefying and ultimately doomed (Kunstler 1993).

Others have focused on the economic and political downsides of suburbia, notably its income-based exclusivity and inequitably high levels of public support compared to the central city. Kenneth Jackson's definitive history of suburbia, Crabgrass Frontier: The Suburbanization of the United States, shows how the drive for separation from the city and its "problems" was one of the principal motivations for suburban development in the first place (Kenneth Jackson 1985). This has led to municipal balkanization and class and race based segregation, which is also a prominent theme in Dolores Hayden's Building Suburbia: Greenfields and Urban Growth, 1820-2000 (Hayden 2003). Meanwhile, there have been several studies which have tracked the extra public expenditure cost of the country's low-density metropolitan landscape. The earliest of these is the three-volume The Costs of Sprawl, released in 1974 (Real Estate Research Corporation 1974). An updated report followed in 1998, and then in 2005, Robert Burchell et al. published Sprawl Costs: Economic Impacts of Unchecked Development (Burchell et al. 1998; Burchell et al. 2005). These studies place the extra costs of suburban sprawl in the billions.

### *2.1.2 Smart Growth and Transit-Oriented Development*

The term "Smart Growth"<sup>7</sup> has been proposed to encompass a wide variety of counter-measures to the supposed problems of suburbia (Cervero 2002). Smart Growth legislation has gained in popularity and has taken a variety of forms, including urban growth boundaries, increasingly tight restrictions on greenspace development, and

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<sup>7</sup> Both words in the term will be capitalized in this paper. In the existing literature, sometimes neither word is capitalized, sometimes just the initial word, and sometimes both are. I have chosen to capitalize to reflect its use as a distinct and important planning philosophy.

region-wide transportation and land use planning (Gillham and MacLean 2002). Another element of the Smart Growth movement has been strong advocacy for alternative land use forms, including higher residential densities, more mixed zoning, more pedestrian-friendly environments, and improved access to public transportation. Inherent in the Smart Growth outlook is an expanded role for government to counteract the sprawl that critics argue has resulted from market driven development.

These views are elucidated in a number of books on Smart Growth. Three exemplary works will be reviewed here. Smart Growth in a Changing World by Jonathan Barnett et al. (Barnett et al. 2007), provides a thorough overview of the problems that Smart Growth is intended to solve and offers a blueprint for addressing them. Barnett and the other authors argue that there is a “growth crisis” afflicting the United States as the populations of many metropolitan regions increase, especially at the peripheries of those regions. The authors argue that this rapid growth is leading to environmental destruction, a lower quality of life through increased commute times, air pollution and loss of green space, as well as excessive (and unsustainable) energy consumption. In response to these issues, the authors advance an agenda for Smart Growth, including planning restrictions on future suburban and exurban growth, compact, transit-oriented and mixed-use development at already populated nodes and inter-regional high speed rail service. The primary virtue of this book is its scope. It analyzes the major problems with existing American development practices and lays out a coherent plan for addressing problems with the *status quo*. The book argues that greater federal funding for Smart Growth

initiatives (especially mass transit) and greater control over development patterns by local governments are essential for Smart Growth to take root and flourish.

Along the same lines, Solving Sprawl, published by the Natural Resources Defense Council, advocates for Smart Growth with reference to specific problems in American communities (Benfield, Terris, and Vorsanger 2001). The book contains an overview of the problems that sprawl presents (roughly the same litany of things as Barnett et al.'s book) and includes a discussion of thirty-five case studies in which Smart Growth principles and processes are being implemented. This book is valuable for those wanting a broad survey of all of the different manifestations of Smart Growth planning: in rural areas, on the exurban fringe, in city centers, and in all different regions of the United States. The recurrent theme of the book is that citizen action in the form of local and federal government oversight should push to balance development (here conceptualized as an economic force reflecting market preferences) with quality of life concerns. The case studies are presented as successful instances of this balancing. If there is a weakness to the book, it is that the case studies are somewhat shallow for academic research and are universally positive. There is no discussion of possible downsides or problems with the Smart Growth agenda.

The third important text is The Smart Growth Manual by Andres Duany, Jeff Speck and Mike Lydon (Duany, Speck, and Lydon 2009). This book is practitioner-oriented and written for an audience already assumed to be knowledgeable about Smart Growth. Analysis is at four scales: the region, the neighborhood, the street and the building. The manual offers an almost encyclopedic description of Smart Growth

principles, such as mixed-use zoning, bicycle pathways, inter-regional rail transit and many others. It also features discussions of relevant case studies that illustrate challenges and success in the process of implementing Smart Growth principles. The book thoroughly encapsulates the established conventional wisdom on Smart Growth in one, accessible volume. Its limitations are that it is not much more than such a compendium. It is oriented towards the already converted, and does little to address any of the controversies surrounding Smart Growth in general or surrounding specific practices under the Smart Growth banner, such as development or design restrictions. In addition, while the discussion of Smart Growth at different scales is helpful, there are other scales that are neglected (i.e. the nation, the city, downtown). Still, this timely book offers a well-researched overview of Smart Growth as it is understood and practiced today.

One specific concept under the general Smart Growth banner is Transit-Oriented Development (TOD). TOD has become more popular over the past two decades as an alternative to weakly controlled, separated and automobile-dependent development. Architect Peter Calthorpe, author of The Next American Metropolis: Ecology, Community and the American Dream, is the person most responsible for interest in this type of transportation and land use planning (Calthorpe 1993). Calthorpe defines a TOD as “a mixed-use community within an average 2,000-foot walking distance of a transit stop and core commercial area. TODs mix residential, retail, office, open space, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot, or car” (56). Calthorpe’s recent work, The Regional City (co-authored by William Fulton), expands his original vision to call for

comprehensive regional planning based on TOD at various scales: urban, suburban and exurban (Calthorpe and Fulton 2001).

Although Calthorpe deserves credit for introducing TOD to contemporary discussions about metropolitan form, the origins of TOD actually go back much further, as even Calthorpe would likely admit. Towards the latter half of the nineteenth century, improvements in railroad technology, especially the development of electric locomotives, expanded rail and streetcar systems in cities and their immediate environs. This led to the first generation of transit-oriented urban and suburban development in the United States. Cities such as Boston, Cleveland, Philadelphia and Minneapolis were a few among many cities whose form changed considerably after the introduction of light railways and streetcars (Warner 1962). Generally speaking, these cities featured dense, walkable downtowns with that were well-served by the terminals of various streetcars and light railroads, as well as a radial pattern of development as those railroads went outward from the city center. These cities still exhibit the impact of early development patterns caused by mass transit.<sup>8</sup>

Recreating the denser landscapes of that earlier era is one of the main selling points for reviving TOD in the United States; improving mobility in metropolitan areas is another. Increased transit service can improve air quality, lessen congestion on highways, and increase the accessibility options for Americans for whom driving is either impossible or extremely difficult (Dittmar and Ohland 2003, 5-15). Proponents of TOD,

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<sup>8</sup> Admittedly, these patterns are not always obvious, since in many cities, the decades in the second half of the twentieth century saw intentional and effective, though not total, destruction of those patterns. Many streetcar systems were sold off and eliminated; large parts of downtowns were destroyed as parts of urban renewal and highway construction.

along with proponents of Smart Growth more generally, argue that greater financial support for mass transit, plus more innovative land use planning, can create attractive urban and suburban landscapes, while curtailing sprawl and its consequences (Brueckner 2000). Modern TOD projects have been implemented in a few dozen metropolitan areas in both urban and suburban settings, including Atlanta, Chicago, Denver and San Francisco over the past two decades (Ohland 2001). These projects have generally been successful, at least according to Smart Growth advocates, and have spawned a burgeoning literature discussing the “best practices” and “secrets to success” that other metropolitan or state governments might emulate. The next section reviews exemplary works that provide insight into the origins of TOD as well as how it is being put in place today. The literature on TOD also contains dozens of more narrowly defined reports on particular elements of TOD, as well as site-specific case studies. While these are very useful for practitioners of TOD planning, they are not as useful for this research project and will not be reviewed here.<sup>9</sup>

The New Transit Town: Best Practices in Transit-Oriented Development, edited by Hank Dittmar and Gloria Ohland, is at the forefront of works discussing TOD (Cervero 1998; Dittmar and Ohland 2003). In the early chapters, Dittmar and

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<sup>9</sup> For more sources, see two updated on-line literature reviews hosted by the University of Maryland and the Victoria Transport Policy Institute, respectively (Community-Wealth 2010; Victoria Transport Policy Institute 2010), as well as a thorough, but dated, review published by the Transportation Research Board (Cervero, Ferrell, and Murphy 2002). In addition, two of my co-authored articles offer additional perspectives on TOD. “A County and Its City: Hennepin Community Works,” with Judith Martin, discusses Hennepin County’s emerging role in urban planning and design, including work on transit corridors for both buses and rail (Martin and Jacobson 2008). “Seven American TODs: Good practices for urban design in Transit-Oriented Development Projects,” co-written with Ann Forsyth, focuses on physical design of TOD projects (Jacobson and Forsyth 2008). This article pays special attention to development processes, place-making and facilities, and concludes with twelve principles of good design as exemplified by the seven case studies.

collaborating authors lay out a strong case for TOD's potential as a solution to some of the problems of the current American landscape such as over-reliance on the automobile, segregated land uses and poor transportation access for some. Next is a discussion of some of the major issues surrounding TOD, including how it can be paid for, the political process and the stakeholders involved in implementation, and how to transition from a car-based landscape. The book surveys possible responses to these issues, and closes with case studies in Northern Virginia, Dallas, Atlanta, San Jose and San Diego which illustrate exactly how TOD has taken root in those places. The editors conclude with comments on TOD's potential elsewhere. This book benefits from a more balanced approach to its subject. Whereas much of the work in the Smart Growth literature tends to be one-sided in its support, this volume acknowledges the difficulties of TOD's implementation and makes it clear that TOD is not the panacea for all of American's transportation and land use ills.

Robert Cervero's book, Transit Metropolis, complements Dittmar and Ohland's work (Cervero 1998). It also contains an overview of what TOD is and suggests how it has potential to address issues of energy consumption, disconnected communities, long commutes and scattered land use patterns. The real strength of this book is that it contains an international perspective on TOD. By broadening the scope of the discussion of TOD and especially by including international case studies, Cervero helps put American discussions of TOD in context. It also highlights the incredible range of TOD projects: from comprehensively planned development around train lines in Singapore and Zurich to Bus Rapid Transit in Curitiba, Brazil and Ottawa and central city revitalization in

Melbourne. Cervero argues that the main determinant for the success of transit in any places is its fit with the city that it serves; the wide variety of TOD projects at work all over the world show a range of city types and the transit solutions that match them.

Developing Around Transit, with Robert Dunphy as lead author, serves as the best “how-to” guide for developers (Dunphy et al. 2004). Like many works on TOD, it is very practitioner oriented and grounded in exemplary case studies that show how particular problems of traffic or exurban sprawl, for example, have been solved. Published by the Urban Land Institute, it is primarily geared towards real estate developers looking to build around already existing transit investments. It also contains sections on political processes involved with coordinating development around transit areas, as well as market-based arguments for broader TOD implementation across the country.<sup>10</sup>

### 2.1.3 “*Let Markets Plan*”

TOD and Smart Growth have in turn become targets for much criticism, mainly from the conservative side of the American political spectrum. There are far fewer books and articles written from this perspective, but there is relative unanimity among them. The counter-critique these books share has two elements: one, that the criticisms of suburbia and sprawl are exaggerated if not completely fabricated, and two, that even if sprawl were considered a disease, the cures of greater government intervention via TOD would probably prove worse. These critics generally argue that suburban sprawl is really

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<sup>10</sup> Other important TOD advocates include various political advocacy organizations which argue for a new round of planning regulations, increased funding for urban transit and greater government involvement in transportation and land use issues (Transit for Livable Communities 2009; Reconnecting America 2009). Both of these organizations produce dozens of position papers as well as news reports on TOD in the United States.

just the expression of the free market on the landscape, and that problems with suburbia, if any, will be corrected by the “invisible hand” of the market when consumers begin to demand alternatives. Meanwhile, government-led efforts to promote and plan alternatives like TOD are seen as unnecessary meddling with market forces and as inefficient public subsidies for an otherwise unprofitable enterprise.<sup>11</sup>

A Guide to Smart Growth: Shattering Myths, Providing Solutions, edited by Jane Shaw and Ronald Utt and published by the Heritage Foundation, is an attempt at a point by point refutation of the claims of Smart Growth advocates (Shaw and Utt 2000). Utt, a Senior Research Fellow for the Heritage Foundation, and Shaw, a Senior Fellow at the Property & Environment Research Center,<sup>12</sup> declare themselves unabashed opponents of governmental involvement with transportation and land use and in favor of a “free market” approach. Theirs is a fairly myopic and Manichean book, as it consistently blames governmental action for any negative outcomes and lauds market forces for any positive ones, without considering any possible virtues of the former and any possible faults of the latter. At one point, Utt writes that “there is little evidence to suggest that federal programs have contributed to or encouraged suburbanization” (104), apparently unaware of the Federal Highway Act or federally subsidized mortgages, not to mention

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<sup>11</sup> Sharp increases in oil prices, such as in 2007, can influence these debates, to be sure. With gas prices high, the number of people supporting such governmental “meddling” in order to provide an alternative to driving would increase. Among the true-believers that I describe here, however, high oil prices would not justify governmental investment in mass transit, but rather, a new possible sector for private investment.

<sup>12</sup> According to its website: “The Property and Environment Research Center is a nationally recognized think tank focusing on market solutions to environmental problems. Founded in 1980, PERC is one of the pioneers of free market environmentalism. We believe environmental quality can be achieved by managing our resources based on property rights, private initiative and voluntary activity. Free market environmentalism offers a genuine alternative to excessive government control and regulation” (The Property and Environment Research Center 2010).

established research on suburbanization such as Crabgrass Frontier (Kenneth Jackson 1985). Despite its flaws as a source, however, it is valuable for its exemplification of the “libertarian” political and economy perspective that conflicts with the pro-Smart Growth and TOD movements.

Meanwhile, the hyperbolic title and tone of Wendell Cox’s book War on the Dream: How Anti-sprawl Policy Threatens the Quality of Life, establish this book as a foil to equally hyperbolic attacks on suburbia (Cox 2006). Cox’s basic position is that the stereotypical suburbia that Smart Growth advocates argue against is actually the perfect embodiment of the American Dream. Rather than attempting to restrain or modify these choices, which Cox feels come as a result of market preferences without any assistance from the public sector, Cox argues that transportation and land use policy should attempt to extend this mode by providing more highway funding, eliminating environmental regulations, and ending building or land use permission systems. Elsewhere, Cox has been a staunch advocate for increased highway funding and elimination of public support for mass transit (Cox 2005). Like with Shaw and Utt’s book, there are gross inconsistencies in Cox’s arguments, mainly the habit of demonizing governmental intervention for outcomes that he opposes, while ignoring the role of government in producing outcomes he favors, and indeed, attributing those solely to the “free market.”

Driving Forces: The Automobile, Its Enemies and the Politics of Mobility by James Dunn echoes Cox’s thoughts, opposing transit advocates such as Dittmar and Ohland while arguing for increased support for America’s automobile infrastructure (Dunn 1998). Dunn argues that Americans have shown an obvious preference for driving

over other modes of transportation, and that these preferences should be respected and protected against the anti-automobile zealots he labels “The Vanguard.” According to Dunn, the anti-automobile group includes a wide range of people, from established luminaries in American urban planning such as Lewis Mumford and Jane Jacobs, modern day journalists such as Howard Kunstler and Jane Holtz Kay, as well as a veritable who’s who of groups advocating mass transit, TOD and Smart Growth: the Environmental Defense Fund, America’s Coalition for Transit Now!, National Resources Defense Council and others (6-16). The broad, overstated definition of the “vanguard” is problematic, but Dunn’s argument is still more sophisticated than that of Utt, Shaw and Cox. The book acknowledges the crucial role that federal spending played in building the road network, though he still writes that at this point, it is clear that the market preference of individuals is to drive above all other options.

Robert Bruegmann’s Sprawl: A Compact History is the most historically grounded defense of stereotypical suburban transportation and land use patterns (Bruegmann 2005). Bruegmann argues that suburban sprawl is just the natural extension of human settlement and that the particular version of suburban sprawl in 20<sup>th</sup> and 21<sup>st</sup> century America is the manifestation of people’s natural inclination for nicer and larger homes. He invokes the “voting with one’s feet” argument to defend suburbia’s virtues. That is, suburban sprawl is inherently a good thing, for why else would so many people have chosen to live there? He treats anti-suburban sprawl arguments for “increased planning, more compact development and more stringent regulations” (219) as a mix of elitist cultural snobbery and misguided anti-market meddling (see 220-5). Tom

Martinson's American Dreamscape continues this point. Martinson defends suburbia as a cultural success story that represents American aspirations for clean air and spaciousness. This book serves as a direct counterpoint to works such as Morris's tract on suburban-induced loneliness and atomization (Martinson 2000).

The same themes are picked up by Peter Gordon and Harry Richardson in their collaborative work to defend suburban sprawl, as well as a transportation system based on the automobile, from their critics (Peter Gordon and Richardson 1997; Peter Gordon and Richardson 2000; Peter Gordon and Richardson 2001). The subtitle to their 2001 article, "The Sprawl Debate: Let Markets Plan," offers a concise summary of their thought. Gordon and Richardson believe suburbia's success is due to the fact that it is the most superior "product" on the marketplace, and that rather than trying to stop suburban sprawl, planners should be trying to enhance its success. To paraphrase from the article's conclusion, Gordon and Richardson argue that "rather than pursuing the hopeless goal of getting people to give up strongly preferred freedoms and lifestyles," planners should focus on providing infrastructure (i.e. for the automobile), setting the rules of the game (i.e. local zoning laws, establishing modest but consistent development guidelines) and liberalizing land markets (especially, eliminating urban growth boundaries) (Peter Gordon and Richardson 2000, 148). They argue that planners should have no other roles than these.

#### *2.1.4 Common Ground: The Terms of the Debate*

The two camps obviously differ on their views of suburban transportation and land use, but significantly, they have one crucial thing in common: the terms of the

debate. Namely, both sides view the *status quo* as essentially market-driven while Smart Growth and TOD are seen as planning-based alternatives. The “right-wing” side of this debate makes this claim explicitly when it argues that American suburbia’s success is due to its satisfaction of market demands - the “voting with one’s feet” argument. The “left-wing” side is less explicit about the market forces involved with transportation and land use choices, but nevertheless affirms the same formulation of the argument by countering with a need for new regulations, or perhaps a new regional governance system, or greater federal government funding for mass transit.<sup>13</sup> Depending on one’s ideas about the “free market” and governmental regulation, a move towards more planning can be seen as a mistake or as a necessary corrective for market failure, but regardless, this “planning vs. the market” dichotomy is the shared battle ground for both parties (see Levine, 2006).

## **2.2 The Standard Debate**

The debate over the proper roles of market forces and governmental regulation, as well as the balance between them, in metropolitan issues such as Smart Growth and TOD is a particular instance of an older, broader and deeper debate over the roles and balance of each in society more generally. The arguments put forth by Cox, Bruegmann, Gordon, Richardson and others are more or less the same perspectives put forth by the Right-hand side of the American political perspective: low taxes, minimal (or

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<sup>13</sup> The recent case of the Urban Partnership Agreement between the US Department of Transportation, the Minnesota Department of Transportation and the Twin Cities Metropolitan Council to expand high-occupancy lanes, Bus Rapid Transit and other transit improvements exemplifies this position. Under the terms of the memorandum agreement, all three agencies acknowledge transportation infrastructure issues in the Twin Cities area, namely congestion, and commit to address them with projects paid for by the federal government (Federal Highway Administration 2007).

even entirely absent) governmental regulation and strong individual property rights. Likewise, the perspectives of Calthorpe, Duany, Cervero, Dittmar, Ohland, the Natural Resources Defense Council and others align well with the American Left: use of government to correct “market failure” or improve outcomes, greater public oversight over private market processes, and environmental protection. These two points of view are no doubt familiar, and need not be exhaustively explained here, but it is worthwhile to address a few particular aspects of each perspective in order to fully understand the debate. The next two sections offer a review of the two standard perspectives in modern economics in reference to three key questions:

- 1) How do markets develop?
- 2) Once developed, how are markets sustained?
- 3) What is the proper role of the government vis-à-vis markets?

### *2.2.1 Liberalism*

The writings of Adam Smith, especially his most influential work, The Wealth of Nations, are the obvious starting point for a discussion of liberalism (Smith 2003).

Arguing against mercantilism, the dominant economic theory of the day, which held that the state (in England’s case, the King) should control international trade by limiting imports and exports and promoting domestic manufacture through the organization of guilds and occasionally, monopolies, Smith instead argued for the elimination of tariffs and of public control over domestic industries and agriculture. He argued that the social commonwealth was maximized by leaving economic exchange between people

unfettered, and famously conjured the image of an “invisible hand” motivated by each individual pursuing his/her self-interest that would ensure the greatest social benefit to all (p. 572). Smith wrote that free economic exchange, based on humankind’s essential “propensity to truck, barter and exchange one thing for another” (p. 22), led to the most efficient distribution of resources, labor and capital. Smith believed that markets, in the sense of networks of people trading with each other, grew more or less spontaneously out of this natural tendency. The eternal pursuit of self-interest in the market ensured that they would be basically self-sustaining (see Book 1, Chapter 2).

Smith did not argue that markets were perfectly independent of government, since they depended on a few crucial conditions to begin, and required government to take an important, though limited, role to ensure their survival. Government was expected to provide for national defense in the form of a standing army, paid for through general taxation. Second, markets needed a judicial system that would protect each individual from injustice and oppression by another member and that would determine and uphold private property rights. Third, government should organize and manage necessary public works projects, defined as the things that individuals needed but could not manage successfully on their own, such as roads, canals, bridges and harbors. Lastly, government would also fund foreign embassies and trade missions and provide for some basic schooling for the poor. Outside of performing these functions, government would have no role, and individual producers and consumers would be left alone to pursue their interests (see Book V, Chapters 1, parts 1 through 3).

In the 19<sup>th</sup> Century, the *laissez-faire* doctrine emerged, based on Smith's ideals. While it would be inaccurate to say that any nation wholeheartedly pursued Smith's visions of the "free market" and the subsequently minimal role for government, mercantilism generally gave way to a less constrained economic system. By the end of the 19<sup>th</sup> century, the rise of the corporation plus technological advances helped create an era of significant global inter-connectedness that was then shattered by World War I, a global economic depression, and then World War II. During this chaotic period, a number of economists in the so-called Austrian School revived and extended Smith's thoughts on the functioning and desirability of "free markets." Ludwig von Mises was perhaps the most well known member of this school initially, though he was later eclipsed by Friedrich von Hayek whose seminal tract, The Road to Serfdom, appeared in 1944 (Hayek 2007). In his book, Hayek asserted that governmental control of the economy lay at the heart of both fascism and communism and was making dangerous inroads into the American and English economies, as well. He advocated the rapid devolution of state power in favor of a more or less Smithian "free market" (Hayek 2007; Mises 2007; Thomas C. Taylor 2008).

Hayek's position was in turn extended by a number of economists in the United States, many of whom were at the University of Chicago, such as Milton Friedman, Gary Becker and George Stigler. The research foci of this group varied, but as a whole, this particular "Chicago School" maintained the same basic attitudes as Smith towards the origins of markets, their sustenance and the role of government. To put it succinctly, markets were natural phenomena of humankind that tended towards social progress and

individual freedom if left alone. In their view, the proper role of the state should be confined to a limited sphere of activities as Smith suggested: national defense, police for protection of individuals and property, and a few public goods (some would even disagree about the need for the last of these) (Stigler 1988). Two of Friedman's books, Free to Choose (co-written with his wife, Rose) and Capitalism and Freedom, offer almost point-by-point accounts of how government actions produce outcomes inferior, in terms of economic efficiency and individual freedom, to private markets (Milton Friedman and Rose Friedman 1980; Milton Friedman 2002). Robert Nozick, not of the Chicago School himself but an intellectual affiliate of them, conceptualized the appropriate role of the state as "night watchman" in his important work, Anarchy, State and Utopia: essentially quiescent, roused only to protect national sovereignty and property or to adjudicate claims between parties (Nozick 2001).

This tribe of liberal revivalists were virtually shut out of mainstream economic thought in the 1940s and 1950s, but began gaining ground in the 1960s and even more so in the 1970s.<sup>14</sup> In the late 1970s, the group's influence began to extend far beyond academia and rose to prominence as the philosophical underpinnings of a rightward shift first in the United States and the UK, then in the rest of Europe and, eventually, most of rest of the world. These ideals became dominant in the 1980s as Ronald Reagan and

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<sup>14</sup> The shift away from Keynesianism and towards neoclassical economics came about for a number of reasons. For one, a number of The Economics Department at the University of Chicago managed to assemble an impressive roster of scholars who shared these perspectives, and many of them such as Ronald Coase, Robert Fogel, George Stigler and Milton Friedman produced work in the 1960s that would then lead them to Nobel prizes in ensuing decades. Second, and more significantly, Keynesian intellectual orthodoxy and the Rooseveltian welfare state, which were both well-established in the 1950s and 1960s, began losing their strength towards the end of the 1960s in the face of civil unrest and intractable poverty. The stagflation era of the 1970s was another challenge to these established ideas, and this decade served as a watershed between the Keynesian era and that of the revived neoclassical liberals (See: Nelson 2002; See: Kasper 2003).

Margaret Thatcher, both followers of these economic philosophies, took office in the United States and the UK (Prasad 2006). Meanwhile, on the international scene, international development and trade agencies such as the World Bank, the International Monetary Fund and GATT/WTO<sup>15</sup> pushed “neoliberal” development strategies in various countries in the developing world, including Chile, Argentina, Zambia and Zimbabwe, to name just a few (Marcus Taylor 2006). These market friendly reforms often included the privatization of social services such as health care and education, a rigid monetary policy designed to prevent inflation and deficit spending, and elimination of many environmental, labor and trade regulations that were thought to restrict private enterprise.

In the 1990s and 2000s, the ideals that, 1) markets are natural phenomena that spring up everywhere; 2) that they work well enough when left alone, and when things go wrong, are self-correcting; and 3) that government “intervention” interferes with the internal dynamics of the market, leading to sub-optimal outcomes, had become fairly widely held. Taken together, many critics dubbed this philosophy “neoliberalism” since it represented a new wave of support of liberalism that followed Hayek, Friedman and the rest of the Chicago School (Harvey 2005; Saad-Filho and Johnston 2005).<sup>16</sup> The rise of neoliberal policy as well as its philosophical underpinnings was not without dissent, of

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<sup>15</sup> The General Agreement on Tariffs and Trade, founded in 1947 to liberalize international trade was renamed the World Trade Organization in 1995.

<sup>16</sup> Interestingly, the term “neoliberal” is almost always used by critics of these ideals, and almost never by their proponents. According to Oliver Hartwich, whose paper “Neoliberalism: The Genesis of a Political Swearword” tracks the use of neoliberalism since its first use in the 1930s, proponents of neoliberalism often refer to their ideas officially as liberalism or classical liberalism, and often colloquially as “free market” economics (Hartwich 2009). It is indicative of the dominance of these ideals that in many economics departments they are simply considered orthodox economic theory. Also see “Neoliberalism: From New Liberal Philosophy to Anti-Liberal Slogan” by Taylor Boas and Jordan Gans-Morse which tracks the use of the term in leading academic journals from 1990 to 2004 (Boas and Gans-Morse 2009).

course, and opposition to so-called free trade and the imposition of Structural Adjustment Programs in the developing world grew as well. The recent global economic downturn in 2009 has been another counter-argument to the desirability of liberal ideology, and has called into question the idea that unfettered markets produce more good than harm. Still, support for liberal goals and its fundamental beliefs remains quite strong and does not appear to be in danger of imminent collapse.<sup>17</sup>

### 2.2.2 *Keynesianism*

There have been two major strains of criticism of liberalism, broadly speaking. The first is Marxism and its intellectual successors, which advocates the abolition of private property and the creation on a cooperative society and economy. Marxism (or Marxist economics), is, to say the least, a complicated topic and a full discussion lies somewhat beyond the concerns of this project. It is important to point out, however, that despite his criticisms of the private property centered economy of Smith and other classical liberals, Marx nevertheless accepted many of its premises. Marxism, generally speaking, holds that private markets can and do perpetuate themselves, though Marxism places definite limits on how long a “free market” can exist before giving way to monopoly capitalism, and eventually, socialism (Heilbroner 1999).

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<sup>17</sup> As with the first footnote of this chapter, the economic downturn of the past eighteen months or so influenced the debate as it relates to this thesis. It began in 2006 at what was, in retrospect, a highpoint for intellectual support for the “free market.” It is concluding in an age where criticism of the “free market” is much higher, with greater recognition that unfettered market forces were a major cause of the downturn. Support for the liberal revivalists seems to be waning, in favor of a more Keynesian approach. I would argue, though, that this is a shift in the relative popularity of the two sides in the debate and does not constitute a shift in the terms of the debate itself. While the downturn has perhaps changed peoples minds about which side they are on, or caused people to temper support for “free market” forces, the collective understanding of the metaphorical tug of war between market and state (as explained later) does not appear to have diminished. For example, the rhetoric over health care reform in 2009 and 2010, I would argue, confirms the ubiquity and normalcy of thinking of state and market as oppositional.

The second major critique of “free market” liberalism emanates from the work of John Maynard Keynes, especially his seminal work, The General Theory of Employment, Interest and Money, published in 1936 (Keynes 2007). Keynes’ original concern was to address the problem of private market decisions which lead to non-efficient outcomes, in contradistinction to the liberal claim that market decisions in the long run lead to efficiency and equilibrium. Keynes was writing in response to the tangible distress caused by the stock market crash of 1929 and subsequent economic downturn, which by the mid-1930s had not yet been resolved. Keynes set out to address questions of how markets can stop functioning and how the market might get itself going again. He urged that the state should increase spending in order to “prime the pump” of private markets, reasoning that increased employment would lead to increased demand for goods and service, which would cause producers to invest in expanding capacity by hiring more workers, and so on. Once the acute crisis of depression had been solved, Keynes argued that the state should take a countercyclical position to the ups and downs of market, using public spending and tax cuts to bring the economy up when it was down, and tax hikes and reduced spending when fortunes were reversed. Keynes foresaw a permanent role for the state in managing the economy, essentially built around the goal of maintaining full employment (also see Keynes 2007; Heilbroner 1999).

Although not explicitly part of Keynes’ analysis nor his proposals, the idea of the welfare state grew in tandem with Keynesian economics, resulting in a vastly expanded state with much more influence over the economy. The proposals from Franklin Delano Roosevelt’s administration to employ people with “make work” projects initially, and

then seek full employment through higher levels of social spending on infrastructure, school, and unemployment relief, were well in line with Keynesian theory, and looked to provide the necessary public ballast for the moderation of market capitalism's excesses. Roosevelt, his supporters and Keynes himself judged these proposals good in and of themselves, but also as the foundation for a broader and more secure national prosperity. Whether they would have worked on their own remains an unknown; the onset of World War II brought about the full employment, rising demand, and expanding economy that Keynes and Roosevelt had promised. After the war, the American welfare state expanded, assisted by the advocacy of economists such as John Kenneth Galbraith and Robert Heilbroner in the 1950s and 1960s (John Kenneth Galbraith 1998; Heilbroner and Milberg 2007). This trend also held internationally, as Britain under the governance of the Labour Party embarked on a similar path. Practically every industrialized nation, to one degree or another, followed suit (John Kenneth Galbraith 1998; see Esping-Andersen 1990).

The values of Keynesianism at its height were as widely held as the beliefs/truisms of the Liberals today: government intervention was needed to bring market economies out of their occasional crises, government had an obligation to look after the welfare of individuals, and policy should be oriented towards full employment, even if this resulted in higher taxes or more regulations than would otherwise be the case. These ideas were anathema to the new cadre of Smith-influenced capitalists, the neoclassical liberals, who recoiled at expansive state power and regulatory behaviors. Indeed, the *raison d'être* for the Chicago School and its associates was to oppose

Keynesianism intellectually and politically. The 1970s were the tipping point between the two movements as the economic growth of Keynesianism seemed to be slowing down. Neoliberalism found political purchase as an alternative approach, and its advocates began the process of gradually chipping away the foundations of the welfare state and replacing Keynesian conventional wisdom with their neoliberal version.

Recent events, such as the Great Recession of late 2008, the election of Barack Obama, and then the debate over healthcare reform, may be starting to turn the tide the other way towards a new Keynesian era, this version in response to neoliberalism as neoliberalism was to original Keynesianism. The resurgence of Keynesian thought in the popular sphere is perhaps best exemplified by the work of Paul Krugman, most notably his recent book, The Return of Depression Economics and the Crisis of 2008, but also Dean Baker and James Galbraith (Krugman 2009; Baker 2007; James Galbraith 2008). These authors essentially call for bolder measures to bring the economy out of its current decline, a resuscitation of the welfare state and greater public spending over the long term to increase employment rates and wages.

### *2.2.3 Compatibility*

As anyone who has been paying attention to American politics over the past thirty years knows, liberalism and Keynesianism are oppositional. The greatest point of contention regards the role of the state in overseeing and intervening with the economy: the liberals see little or no need for this as they believe the market is a self-correcting system, while the Keynesians point to the market's occasional, though severe, moments of slowdown and collapse. The perspectives also differ on what constitute legitimate

public goods for the public sector to administer. Whereas Liberals would generally accept only a circumscribed lists of functions: defense, court system, infrastructure, Keynesians would add elements of the welfare state to that list, including universal education, healthcare, pensions, public recreational facilities and the like.

The points of contention are important, and not likely to be resolved any time soon, yet, what is more interesting about the debate between liberalism and Keynesianism is what ideas they have in common. The differences between liberalism and Keynesianism have become so well-known and have been so hotly debated that they have rendered the commonalities between the two practically unexamined. The first of these commonalities is the understanding of states and markets as distinct from one another. That is, both perspectives speak of markets and states as two separate spheres, though, of course, with many interactions between them. Liberals maintain that these interactions are almost uniformly negative, while Keynesians would say they are both necessary and occasionally of benefit, depending on the situation. Regardless, both sides view states and markets as counter-weights to one another so that the advance of one sector must imply the retreat of the other. This conceptualization of states and markets engaged in a never-ending game of tug of war is practically ubiquitous. For example, in issues of forest management, what is a gain for the market, say a firm's right to harvest trees, profit from the sale, and provide cheaper forest products for consumers through greater supply, is considered a loss for the state in losing public ownership of the forest for environmental or aesthetic reasons. Designation of a particular area as a protected wildlife reserve, alternatively, represents an advance of the public sector at the private sector's expense.

Second, both perspectives hold that markets are essentially self-generating as long as private property rights have been established. Smith observed that humans have innate abilities to “truck, barter and exchange” and that, if property rights can be determined and protected, markets will spring up to facilitate those natural tendencies to trade. Although this would seem to indicate that the state, in some form or another, must already exist in order to protect property rights, Smith writes that states are not the only method to ensure property rights, since property rights can be respected through social custom or protected through the use of force (Smith 2003), see Book 5, section 2). According to Smith’s view, states need not necessarily precede markets, though they may. Keynesianism, as a critique on the ability for markets to be self-sustaining and to tend towards equilibrium, offers no counterpoint to Smith’s idea of market origin, leaving intact the classical liberal notion that markets are spontaneous and natural social occurrences.

Third, even though their normative positions on the matter are quite distinct, both the liberal and Keynesian perspectives share a common vocabulary on the issue of market intervention. For one, both sides use the term “regulation” when talking about state involvement in the market, which suggests the rules in place to control the performance of market forces. To make an analogy, regulation of the market is seen as akin to the function of a regulator in a lawnmower engine: the blades need to spin fast enough to cut grass, but spinning faster than necessary is overkill and uses fuel too quickly. Likewise, the government may use regulation to control an industry that emits pollution, allowing for a certain degree of pollution as an inherent part of economic activity, but keeping it within certain levels. The use of the term “intervention” is another example. Intervention

means literally to come between, and in this context, refers to government coming between market motivations and market effects. Using intervention to describe the behavior of states and markets presupposes a separation between them.

### **2.3 Economic Institutionalism**

To be clear, the standard debates over the need for or about problems caused by government intervention are neither trivial nor incorrect. The metaphorical tug of war is one productive way to think of markets and states, and there are indeed numerous occasions in which states interfere with private markets or else correct particular flaws in their operation, depending on one's views. There is another, less well-known perspective, however, which offers a different and, I would argue, equally productive view of the market/state relationship. At the risk of over-simplifying a diverse group of writers and ideas, I refer to this perspective as "institutionalism." This is a broad concept with multiple sub-fields, as the following section will attempt to show, but at its core this approach stresses that institutions can never be separated from the societies in which they are found. I focus here on economic institutionalism which stresses that markets are not an abstract entity that have an existence on their own, but rather are always and forever embedded in the political and social structures which enable them. In this view, states and markets are not necessarily oppositional to one another, since the very existence as well as the form of any particular market is always dependent on the state in which it is found. Economic institutionalism does not deny that states intervene with market forces or that there are cases when a loss for one is a gain for the other. Rather this orientation stresses

that even these cases pale in importance to the fundamental role that states play vis-à-vis markets: they create them.

### 2.3.1 *Early Institutionalism*

Economic intuitionism has undergone several important iterations over the past century or so. The earliest roots for this perspective are in the European historical school of economics, especially the German branch of this broader school. Historicists, as the name implies, stressed the need to understand the historical context of economic issues, as demonstrated by the work of Max Weber and Werner Sombart (Weber 2002; Sombart 1979). English, French and German historicist schools disagreed with perspectives, most notably those emanating from the emerging Austrian School of economics, which treated economics as a distinct and unique field of study. Historicism did not become established in the United States, *per se*, but did heavily influence a group of scholars, now referred to as American Institutionalists, at work in the early part of the 20<sup>th</sup> Century up until the arrival of the Great Depression and the rise of Keynesianism (Hodgson 2004). Thorstein Veblen, now better known as a sociologist, is the most notable of the early American Institutionalists. His most famous work, The Theory of the Leisure Class: An Economic History of Institutions, used principles of Darwinian evolution to investigate economic structure and was notable for its treatment of the social motivations for economic success (Veblen 2008). His 1904 book, The Theory of Business Enterprise, analyzed the evolution of monopolies and trusts in the context of an industrializing society, and paid special attention to the social motivations of businessmen and engineers within them, rather than focusing on their development in narrow economic terms (Veblen 2006).

Following Veblen, John Commons helped coalesce this emerging perspective through a series of essays and perhaps, most importantly, by defining the term “institution.” His summative 1931 essay defined an institution as “collective action in control, liberation and expansion of individual action” (Commons 1931, 648). Commons, along with his contemporaries Adolf Berle and Gardiner Means, also analyzed the legal parameters of firms and individual actors, thereby bridging the study of law and economics (Commons 1995; Berle and Means 1991). Considered as a group, early Institutionalists offered a strong critique of classical economics. They disagreed with the notion that one had to understand markets’ inherent dynamics to understand economics, and instead stressed that one had to understand the dynamics of the societies those markets existed within. Consequently, their mode of inquiry was historical rather than theoretical: they asked questions of how particular firms grew, how specific business owners acted and what the actual effects of economic choices were, rather than create models of how firms, capitalists or market forces worked in the abstract. The heyday of this view was in the 1910s and 1920s. Economic institutionalism then fell out of favor in the chaos of the early and mid-1930s, likely because it had no prescription for dealing with the crumbling economy, whereas Keynesianism did. After World War II, institutionalism had all but vanished from mainstream economic thought.

### 2.3.2 *Polanyian Institutionalism*

The ideas of the Hungarian economist Karl Polanyi constitute the next iteration of institutionalist thought. Influenced by German historicism, Marxism and the emerging field of anthropology, Polanyi had a diverse early career as a radical political activist in

Budapest, an army officer, and later as a commentator for an economic journal in Vienna, where he frequently sparred with his contemporaries of the Austrian School, especially Hayek. He fled Austria in 1933, and eventually moved to the United States, where he began work on his seminal book, The Great Transformation (Polanyi 2001). Published in the same year as Hayek's The Road to Serfdom, Polanyi's book sought to explain the rise of modern capitalism as launched by the Industrial revolution and its social effects.

Polanyi's central task was to challenge the widely accepted ideas of markets as universal, spontaneous, and self-regulating. For most of human history, Polanyi argues, economic exchange has been "embedded" in social relationships and never autonomous from them, as classical liberalism holds (60).<sup>18</sup> He supports this argument through discussions of other economic systems, both from earlier periods in Europe as well as from other societies, showing how, as Mayhew puts it, "production and distribution . . . had been accomplished through social relationships of kin and community obligations and counter obligations" (Mayhew 2000, 2). What distinguishes the arrival of *laissez-faire* capitalism is its rhetorical insistence that economics is autonomous from society, which obscures its actual foundation as the product of an expanded state. Polanyi writes:

The road to the free market was opened and kept open by the enormous increase in continuous, centrally organized and controlled interventionism . . . Administrators had to be constantly on the watch to ensure the free working of the system. Thus even those who wished most ardently to free the state from all unnecessary duties, and whose whole philosophy demanded the restriction of state activities, could not but entrust the self-same state with the new powers, organs, and instruments

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<sup>18</sup> A related point is that the liberal move to detach economics from society is ultimately a fool's errand, as social forces will naturally organize to resist attempts to make individuals and society as a whole part of the market (147-157).

required for the establishment of *laissez-faire*...*Laissez-faire* was planned (146-7).

Even after its creation, the *laissez-faire* market system is crucially dependent on the state to function, Polanyi argued. Above all, market societies depend on the state to create the money supply and then adjust it higher or lower depending on price inflation or deflation (201-209). States also must take an active role in managing the labor supply, through encouraging or discouraging migration patterns, training, education and use police powers as a check against workers and unions (171-186). Third, the state must continually oversee the use of land, not just by protecting “original” property rights, but also through public works projects<sup>19</sup> to convert land or natural resources for private use, and regulations to manage land uses (187-200). Polanyi stresses that choices about how money, labor and land<sup>20</sup> are to be managed are political ones that must precede the existence of a market. Thus, any given market configuration needs to be understood as the product of those choices.

### 2.3.3 *Contemporary Institutionalism*

Much like the pre-Depression institutional school, Polanyi’s views had little hope of succeeding in the era of post-War Keynesian consensus. The perspective all but

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<sup>19</sup> Smith also writes that public works are a necessary role for government, but that doing so constitutes a minor exception to a “free” market. Polanyi’s point is that public works are a major function of governments in a supposedly *laissez-faire* system, not a minor one.

<sup>20</sup> Polanyi’s treatment of the money supply, labor and land, which together he calls the three “fictitious commodities” of capitalism, also mark his major departure from Marxism. To quote leading Polanyi scholar Fred Block: “Marx sets up an analytic model of a fully functioning capitalist economy and then argues that the resulting system is subject to intense contradictions that can be expected to manifest themselves in periodic crises. Marx analyzes a pure version of capitalism and finds it prone to crises, while Polanyi insists that there can be no pure version of market society because land, labor, and money are not true commodities. In Marx, the contradictions come at the end of the analysis; for Polanyi, the system is built on top of a lie that means that it can never work in the way that its proponents claim that it works” (Block 2003).

vanished from economic thought until the 1970s, and when it did appear, it bore scant resemblance to its former self. The New Institutional Economics (NIE) School, intellectually imbedded in the University of Chicago, proposed a course of research that turned traditional institutionalism on its head: rather than treat markets as a type of institution such as religion, the family, or the law, scholars in the NIE School have tried to explain all such institutions in market terms. NIE scholars apply assumptions of rational actors selecting options according to their best interests and of societies as conglomerations of such actors to their work, and frequently rely on quantitative analysis to explain other elements of social life. The work of Ronald Coase and Oscar Williamson on transaction costs and negotiation helped launch the NIE approach, and broadened the field of economics by introducing concepts such as trust, enduring relationships, and social connections to the field (Coase 1998; Williamson 1998). Gary Becker, who applied economic theory to family structure, helped turn NIE towards some of the traditional issues of sociology (Becker 1978), while others have used the tools of economics to address historical questions, including Robert Fogel's work on slavery and Douglass North's scholarship on the rise of the West (Fogel 1994; North and Thomas 1976). A number of scholars such as Gordon Tullock, James Buchanan and William Niskanen, writing on topics such as voting behavior, interest groups, and bureaucracy, have worked to bridge economics and political science (Tullock and Buchanan 1999; Niskanen 1996). This branch of New Institutionalism has become a significant sub-discipline of economics in its own right, the Public Choice School.

NIE has become a very influential perspective in economics. Largely due to its compatibility with neoclassical economics and with American movement conservatism of the past thirty years, it has also achieved a great deal of popular support. It represents a major break from earlier versions of institutionalism, but is often the first type of institutionalism that comes to mind in the modern era, and has definitely overshadowed work based on Veblen, Commons, or Polanyi. Modern scholarship that revived the earlier sense of the term did not make much of a mark until the late 1980s, and only then in the field of sociology. Mark Granovetter helped reignite this theoretical orientation by calling for a new research program in economic sociology that would address how individual choices were embedded<sup>21</sup> in social relationships (Granovetter 1985). Granovetter advocated a bridge between traditional approaches in economics and sociology, proposing a middle ground between economic studies of atomized, non-social decision makers and sociological studies of complex, dominant social structures that left little room for individual actors. Granovetter's work on the importance of social networks to finding employment exemplifies this approach (Granovetter 1995). Other important scholars in this sub-field are Richard Swedberg (Nee and Swedberg 2005; Swedberg 1994), who focuses on theoretical aspects of new economic sociology; AnnaLee Saxenian, who has researched knowledge networks and the rise of high-tech areas such as Silicon Valley (Saxenian 1996); and Viviana Zelizer, whose work traces the development of money, in all its forms, from a sociological perspective (Zelizer 1997).

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<sup>21</sup> Granovetter's use of the phrase embeddedness shows his relation to Polanyi, though their approaches are slightly different. Granovetter focuses on how individuals makes decisions and how those decisions exist in networks of relationships, whereas Polanyi focused more on how markets as a whole were embedded in social structures.

Sociologist Neil Fligstein has also been at the forefront of the recent move to resuscitate the ideas of earlier Institutionalists. His work has included both empirical case studies and theoretical frameworks demonstrating the American government's role in providing the conditions and parameters of private sector growth. In his empirical work, his research on the growth of Silicon Valley is especially interesting. In his article, "States, Markets, and Economic Growth," Fligstein catalogs the incredible level to which Silicon Valley's nascent computer industry depended on government support (Fligstein 2005). For example, electronic firms such as Hewlett-Packard, Varian and Lockheed, depended almost exclusively on government contracts in the 1940s, 1950s and 1960s. In the case of Varian, over 90% of its business was with the government. By and large, these contracts came from the Defense Department and were used to develop the military's guided missile and advanced aeronautics programs, applications that had virtually no private sector application at the time. The government also provided funding for the majority of graduate students and academics working in those fields (p. 130-1). In the 1960s and 1970s, the Pentagon underwrote development and application of an experimental computer-networking scheme called Arpanet, which then became the foundation of the modern Internet. In the past few decades, governmental protection of computer firms has been crucial in helping them become and remain profitable. Such assistance has included on-going funding for experimental projects, strong intellectual property and patent laws for electronic and computing technology, the 1996 Telecommunications Act which has protected incumbent firms and lessened competition, and finally, the waiver of sales tax on Internet sales, which gives electronic based

retailers a five to seven percent advantage over traditional stores (pp. 132). Fligstein does not deny that “entrepreneurship and competition matter for the creation of new markets and industry,” but does assert that they “cannot occur without governments and stable structures to support them.” (119).

Fligstein has supported the empirical case studies with theoretical work on what he calls “the architecture of markets.” His 2003 book of that title outlines his view that effective markets depend on the prior existence of an expansive and stable governmental system that makes the dynamics of a market system possible (Fligstein 2002). He argues that a retreat of the state from markets is not possible, as markets cannot function without the stabilizing forces of the public sector; nor is it even desirable from the point of view of wealth creation, since the public sector assists private markets in myriad ways. In the case of the United States, Fligstein writes that there are four main aspects of public “architecture” that shape and support the private sector. First is the use of the law to determine, among other things, tax policies, employment relations, antitrust and competition policies, and patent and property rights. Second is the government’s role as a buyer of products and services from firms. Third is as an adjudicator among different types of market participants, yielding decisions that tilt competition in one direction or another. Fourth is the state’s provision of public infrastructure that helps lowers costs for private interests (Fligstein 2005, 120; Fligstein 2002). Fligstein’s theoretical work on market “architecture” is a useful model for understanding the backdrop behind economic growth.

The institutionalist perspective has made a small comeback in political science recently, as well. One cluster, called institutional political economy, has focused on developing countries. Scholars such as Ha-Joon Chang, Dani Rodrik and Geoffrey Hodgson have charted an alternative to neoliberalism that focuses on protecting infant industries, strategic trade, and domestic development – all of which fly in the face of the Washington Consensus<sup>22</sup> regarding international development over the past three decades (Chang 2002; Rodrik 2008; Hodgson 2001). Chang’s recent book, Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism, shows the gap between the rhetoric of free trade and actual practice (Chang 2008). Chang points out that while nations such as the United States and Great Britain are fierce free trade proponents, their own development was largely based on protectionism. Meanwhile, in the field of comparative politics, Steven Vogel’s work on the changing regulatory framework in industrialized countries over the past thirty years highlighted the degree to which the era of so-called market ascendancy has amounted to the aggrandizement of the state and not its diminution, as is typically supposed. His 1998 book, Freer Markets, More Rules perhaps says it best (Steven Kent Vogel 1998). In it, Vogel shows the collaborative growth of state and market during a supposed period of deregulation of the telecommunications industries in Japan, the UK, France, Germany and the United States.

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<sup>22</sup> This is an alternative term that roughly describes the package of reforms for developing countries promoted by various transnational quasi-governmental organizations, especially the World Trade Organization and the International Monetary Fund, in conjunction with governments of leading industrialized countries. The Consensus includes advice to stabilize the currency, cut the public sector, lower tariffs to trade, develop export industries and the like, or as Rodrik puts it: “stabilize, liberalize and privatize” (Rodrik 2006).

This review of institutionalism and its varied forms has been intentionally wide-ranging. In trying to build a theoretical framework with which to approach the questions posed by the development of transit-oriented development in Japan, I have sought out as many perspectives on institutionalism as has been practical, and then worked from this broad survey to find the most useful elements. This process has revealed two small obstacles in appropriating institutionalism. First, there are contradictions between different types of institutionalism, specifically the New Institutional Economics School perspective and its fundamental opposition to the other institutionalist schools. NIE is better described as an offshoot of classical liberal economics and carries many of the same assumptions, for example that actors are rational decision makers and that markets are autonomous from states. Consequently, NIE is bedeviled with many of liberalism's same limitations in trying to answer the specific questions of this project and will not be used here.<sup>23</sup> Second, much of institutionalist theory, as well as many of the exemplary case studies based on these theories, lies far beyond the scope of this project. The works of Polanyi, Granovetter, Fligstein and Chang, among many others in the institutionalist field, are all grand projects. They promote a substantive alternative to mainstream economics based on analyses of broad and dense topics such as the development of 19<sup>th</sup> century *laissez-faire* economics and the development prospects of Third World nations. Their missions and findings far exceed the ambitions of the current project, but have been reviewed to distill a few core perspectives with which to approach Japanese transit-oriented development.

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<sup>23</sup> I would argue it is best to be aware of NIE and its implications if only to distinguish it from the type of institutionalism that has been useful for this study.

Given these acknowledgements, the core of institutionalism that I intend to employ is essentially the idea that markets are products of the particular social and political circumstances in which they are embedded. To return to the three questions used to analyze liberalism and Keynesianism, institutionalism differs substantially from those views. In the institutionalist perspective, markets develop from a particular configuration of rules and relationships in the public sector, which necessarily must precede the market. Markets are sustained as long as these conditions are maintained. They are not self-perpetuating any more than a moving car would be, given its dependency on a driver, gasoline in the tank, functioning tires, and occasional maintenance. In institutionalism, the role of the state in terms of markets is up for debate from a normative point of view, but analytically, it is nonsensical to say a market can exist without the state. Formulated so basically, this is far from a radical notion, but it is fundamentally at odds with the standard debate between liberalism and Keynesianism in which markets can be considered autonomous from states.

## **2.4 The Framed Market**

### *2.4.1 Institutionalism in Geography and Urban Studies*

Institutionalism in the Polanyian sense has not made much of an impact in the fields of geography or urban studies, at least not as a distinct and significant perspective within those fields. However, a small handful of scholars have done work that is congruent to institutionalism and helps point a way out of the seemingly irreconcilable debate between planning and markets, as discussed earlier.

The first of these is Pietro Nivola's book, Laws of the Landscape: How Policies Shape Cities in Europe and North America (Nivola 1999). This is a comparative study of land use policy in Europe and North America which highlights the wide variety of governmental restrictions and supports for different types of land uses in different countries, all of which are essentially market oriented. In his chapter "The Not-So-Invisible Hand," Nivola compares the web of interconnected (but not necessarily intentionally so) governmental policies that have helped to induce suburban sprawl in the United States with the web of interconnected policy choices in Europe which have produced vastly different landscapes. The first element of the institutional framework is automobile-centered transportation policy, with the U.S. spending more resources per driver than anywhere else. The presence of a highway trust fund with its own dedicated revenue stream ensures public spending for highways. Gas taxes are also relatively low in the United States, and insufficient to cover new road construction, which must be supplemented from general funds. Meanwhile, public transportation funding is miniscule in relation to road funding, with users expected to pay more of the direct costs, and liable to experience fluctuating levels of support (13-21). Second, housing policy in the United States has favored suburban over urban areas by providing more generous mortgage subsidies to new housing than to repairing the existing housing stock – this proved a boon to suburban areas compared to traditional urban cores (22-4). Third, tax policy encourages home ownership in the U.S. and, thereby, boosts demand for owner-occupied housing. The mortgage interest tax deduction, as well as Capital Gains tax exemptions on profits from a home sale, make home ownership an investment options as much as a

housing choice. In Europe, generally speaking, there is no fiscal advantage to owning, while high consumption taxes (especially on energy) subtly discourage people from owning large homes far from their jobs (25-6). For these and other reasons (26-33), Nivola argues, American suburban sprawl cannot be attributed solely to market forces.

Owen Gutfreund's work builds on some of Nivola's themes, and specifically connects urban form with public choices about transportation infrastructure. In Twentieth Century Sprawl, Gutfreund describes the impact of highway funding on three different locales: Denver, Colorado, Middlebury, Vermont, and Smyrna, Tennessee (Gutfreund 2004). The chapter on Smyrna, Tennessee is especially valuable as he shows how investments in interstate highways in the 1960s and early 1970s laid the foundation for several factories to locate (including Nissan Motors' main US factory) there in the later 1970s and 1980s. Without that funding for infrastructure growth, the automotive industry could not have relocated from the upper Midwest. Gutfreund concludes that instead of these Smyrna being judged as an entrepreneurial growth region whose successes are due to market-based forces, as he shows is often the case, one must look at the public funding of transportation infrastructure that made that success possible.

In making this argument, Gutfreund is building upon established scholarship in geography, for example, that considers transportation technology a central determinant of urban form. John Borchert's classic paper, "American Metropolitan Evolution," shows how the growth of American metropolitan regions came as a result of two interrelated factors: first, changes in the resource base of the hinterland around those regions, and second, changes in the technology of transport and industrial energy for processing those

raw materials (Borchert 1967). Anticipating Gutfreund's argument, Borchert emphasizes understanding these fundamental changes as they provide the conditions for growth. Meanwhile, Alex Marshall's 2001 book, How Cities Work: Suburbs, Sprawl, and the Roads Not Taken, continues this line of thought through its focus on public policy's role in determining metropolitan growth patterns (Marshall 2000). Marshall argues that, above all, cities are primarily shaped by the transportation systems that serve them. His book examines four case studies (Portland, Washington Heights in Manhattan, Silicon Valley, and Celebration, Florida) and describes how urban form is always dependent on public infrastructure. Marshall's most compelling observation is that transportation infrastructure choices are, at base, public choices that create markets in their wake. For example, the decision to build America's interstate highway system was made in advance of existing market demand to justify its construction; the Federal Aid Highway Act of 1956 (and its \$25 Billion dollars in authorized funds) was primarily a political judgment that the system would be good for the country and would in time create demand. This is exactly what happened. The government built the world's best and largest system of highways, making driving easier, cheaper and more convenient, which launched a new land market for places well-served by those highways (135-154). Marshall echoes a key tenet of Polanyian institutionalism: markets are not natural phenomena, but the products of political decisions that must necessarily precede them.

The final contributor to an institutionalist approach to suburban growth is Jonathan Levine's work on Smart Growth and sprawl in the United States, especially Zoned Out: Regulation, Markets, and Choices in Transportation and Metropolitan Land-

Use (Levine 2006; also see Levine and Inam 2004). Levine focuses on the zoning laws (and debates surrounding them) that assign sprawl-supporting zoning codes “default” status, while Smart Growth codes are seen as a state “intrusion” into the workings of the market. Specifically, Levine is attempting to refute the arguments of various free marketers (Robert Bruegmann, Wendell Cox and others) who claim that segregated, exclusive zoning is a type of collective property right, while changes to that *status quo* represent planning “interventions.” Levine argues essentially that since zoning passes the “duck test” for defining government intervention in the economy (looks like intervention, acts like intervention, etc.), efforts to zone out “non-conforming” uses such as apartment buildings are just as much a market intervention as any Smart Growth plan to mandate such uses (2006: 6). He writes:

The reform of current exclusionary land-use policies, and even the adoption of rules facilitating alternative development, hardly represents the initiation of planning intervention into free markets – they are just a shift from one set of rules to another. In many ways, the smart-growth agenda for regulatory reform in fact gives greater play to markets than does the status quo. In this policy dispute, neither set of rules can legitimately lay claim to the status of neutral default that ought inherently to be chosen should evidence of its competitors’ benefits turn out to be uncertain. The relevant policy framework is not the tired and fallacious dichotomy of ‘planning versus the market’ but the competing legal and institutional arrangements within which transportation and land-use choices develop (122).

Levine’s work addresses the limitations inherent in thinking of markets and states as opponents in a game of tug of war. And while it is clear that his sympathies lie on the political left, his book’s basic argument is not a call for more Smart Growth planning *per se*, but rather, for a new common ground on which to discuss Smart Growth and stereotypical suburban *status quo*. Once the proponents of each type can stand on equal

footing, he argues, a more productive debate on the relationship between government policy and the form of metropolitan land use would be possible.

#### *2.4.2 The Institutional Approach to Japanese Transit-Oriented Development*

To be clear, institutionalism is not the only theoretical lens through which to view the subject of transit-oriented development in Japan. In Appendix A, I discuss alternative approaches and their strengths and weaknesses in terms of the insight they can offer to the topic. I have adopted an institutionalist perspective since it is the most useful theoretical lens through which to answer these particular research questions regarding Japanese transit-oriented development. There are several reasons behind this choice. First, institutionalism's emphasis on a historical approach to economics has a particular relevance to issues of land use and transportation systems in metropolitan regions. Mainstream economics tends to view choices as "spot" decisions: people enter the "market" and make choices, if enough people make the same choices, the market will shift to reflect the greater demand for that choice. If not enough people make the "right" choice, government action may be required to shift the market. This concept of how markets function certainly works in automobile shopping, for example, but not as well for questions of where to live, shop, and work, or how to get from place to place. Choices in urban form made early on are not easily counteracted. For example, a new highway cannot easily be shifted a mile to the east to take advantage of new market trends in housing location. In other words, path dependency, the notion that early choices have a significant, sometimes even determinant effect on later ones, is especially relevant to built environment questions: once a particular transportation mode or a particular

settlement pattern achieves dominance, it is very hard to undo. To understand fully why Japanese t.o.d., such as at Futako Tamagawa, is so popular and so common, one must take a historical approach that looks at how it developed over time, especially in light of possible alternative paths.

Following Karl Polanyi, I emphasize that any particular market configuration is the product of essential public decisions that allow a seemingly free market to exist. Polanyi, above all, emphasizes that states always precede markets, in contrast to classical liberals and Keynesians who argue that markets are more or less spontaneous phenomena with which states may interfere *post facto*. In approaching the issue of the Japanese suburban landscape, a more mainstream view might look to consumer preference as the original motivator, and focus on the Japanese state as an inhibitor or promoter of certain pre-existing market forces. This view would place great emphasis on market emphasis, including both consumers and producers of goods such as railways or suburban housing. It would de-emphasize the context in which those market participants intersect, somewhat akin to neglecting the properties of water when talking about swimming. In the Polanyian view, however, the inquiry is re-oriented to look at state action, which creates the environment in which entrepreneurs and consumers operate, and acknowledges that, unlike water, the context of a market may not be equal or consistent for all market participants. This study seeks to unravel the political decisions that, over a long period of time, gave rise to the seemingly odd (at least for an American audience) market outcome of private industry-led mass transit and higher density, mixed-use land use patterns.

Finally, my approach to this subject owes a great deal to Jonathan Levine's work, especially his skepticism towards the well-established idea that market and state are inherently oppositional. Rather than yet another work in the well-worn "planning vs. the market" debate that rehashes either the benefits or flaws in regulation of otherwise free markets in transportation and land use, Levine deftly transforms the question to one of "planning vs. planning," asking his readers to reconsider unexamined notions that give some transportation and land use patterns an ill-deserved market-oriented reputation, while others are seen as only possible through state intervention. To reiterate the key phrase from Levine's words above, the key question in discussions of transportation and land use patterns "is not the tired and fallacious dichotomy of 'planning versus the market' but the competing legal and institutional arrangements within which transportation and land-use choices develop" (Levine 2006, 122). This observation lies at the heart of the current study: an analysis of the political, legal and institutional arrangements that have allowed the private railway led, transit-oriented landscape in Japan to develop.

## Chapter Three: Methodology and Sources

### 3.1 Methodology

#### 3.1.1 *Historical Approach*

This thesis is essentially geographic, theoretically economic, and methodologically historical. I employ a historical approach for an obvious reason: the development of the institutional framework for transit-oriented development in Japan has been a long-term process and its explanation would be ill-served by an analysis focused primarily on the present. The historical account addresses the period from the 1860s, when Japan was first becoming a modern nation-state and immediately before the arrival of Japan's first train, through the 1970s, when transit-oriented development had become the standard metropolitan form in modern Japanese cities. The historical approach also is useful for coming to grips with the multi-faceted nature of Japanese metropolitan morphology, which is partly a story of urban planning, urban policy, transportation policy, corporate and economic history as well as demography, all against a backdrop of modern Japanese history. All of these separate strands need explanation and inter-connection to convey the full story of how the metropolitan landscape of Japan evolved in the particular way that it has.

Choosing a historical approach, however, is not enough, since the question remains: which one? Within the sub-field of historical geography, there could be myriad ways to approach the development of Japanese suburbia. One could be demographic,

focusing on population shifts between central cities and suburbs or between suburbs. This path of inquiry would be well suited to a quantitative analysis, using historical census data as primary materials, perhaps enhanced by a geographic information system, or computer-based cartography. The result of such an approach would be a systematic and presumably comprehensive view of Japanese suburban demographic development.

Another approach could be more qualitatively oriented, stressing the social and cultural aspects of Japanese suburban development. Instead of official census reports, regression analyses, and GIS, a qualitative approach would rely on personal or familial histories or cultural products such as books, films, television shows, or pop songs to construct a history of Japanese suburbia as a social and cultural space. Such a study would stress anecdotal and exemplary parts of suburbia, and result in a particular and subjective understanding of suburban development.

### *3.1.2 Institutional History*

The particular questions of this study lend themselves to a third approach, one that highlights the interaction between multiple levels of government policy, as well as corporate strategy, in creating the contemporary landscape. While specific census data and broader social and cultural histories of Japan are part of this study, the research emphasis here is on government policy in the fields of urban planning and transportation. The sources for this research include both primary materials, such as official documents regarding the policies, and secondary materials, including histories of those policies and their effects. These policies form the core of the research, and are then embedded in a broader history of Japan, Tokyo and Tokyo's peripheral areas.

Specifically, the methodology for this study has been to interweave three somewhat distinct strands to produce the whole, in the same way one braids a ponytail. The three strands are distinguished by scale -- what I call here the macro, meso, and micro scales, as described below. The differentiation between scales is partly geographical and partly based on the institutions involved. The aim is to understand how histories at the three scales connect with one another, and how events or circumstances at one scale have influenced the others.

By “macro-scale,” I refer to broad, national-level policies, contexts and effects. For institutions, I include urban planning policy (for the most, decided at the national scale) and transportation policy, both of which have been crafted by the national government reputedly in response to national concerns. This strand also includes national historical events, such as economic modernization in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, World War II, and rising national prosperity in the post-War period.

The “meso-scale” concerns policies, contexts and effects below the macro-scale. Geographically, this means looking at the regional scale, especially the Kantō (Tokyo and Yokohama) region, though other large urban regions such as Kansai (Osaka, Kyoto and Kobe), Nagoya and northern Kyūshū (Kitakyūshū and Fukuoka) are also relevant to some degree. For example, the shift in downtown land use in major cities away from housing and the concomitant growth in suburban housing is described here as a meso-scale event. Investigations of private suburban railways as a whole are also part of the meso-scale. The individual railway companies are subject to national-level policies but are also

concerned with issues beyond a local station on one suburban line, making them appropriate for the middle level.

The “micro-scale” refers to very specific and local issues. Geographically, the micro-scale refers to Setagaya Ward, a suburb in the southwestern part of Tokyo Metropolitan Prefecture. In terms of institutions, the micro-scale is centered on the Tōkyū Company, a private railway consortium with several railway lines and extensive real estate investments in Setagaya. While the macro- and meso- scales refer to places and institutions in general terms, study at the micro scale is narrowly focused on two entities: Setagaya Ward and the Tōkyū Company. Other particular suburbs and other private suburban railway companies are occasionally mentioned by way of comparison.

**Table 3.1: Differentiation of Three Research Scales**

	<i>Macro-scale</i>	<i>Meso-scale</i>	<i>Micro-scale</i>
<b>Geography</b>	National	Regional (Tokyo area)	Local (Setagaya Ward)
<b>Transportation</b>	National railroad policy	Policy towards private suburban railways	Tōkyū
<b>Urban Planning</b>	National land use policy	Effect of national land use policy in Tokyo	Effect of national land use policy in Setagaya

During the research process, I constructed three parallel histories, based on each scale, and looked for points of connection between two or even three scales. This study is

the end product of that braiding process. While no braid is intellectually more significant than the others, the micro-scale has been at the center in the writing process, since at that scale one can see tangible landscape effects of the policies and trends at higher scales. While this study is interested in various policies, trends and decisions in and of themselves, it prioritizes their impacts on the everyday built landscape, and attempts to keep the historical account tethered to their relationship to the micro-scale.

## **3.2 Setagaya and Tōkyū**

### *3.2.1 Evolution of the Focal Study Approach*

The method outlined above evolved during the course of my research. This dissertation has been driven by the free market t.o.d. paradox described in earlier chapters, but as the research project began, it was an open question of the best way to tackle this question, and especially of the best analytical scale at which to tackle it. The initial plan was to focus on the national scale and to treat Japanese suburbia more generally, searching for the national institutional framework that allowed for such widespread growth and success of private railway company-led suburbia. The other two scales would have been a part of the study, but far in the background: closer examinations of particular suburbs and the role of private suburban railways would have been included to highlight particular issues, but the analytical scale was oriented towards explaining private sector, transit-oriented Japanese suburbia as a whole. This approach proved problematic, however, and describing why here explains the reasoning behind the more focused approach I have followed instead.

Mainly, there was the problem of distinguishing different types of suburbs within the whole of suburbia. Based on previous fieldwork and initial research, it was clear that not all Japanese suburbs are the same any more than are American suburbs. In the case of American suburbia, however, a language for talking about suburbs has been developed so that if one mentions first-ring suburbs, streetcar suburbs, or exurbs to a knowledgeable audience, there is more or less a common understanding of what type of suburb is being studied. For that matter, in the American context, it is possible to mention particular suburbs that can stand as paradigms for the group, in the way that Westchester, NY or Forest Park, IL, for example, both evoke particular and distinct types.

There is no comparable, English-language typology of Japanese suburbs, however, making the problem of distinguishing sub-groupings problematic for presentation to an English-speaking audience. There are distinctions between types of suburbs in Japanese<sup>24</sup> but these are anecdotal rather than scholarly, and even Japanese language scholarship on suburbia is rare (see below). Furthermore, English language scholarship on suburbia is practically non-existent, meaning there was no research on which to build. This became a practical problem very quickly: trying to explain the institutional framing of Japanese transit-oriented development quickly turned into a broad explanation of a broad subject that diverted attention away from, not towards, the question at hand. Without specificity, the research and initial writing stages turned into a flood of qualifiers as I was forced to account for the complexity of Japanese suburbia at practically every mention of the term. Again, if there had been prior research and a

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<sup>24</sup> See section 3.2.2 for a discussion of Japanese terms for suburbs.

common level of understanding about the basic of Japanese suburbanization write large, this would not have been the case as I could have referred to types of suburbs or elements in suburban history that had received more comprehensive treatment elsewhere. As this is the first known work to tackle the specific problem I have laid out here, *as well as* one of a very small handful of works that deal with Japanese suburban morphology more generally, I elected to keep focus on my original research question and not obfuscate it with long disclaimers and tangents explaining elements of suburban history that were not directly relevant.

The problem with the wider focus manifested itself as a problem of data. With a large research project, it is difficult to know where, when, and with which sources to begin, as there are so many possible cases to examine and so many exceptions to any rule that one may want to put forth. Within a short time of trying to tackle the unwieldy subject of all of Japanese suburbia and then looking to answer the research question after providing a comprehensive discussion of suburbia, it quickly became obvious that the research was drowning in massive amounts of data that was not exactly relevant, such as the convoluted institutional histories of each private railway company, especially each railway's particular history of buyouts, mergers and takeovers. Such information could have been added here, but would not have made a difference in the quality of the available research. It would have been redundant towards answering the central question. I needed to ground the analysis on something more specific and define the primary research parameters. Pursuing the broader strategy at first was still useful, as the initial

research with the earlier approach now forms the bulk of the “macro-scale” analysis as described above.

Moreover, the initial strategy seemed to be leading the research uncomfortably away from an understanding of the Japanese suburb as a real and tangible place. In short, while providing me with a surfeit of data on things that were not central to my research question, it left me unable to pursue information that was. In order to talk about suburbia as a whole, it was necessary to avoid becoming entangled in the particularities of any one suburb. Staying at the broad, national level of inquiry into suburbia as a whole meant a departure from my initial intellectual motivation: to try to account for the morphology of the Japanese suburb. Above all, this project emphasizes the impact of regulations, taxes, subsidies, business strategies, and political circumstances, as they influence and produce the everyday landscape – it is not primarily concerned with regulations or taxes just in and of themselves. A more focused study makes drawing that connection much more practical.

The approach I take here will ground the broader story of institutional change and Japanese suburban development by focusing on a particular suburb, Setagaya, and a particular private railway company, Tōkyū. This approach is not without its flaws, or rather, its trade-offs. It does, however, address the three major obstacles apparent in the initial approach: it solves the problem of differentiation, and indeed, could contribute to the much needed typology of Japanese suburbia by forming a closer look at one particular type; it solves the problem of data overload by enabling clear parameters for identifying which primary research materials are within the study’s scope, and which are not; and,

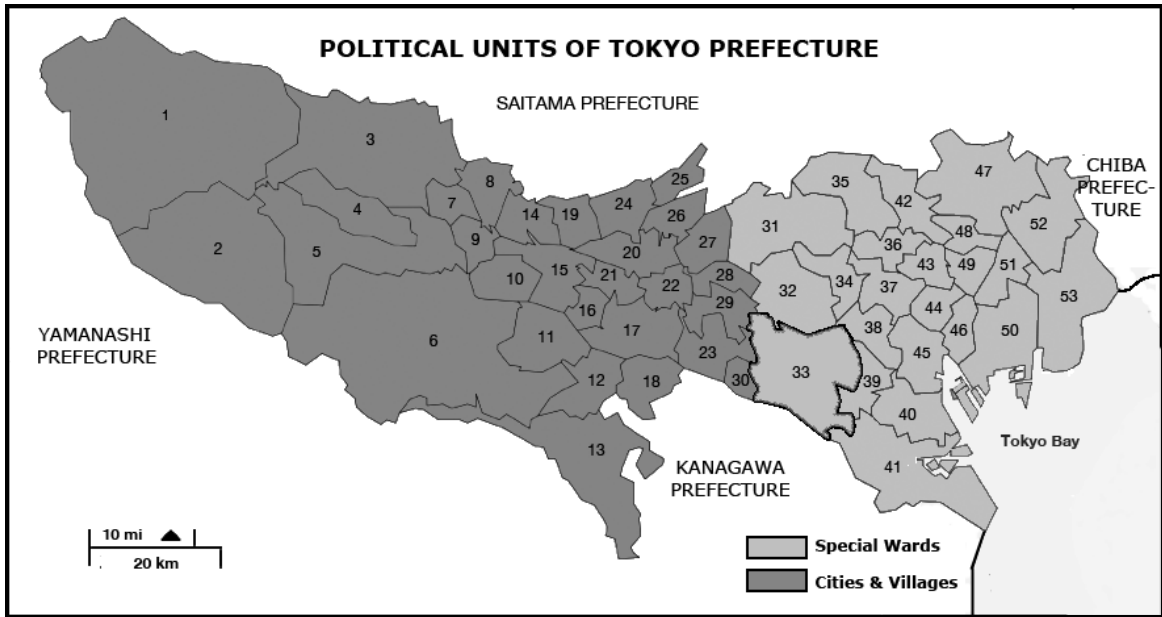
finally, it allows for a clear connection between macro- and meso-scale institutional factors and how they have helped shape a particular place.

This study is not a comprehensive treatment of Japanese suburbia. Instead, it analyzes the specific in order to comment on the whole. The suburb that I concentrate on here, Setagaya Ward, does not represent the whole of Japanese suburbs, all the suburbs in the Tokyo Metropolitan Region, or even its neighbors in the southwestern part of the region. Likewise, this study pays special attention to Tōkyū, though it is not in any sense the exemplary private suburban railway. In that sense, Setagaya and Tōkyū are *not* case studies of what in compact form needs to be understood about Japanese suburbs or private railways. Future work on other suburbs or private railway companies, some that are more or less similar to the ones focused on here, and some that are quite different, would be welcomed, as they would allow for an even richer understanding of Setagaya and Tōkyū in comparative terms. Once a sufficient number of studies were carried out, the work of developing conceptual frameworks to classify and analyze the varied examples could begin. Simultaneously, scholarship from other perspectives, say quantitative work in population geography, could begin classification based on density figures, land use patterns, or phases of historical settlement, for example. A final step for a comprehensive treatment of Japanese suburban development would be to combine specific suburban histories and quantitative comparative analysis to create a thorough overview of suburbia as a whole. Such a project, though, is beyond the scope of this paper.

### 3.2.2 *The Selection Process*

Once the decision was made to pursue a more limited investigation of a particular suburb and a particular private railway, I began considering which suburb and which railway company might yield the best study. The research on macro-scale issues of Japanese suburbia, plus personal experience, provided a good grasp of various possibilities, but no single suburb or railway company emerged as a clear and obvious choice at the start. In the end, I selected Setagaya and the Tōkyū Railway Company even though my knowledge of them at the time was less than expert. In this sense, Setagaya and Tōkyū were not “cherry picked” as the perfect examples that illustrate everything relevant in the development of Japanese suburbia. Instead, the combination was selected after a multi-step process as a suitable approach to explore these questions and issues.

The first step of the selection process was to decide on what constitutes a suburb in Japan. This is not as straight forward as it is in the United States where one may quickly identify smaller municipalities outside of a central city (or cities), but still within commuting distance, with usually high proportions of residential land use. The same definition would fail in the Japanese context, due to its very different municipal structure.



	<i>Villages</i>		<i>Cities (cont.)</i>		<i>Cities (cont.)</i>		<i>Wards (cont.)</i>
1	Okutama	14	Musashi-Murayama	28	Musashino	41	Ōta
2	Hinohara	15	Tachikawa	29	Mitaka	42	Kita
4	Hinode	16	Kunitachi	30	Komae	43	Bunkyo
8	Mizuho	17	Fuchū		<i>Wards</i>	44	Chiyoda
	<i>Cities</i>	18	Inagi	31	Nerima	45	Minato
3	Ōme	19	Higashi-Yamato	32	Suginami	46	Chūō
5	Akiruno	20	Kodaira	33	Setagaya	47	Adachi
6	Hachiōji	21	Kokubunji	34	Nakano	48	Arakawa
7	Hamura	22	Kogane	35	Itabashi	49	Taito
9	Fussa	23	Chōfu	36	Toshima	50	Kōtō
10	Akishima	24	Higashi-Murayama	37	Shinjuku	51	Sumida
11	Hino	25	Kiyose	38	Shibuya	52	Katsushika
12	Tama	26	Higashi-Kurume	39	Meguro	53	Edogawa
13	Machida	27	Nishitōkyō	40	Shinagawa		

**Figure 3.1: Political Units of Tokyo Prefecture**

The suburbs of Tokyo are perhaps the most difficult to define in political terms, for a reason that surprises many non-Japanese: there is no such thing as Tokyo City. Instead, Tokyo refers to Tokyo Metropolitan Prefecture (*tō*), which is made up of 23

special<sup>25</sup> wards (*ku*), 26 cities (*shi*) and four villages (*mura*). The 23-ward area is often thought of as the “city” of Tokyo, but in political terms, all wards and cities within the prefecture are all on equal footing and report to the prefectural government.

The absence of a central city is peculiar to Tokyo, but even in the case of Osaka, for example, defining suburbs in political terms is a distinction without much difference. Political structure is very much centered at the national level, and prefectures and municipalities (whether wards, cities or villages) have little degree of local control. In the American case, the foundation and growth of suburbs was partly a political concern, as people left central cities to perhaps lower their tax burden, solidify a particular land use pattern, send their kids to better schools, or even to exclude certain racial or ethnic groups from living next door. In Japan, by contrast, most taxes are collected on a national basis, and where taxation is local, the rates are set by the prefectural or national government, eliminating any fiscal advantage to living on one side of a municipal border or another. Land use regulations are another national concern, with little to be gained by moving somewhere else, and schools are standardized across the country. In short, political considerations and municipal divisions are of limited use in defining suburbs in Japan.

Defining suburbs visually by their dominant type of land use is also difficult in Japan. Within Tokyo, one can travel from ward A to city B and then to ward C without realizing one has crossed any boundary at all. There are generally no greenbelts or other environmental clues that signal a transition. The fact that planning is a national concern, not a local one, ensures that there is little a municipality can do regarding land use or

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<sup>25</sup> This is to distinguish the wards with Tokyo from wards in other cities. In Osaka or Yokohama, the wards are the constitutive parts of the city and under the city’s control; In Tokyo, there is no city, and the special wards are constitutive parts, along with the non-ward cities and villages, of the metropolitan prefecture.

urban design to distinguish itself from a neighbor. The urban/suburban landscape of Tokyo prefecture is without clearly defined zones for particular land uses, and the transition from urban to suburban to exurban areas is a very subtle one.

Trying to use the Japanese language equivalents for suburbs is also problematic. There are several words that translate as “suburb.” The connotations are slightly different for each term. The most common word is *kōgai*, which literally translates as “outside areas” and connotes “outskirts.” Another term is *kinkō*, which translates as “nearby areas” or “surrounding areas.” In very contemporary contexts, such as with advertising for new housing complexes, the borrowed Japanese version of the English word sometimes appears as *sabābu*, but it is not very common. In everyday conversation, *kōgai* roughly implies what in English would be an exurb – the very peripheral areas where development meets agricultural or forested land. As such, Japan’s “suburbs” are constantly moving, since they only refer to the areas where the urban and the non-urban meet. Once rice paddies, for example, are plowed up and turned into housing, the area is considered urbanized, and the *suburban* area moves farther out. Contemporary concern with suburbs in Japan is considered synonymous with the study of the sprawling urban/rural frontier and does not include the study of areas that were considered suburbs even a few months prior. In describing this project to Japanese people, it has been easiest to say mine is a study of former suburbs, even though the idea that such places should now be lumped in with “the city” is problematic.

Given the inadequacy of the political, visual and linguistic definitions, I have adopted a functional approach to help define Japanese suburbs. By *functionally* suburban,

I mean places that serve the same purpose as U.S. suburbs: peripheral residential areas within commuting distance of urban business districts. In the specific case of Tokyo, it is basically possible to differentiate the “core” and the “periphery” by the location of a particular train line, the Yamanote loop line, and by including two long-standing urban wards just to the east of the train line. Completed in 1925, the Yamanote<sup>26</sup> Line was built to link the various railway terminals on the edge of the city. Private rail lines were effectively banned<sup>27</sup> from extending their lines into the inside of the Yamanote loop, and thus ended at a station on the Yamanote Line, where passengers heading to destinations within the loop would have to transfer to a municipally owned streetcar or subway to reach their destination. The loop line passes through ten wards (Chiyoda, Chūō, Minato, Shinjuku, Bunkyo, Taitō, Shibuya, Meguro, Shinagawa and Toshima) and runs adjacent to, but does not operate in, two wards (Sumida and Kōtō). Together, these twelve wards make up the historical city core and would have been the only areas that could be considered urban one hundred years ago. Land prices within and along the Yamanote Line have historically been and still are higher than land on the outside, and development is more intense.

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<sup>26</sup> This is translated in English as “foothills.” The core of Tokyo was built on flat, marshy land adjacent to Tokyo Bay, which gradually rose in elevation as one went west into the hilly Tama region. Yamanote means the land where these two physical landscapes meet.

<sup>27</sup> There was no written rule, as such, but since rail transportation needed ministerial and governmental approval, the implied policy was enough to limit the expansion of suburban railways in this direction. It is essentially a moot point anyway, as land prices inside the loop were extremely expensive and municipal subways and streetcars already had wide coverage within the loop by 1920, making penetration of the loop line unlikely (Eiichi Aoki 1994).



**Figure 3.2: Center City Wards (dark grey) and Suburbs (light grey) in Tokyo Prefecture, also showing the Yamanote Train Line**

I define the suburbs of Tokyo as the areas outside of these twelve wards that roughly follow the path of the Yamanote Line. Other wards, as well as the peripheral cities of Tokyo Prefecture, have historically functioned as residential areas outside of the core city from which people commute to their jobs within. They are suburbs in this functional sense, even though even it is hard in the present day to imagine that the area in question was ever anything but urban. The historical timeframe I am using for the definition is about a century, or roughly the timeframe for this study as a whole.

Tightening the definition to only include commercial densities or population densities

under a certain amount, or to define as suburban only those cities outside the 23-ward area, would eliminate too many places that developed historically as suburbs.

Once I resolved the initial suburban definition question, I employed a process of elimination to narrow down a list of suitable possibilities. The first and most important selection criterion was to determine which suburb could simultaneously assist the analysis of a particular private railway company. In order to keep the focus on one company, I avoided suburbs that were served by more than one railway, while in order to avoid the convoluted history of Japan's partially public, partially private Japan Railways, I avoided suburbs served by it or one of its previous forms. For approximately 80 years, the Japanese National Railways (JNR) operated several intra-urban lines in the Tokyo metropolitan area. In 1987, JNR was "privatized" as the Japan Railways Group, and divided into seven separate companies, including JR East, which took over the lines in Tokyo. JNR was formed in 1949 as a public corporation, and replaced the *Kokuyū Tetsudō*, or National Railways, which had been formed after the compulsory purchase of some major private railway lines in 1906 and 1907. While the pre-1949 version was essentially oriented towards serving state interests and was truly a "public" railway, the post-1949 version was run like a private company, with the government acting as exclusive shareholder. Privatization in 1987 marked an end to this exclusive relationship, and stock in JR can now be publicly traded. However, the vast majority of shares are still held by various governmental bodies, which also act as guarantors for JR Group's billions of dollars of debt inherited from JNR (Terada 2001). In order to simplify and streamline this particular suburban history, I elected to avoid suburbs where *Kokuyū*

*Tetsudō*, JNR or the JR Group had played a prominent role in its development. The complicated institutional history of such a suburb would have been excessively difficult to disentangle as the railway went from private to public to quasi public to quasi private.<sup>28</sup>

Initial research revealed that a few private railways were consciously oriented toward large-scale suburban rail service and real estate development, while others had broader business strategies or else, smaller profiles. I gravitated towards the larger private suburban railways, and to ones that made real estate development a more explicit part of their overall business strategy. The Tōkyū Railway Company and the Seibu Railway Company in Tokyo/Yokohama and the Hankyū Corporation in the Osaka/Kyoto/Kobe area are generally regarded as the leaders in this field. Due to earlier arrangements to be a visiting researcher at the University of Tokyo, studying Hankyū would have been impractical, so it was eliminated from consideration.

I then considered suburbs in the Tokyo region where either Seibu or Tōkyū had a dominant presence. Next, I looked for suburbs that had a relatively long history, that is, ones that had been considered suburbs before World War II. There have generally been two phases to Japanese suburban growth. The first phase consists of areas settled in the late 1910s and 1920s as streetcars and early intra-urban railways expanded outward from central cities. The second phase is made up of suburbs whose significant growth took place in the post-War period. This group includes many with large-scale public housing

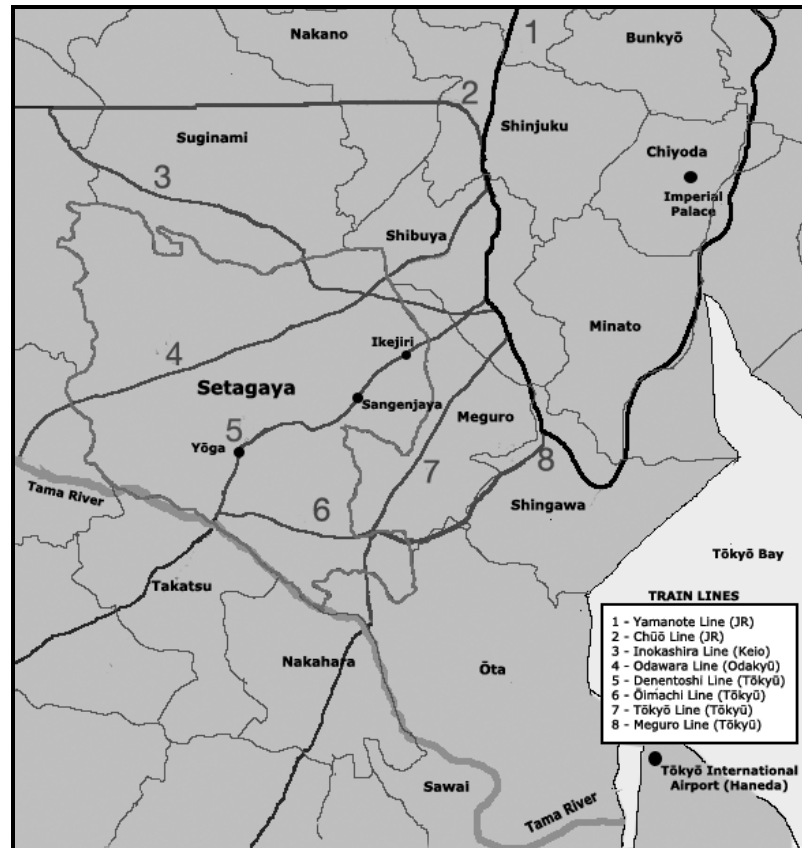
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<sup>28</sup> There are two publicly owned subway companies in Tokyo, some of which offer through service to suburban stations. These lines came about, however, when the regional and national governments underwrote the costs of linking the private railway companies with the municipal subway companies, resulting in joint ventures (see chapter 6).

projects, as well as more comprehensively planned suburbs built by varied combinations of public bodies and private interests as part of the “New Town” movement. These two phases of suburban growth are not exclusive of one another, indeed, even the development of the second phase took place in an institutional context that began in the 1910s and 1920s. The growth of suburbs in the 1950s followed patterns laid out much earlier. I began to focus on suburbs that exhibited growth in the first phase, but that also had clear evidence of second phase growth as well.

These selection decisions left four final candidates: Nishi Tokyo City, Nerima Ward and Setagaya Ward, all of Tokyo Metropolitan Prefecture, and Kōhoku Ward in Yokohama City. I began to research each at greater depth. Nishi Tokyo City and Nerima Ward were initially very promising as they both had long developmental histories dominated by the Seibu Railway Corporation, which has a near monopoly on rail service in the northwest portion of the Tokyo metropolis. Seibu Railway has been a leader in suburban rail service and real estate development in Tokyo, especially in the post-War period. Unfortunately for researchers, Seibu Railway Corporation is a private company that produces few public reports, while its extensive real estate holdings, the key to its success, are a closely guarded secret. That left Kōhoku Ward and Setagaya Ward, two proximate suburbs in the southwestern part of the Tokyo metropolis. Both are predominantly served by the Tōkyū Railway Corporation and have developmental histories that stretch back to the 1900s. There was one minor drawback to focusing on Kōhoku Ward, however. As a part of Yokohama City, Kōhoku has a different political history than suburbs in Tokyo Metropolitan Prefecture, on which my initial research had

focused. I therefore made a practical decision to focus on Setagaya Ward and its intertwined history with that of the Tōkyū Corporation, a suburb for which I had already started some background research.



**Figure 3.3: Map of Setagaya Ward, showing train lines**

The history of Setagaya Ward will be discussed in depth soon. To situate the reader, though, some basic facts of Setagaya are provided here (Setagaya Ward Government Office 2009; Tokyo Prefectural Statistics Bureau 2006). Setagaya is located to the southwest of Tokyo’s 23-ward area, about seven miles from Tokyo’s central reference point, Nihonbashi. Its total land area is approximately 22 square miles, which makes it the second-largest ward in Tokyo Prefecture and a bit smaller than the city of

Burnsville, Minnesota. Setagaya is Tokyo's most populous ward with 826,139 residents as of March 2008. The population density of 36,840 people per square mile is about half of Manhattan's, but twice that of Brooklyn, as of 2000 (United States Census Bureau 2008). The topography is mostly flat and is crisscrossed by six rivers, including the Tama River that marks the ward's southwestern boundary with Kawasaki City. Setagaya is one of Tokyo's most residential wards, with over 60% of the land use devoted to a mix of single-family houses, small apartment buildings and medium and high density apartment towers (Setagaya Ward Government Office 2009). It is considered by many as one of the better addresses in the Tokyo metropolis.

### **3.3 Notes on Sources**

#### *3.3.1 Primary Source Materials*

Research for this paper has been carried out with materials in both English and Japanese. Most primary sources have been in Japanese, while the secondary materials I have used have been more often been in English. The split was not intentional, but came about as the research progressed, and reveals in part some of the strengths and limitations of Japanese-language scholarship in this field. Useful primary documents have been accessed at several libraries and archives in the Tokyo area. Most important among these is the library of the University of Tokyo, the second largest in Japan, where I did the bulk of my research. The Setagaya Central Library contains many of the official publications from Setagaya Ward and owns several important collections of old photographs, maps and local newspapers. The company archives at the Tōkyū Railway headquarters

contained most of the primary documents related to specific research on the railway and the conglomerate as a whole. The Railway Bureau of the Ministry of Land, Infrastructure and Transport collects and publishes the railway data I have used. Finally, the population statistics bureau at the Tokyo Metropolitan Prefecture office was the source for demographic information.

I have mostly focused on English-language sources for secondary materials, as secondary materials in Japanese proved to be of limited value. Japanese scholarship tends to be extremely empirical, which is both its strength and its weakness. Secondary materials tend to be limited to condensations of the same primary materials with little in the way of a conceptual framework to make sense of either the facts or their broader historical context. To give an example, secondary materials on the history of private railways are replete with statistics on numbers of passengers per station, types of cars used, *et cetera* and read as if they were edited collections of company reports.

Unfortunately, the attention to this type of detail is not broadened by a discussion of what to make of such facts or how to see beyond them to the larger picture. Secondary materials in Japanese also tend to be very focused on one particular discipline. They are not trans-disciplinary, as this subject warrants. The books written about the urban planning of Tokyo are written just about the relevant planning regulations involved, what produced them and what their outcomes were, while books and articles on transportation tend to be just as focused on transportation issues only. Suburban studies is not a robust sub-field in Japan; when it is the subject of scholarly inquiry, the overwhelming majority

of studies come from architecture and architectural history and are confined to discussions of suburban housing styles.

### 3.3.2 *Secondary Source Materials*

The field of Japanese urban studies is not a particularly crowded one, either in Japanese or English, at least in comparison to the state of the field for American, British or Continental European cities. In fact, one could count the number of English-language books on Japanese urban studies with just two hands, as I have listed here. In addition to there being such a limited of sources to choose from, almost all existing sources have been useful to the current studies in just limited degrees. That is, I have generally used available secondary sources for background information only since the main arguments of those books has often been not at all relevant to this project's research question. That being said, a brief review of source materials follows here, and should be read as an addendum to the more theoretically oriented literature review of the previous chapter.

I have organized existing sources into four basic groups: planning history, railways, suburbs, and general Japanese history. Of the many Japanese language materials on the history of urban planning, Yorifusa Ishida's *Nihon Kingendai Toshikeikaku no Tenkai – 1868-2003 (Evolution of Modern Japanese Urban Planning: 1868-2003)*, (Ishida 2004) was my main source. It highlights all of the main eras of Japanese urban planning in the modern era, complete with biographical notes on key figures in urban planning. It focuses primarily on how modern Japanese cities evolved from the pre-modern feudal era. Ishida is generally regarded as the preeminent urban planning historian in Japan, and this volume is his most well known. Another by Ishida,

co-written with Hiromichi Ishizuka, focuses specifically on the history of Tokyo's urban planning and was also helpful (Ishizuka and Ishida 1988). Its themes coincide greatly with the later book, only with a focus on one particular city instead of Japanese cities more generally. Supporting works included two books by Akira Koshizawa on the history of urban planning in Tokyo (Koshizawa 1991; Koshizawa 2001). Koshizawa covers much of the same ground as Ishida does, and likewise, employs a historical, era by era look at how Tokyo developed. All of these are squarely within the field of planning history and focus on Japanese urbanism or Tokyo as products of urban planning processes. They neglect, however, significant analysis of urban development as influenced by other processes such as economic, cultural, or technological change. Still, they each present solid overviews of the evolution of various planning paradigms and their impacts on Tokyo and other cities.

Two important English language books on Japanese planning supplemented these materials. First is Andre Sorensen's *The Making of Urban Japan* (Sorensen 2002), the definitive work on the growth of Japanese cities and urban planning history. Sorensen offers a thorough treatment of how Japanese cities evolved over the past four centuries, from the Tokugawa Era until the modern era. Sorensen highlights a few central themes through his survey: one, that modern Japanese cities owe a great deal to pre-modern cities, two, that in the modern era, the Japanese national government has almost always pursued pro-economic growth policies at the expense of other concerns such as the livability of Japanese cities, and third, that civil society has not played a very important role in shaping urban policy, in contrast to North American and European norms.

Sorensen employs a historical approach, and synthesizes many of the key Japanese-language works on the same subject. His background in North American and European urban planning policy, however, allows him to ask new questions of the subject matter and in so doing, create an engaging perspective on how and why Japanese urban planning is distinctive. The book is without any glaring weaknesses, though for my purposes, it is rather light on suburbanization, as well as the role private railway companies have played in growth patterns and housing availability.<sup>29</sup>

The second is *Land Markets and Land Policy in a Metropolitan Area: a case study of Tokyo* by Yuzuru Hanayama (Hanayama 1986). This book examines Japanese urban planning and urban development as it relates to land prices. Although his question – how does urban land policy contribute to high land prices? – is somewhat outside of the current study, Hanayama’s book includes a very useful overview of Japanese urban planning regulation as well as an insightful description of the Japanese real estate industry. It is essentially a policy analysis of the various types of taxation and land valuation schemes that apply to urban areas. He argues that a variety of public policy instruments regarding land prices work at cross-purposes to another, creating inconsistencies between valuations for different types of land and situations ripe for land speculation. Hanayama proposes a number of steps, including increasing land taxes on agricultural land in urban areas,<sup>30</sup> a higher city planning tax with increased revenues to be

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<sup>29</sup> In the interests of full disclosure, part of the inspiration for this dissertation was Sorensen’s book and what I thought were these two insufficiently discussed topics. This is not to take anything away from Sorensen’s volume; its focus was clearly on other important topics.

<sup>30</sup> Since agricultural land is taxed at a much lower rate than land used for other purposes, many landowners practice a kind of “land farming,” in which they grow a modest amount of vegetables or rice in order to collect agricultural subsidies and then wait for the right time to sell out to developers.

spent on infrastructural improvements, and broader use of land readjustment powers<sup>31</sup> to improve the urban environment. In the end, however, Hanayama's main arguments proved of little use for my study, since they are tangential to my main question and dated, as well. It was written in the late 1980s, during the rapidly expanding Japanese "bubble economy" which sent real estate prices soaring, though land prices have been deflating in Japan for more than a decade since the bubble popped.

While not in the field of planning, *per se*, an edited volume by Yukio Noguchi and James Poterba entitled *Housing Markets in the United States in Japan* was helpful as a source on housing policy and consumption patterns (Yukio Noguchi and Poterba 1994). Of the ten essays in the volume, Noguchi's own on "Land Prices and House Prices in Japan," provided a useful summary of statistics on affordability, as well as the rapid increase in land prices in the years prior to publication, while Takashi Ito's article, "Public Policy and Housing in Japan," contained a brief but helpful description on the history of public housing in Japan (Yukio Noguchi 1994; Ito 1994). The main shortcoming of this volume, at least for my purposes, was its almost exclusive focus on providing material for a comparison with the United States. Clearly written for an audience that had no familiarity with Japan, it was often rather basic.

Finally, Norman Glickman's *The Growth and Management of the Japanese Urban System* contained an informative discussion of inter and intra-regional demographic shifts up until the 1960s (Yukio Noguchi and Poterba 1994; Glickman 1970). Glickman takes a quantitative approach to explaining urban growth and

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<sup>31</sup> See chapters 4, 5 and 6.

demonstrates population shifts from rural to urban areas in Japan, as well as shifts within urban areas, namely from central city locations to peripheral cities and wards. The strength of this book is in its presentation of statistics of population growth, and I relied on it primarily in the section of suburban growth in the 1950s and 1960s. It contains some information on public policies that were responsible for such population shifts, but the analytical focus on the Japanese urban system as a whole, and not on individual cities, kept most of the discussion at the national level with little in the way of specific analysis of individual cities or regions.

The second cluster of subject matter literature is from the field of Japanese suburban studies. This sub-discipline is more narrowly defined in Japan than in the United States. In Japan, it is essentially the domain of architectural historians focusing on houses and housing. The most helpful of these monographs was *Kōgai Jūtakuchi no Keifu: Tōkyō no Den'en Yutopia (Genealogy of Suburban Housing Areas: Tokyo's Den'en Utopia)*, an edited volume of short pieces written about fourteen suburban housing developments all over Japan (Yamaguchi and Inaba 1987). In addition to a brief but helpful introduction to Japanese suburbanization in the early 20<sup>th</sup> century, two of the case studies were particularly important: one on Sakura Shinmachi, a housing development in Setagaya Ward (Yamaoka 1987), and another on Heisei Tamagawa Gakuen, a project in a suburb west of Setagaya (Sakai 1987). The strength of these pieces is their attention to the history of these areas' developments. As is typical for Japanese scholarship, they are descriptive and atheoretical. Similarly, the edited volume *Kindai Nihon no Kōgai Jūtakuchi (Suburban Housing Areas of Modern Japan)* was valuable for its introduction

and for two chapters related to suburbs near Setagaya Ward (Katagi, Fujiya, and Kadano 2000). The emphases in these two volumes are on the built form of suburbia in terms of both individual buildings and on patterns of development. There is unfortunately little crossover with the planning history approach in the works mentioned above or with the railway histories mentioned below. In addition, these works exemplify the tradition in Japanese language scholarship to focus on relaying facts and details at the expense of theoretical perspective which may be used to make sense of these facts.

A few English language sources on Japanese suburbia were of modest help for this study, especially Gary Allinson's *Suburban Tokyo: A Comparative Study in Politics and Social Change* (Allinson 1979). By title alone this would seem the most appropriate source for this topic, but Allinson, a political scientist, is mostly concerned with the voting behavior of suburbanites, and how 20<sup>th</sup> century suburban Japanese population growth has impacted the strength of Japan's largest political parties. As such, Allinson's work does not address the central issue of how governmental policy enabled private railway real estate development. In referencing it, I have found most of the book to not be of too much use for the current study. I did, however, find his introductory chapter on the histories and political structures of two middle-class suburbs in western Tokyo (Musashino City and Fuchū City) helpful as a comparison to my research on Setagaya. Three other works by anthropologists about Japanese suburbs are concerned with social interaction in suburbs and have been of very limited value, except as background information (Ezra F. Vogel 1972; Ben-Ari 1991; Robertson 1994).

An edited volume by P.P. Karan and Kristin Stapleton entitled *The Japanese City* (Karan and Stapleton 1997) contains two chapters germane to a discussion of Japanese suburbia. First is Kohei Okamoto's "Suburbanization of Tokyo and the Daily Lives of Suburban People," which is concerned with the demographic growth of Japanese suburbs as well as the time patterns of suburbanites (Okamoto 1997). Okamoto tracks how long a sample of white-collar suburbanites spends commuting, working hours, socializing with colleagues after hours and with their families. He finds a strong time deficit and an alarming lack of time at home. Another chapter by sociologists Kuniko Fujita and Richard Child Hill called "Together and Equal: Place Stratification in Osaka" deals with issues of social equality and residential patterns in Osaka prefecture, which includes both the central city and its suburbs (Fujita and Hill 1997). They contrast Osaka, which they find generally has very little place stratification, with American cities where there is much.

The history of railways, specifically private railways, was the richest set of Japanese-language literature. Japan has a rich railway culture, and activities like model railroading, "trainspotting"<sup>32</sup> and railway vacations are extremely popular. This has led to a staggering number of works on railway history, both popular studies and ones of specific companies. The research difficulty has been separating the wheat from the chaff. Tadashi Uda's *Kindai Nihon to Tetsudōshi no Tenkai (Modern Japan and the Historical Development of Railways)* is one influential source (Uda 1995). Its strength is its discussion of railroad history as embedded in broader context of Japan's economic,

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<sup>32</sup> A hobby in which you try to spot various types of train lines or train cars, akin to bird watching.

social, and political change. *Nihon Tetsudōshi no Kenkyū (Research on Japanese Railways)* is another authoritative source, though in many cases it duplicates what is in Uda's volume. However, it was the best source for statistics of historical railroad growth (Noda and Oikawa 2003).

Because these two books are mostly about the history of national railways in Japan, they have been supplemented with four works by Yasuo Wakuda that deal specifically with the history of private railways (Wakuda 1981; Wakuda 1984, vol. 4; Wakuda 1991; Wakuda 1997a). Of these, the earliest, *Nihon no Shitetsu (Japanese Private Railways)*, is the best overview of Japanese private railway history, and contains detailed narrative histories of all of the major private railways. Meanwhile, the 1997 volume is the best explanation of railroad policy and features detailed descriptions of all major pieces of legislation regarding private railroads. Kyōzō Takechi's *Toshi Kinkō Tetsudō no Shiteki Tenkai (Historical Development of Suburban Railways)* contains histories of individual companies and on the many mergers and takeovers among them (Takechi 1986). It also discusses how suburban railways grew as a group and the importance of governmental policy in their growth. Finally, a monograph by Michikazu Miyata and Ken Yakita was another useful secondary source for research on Tōkyū, though much of it was dedicated to rather arcane information on the types of cars the company used in given years, or changes in engine specifications, for example (Miyata and Yakita 1997).

The key work on Japanese railroads in English is *A History of Japanese Railways, 1872-1999* (Eiichi Aoki et al. 2000), which is based on dozens of articles and books on

Japanese railways by the four authors. The story of JNR/JR is predominant in the book, but there are also important sections on private railways and their expansion. The book is a publication of the East Japan Railway Culture Foundation, a railway history group, which has also published a number of short pieces on specialized topics (Eiichi Aoki 1995a; Saito 1997; Kishi 2002). *Japanese Urban Railways: A Private-Public Comparison* by Fumitoshi Mizutani is devoted to the economics of railways and compares private railways to JR in terms of profitability and was my main source for information on railway financing and subsidies (Mizutani 1994). Steven Ericson's *The Sound of the Whistle: Railroads and the State in Meiji Japan* is the definitive source on the nationalization of railways around the turn of the 20<sup>th</sup> century, and I have relied on it for my discussion of very early private railroad policy (Ericson 1996). Ericson also discusses the early history of Japanese corporations at some length, though the time period he focuses on is a bit earlier than mine. Two monographs about the Seibu railway empire have served as important background materials, even though neither is specifically focused on the issues I am addressing (Havens 1994; Downer 1994). Havens' work is oriented towards understanding the role of Seibu, especially the retailing sphere, in shaping post-War middle-class Japan; Downer's book is a more journalistic exposé of the famous but mysterious Tsutsumi family dynasty that created and still owns Seibu.

The last group of secondary sources focuses on general Japanese history. Andrew Gordon's *A Modern History of Japan*, covering the period from the 17th century to the present, and James McClain's *Japan, A Modern History* were my standard references for 20<sup>th</sup> century Japanese history (Andrew Gordon 2003; McClain 2002). Gordon focuses

primarily on Japan's quest to be a modern nation the equal of any in Europe or North America; this book is notable for its thematic, rather than narrowly chronological, approach to Japan's history. McClain's is another broad survey, though of a longer time period than Gordon's. My understanding of the contemporary Japanese state was greatly illuminated by *MITI and the Japanese Miracle: the growth of industrial policy, 1925-1975* by Chalmers Johnson. Johnson's book, which was published at a time when Japan was just on the precipice of becoming one of the world's most important economic powers, contains valuable insight into the reasons for the Japanese economic miracle of the 1950s, 1960s and 1970s (Johnson 1982). As background reading on Japanese economic policy, I also consulted a few works by economic historians, including Morris-Suzuki's *A History of Japanese Economic Thought*, Kent Calder's *Strategic Capitalism* and *The Japanese Economy: Trade, Industry, and Government* by Ryutaro Komiya (Morris-Suzuki 1989; Calder 1995; Komiya 1991).

## **Chapter Four: The Beginnings of Japanese Transit-Oriented Suburbia**

### **4.1 Early History of Edo**

#### *4.1.1 Early Geography of Edo and Environs*

The giant Tokyo metropolis began in 1457 as a military outpost in the marshy areas between the Pacific Ocean and the largest plain in the Japanese home islands, the Kantō Plain. Situated close to the current site of Japan's Imperial Palace, this outpost evolved into Edo Castle, the home base of one of several hundreds of local rulers throughout the Japanese archipelago. The castle stood on a small knoll, a few kilometers northwest of Tokyo Bay. The castle grounds were framed by two north-south flowing rivers, the Sumida and the Ara, to the east with flat lands to the north, west and south. The castle became a hub of economic activity that eventually attracted a large population of townspeople and peasants.

Prior to large-scale canal-building and land reclamation projects of the 19<sup>th</sup> and 20<sup>th</sup> centuries, land to the east of the castle was crisscrossed by the shifting waterways that made up the delta. This land was settled mostly by fishers, craftspeople, and the poorest townspeople who could not afford to live on better, drier land (Andrew Gordon 2003, 23; Sorensen 2002, 41-3). The better areas were to the immediate west and southwest of the castle, and these gradually grew into an expansive residential area for

lower-ranking samurai and wealthier townspeople. Farther west from the castle, the topography of the Kantō Plain gradually rises as one leaves the original marshy area and gets closer to the foothills that define the edge of the plain. This area, known as the *yamanote* (literally, the hands of the mountain), was covered by larger estates and homes closest to the castle, gradually giving way to middle-class residential areas and then small farms farther and farther to the west. In contrast to the waterlogged areas of the east side, the west side was fairly dry. There are several rivers which flow south-eastward from the foothills and into Tokyo Bay, but due to elevation changes and the geological composition of the area, these rivers did not flood as their eastern counterparts did (Kornhauser 1976, 17). Waterworks construction in the middle of the 18<sup>th</sup> century that brought water to the western plain from the foothills created an agricultural boom in the area (Makoto Aoki 2002a, 52; Steiner 1957, 9).

#### 4.1.2 *Rise of Edo*

The later 15<sup>th</sup> Century, and practically the entire 16<sup>th</sup> Century in Japan, is known as the Era of the Warring States, as lords in Honshū, Shikoku and Kyūshū fought relentlessly over territory. Sporadic fighting continued until a decisive battle in 1600 resulted in a complete victory of the Tokugawa clan over its last significant rival for power. With this victory, Tokugawa became the *Shogun* (Commander of Armies) and the *de facto* political ruler of Japan. Tokugawa's ascension had a special importance for Edo's development. Originally from the Mikawa province near Nagoya, Tokugawa made a surprising switch to leave his home base and operate out of Edo castle, a smaller, more remote castle of his vanquished foe. The advantage at the time to Tokugawa was Edo's

separation from the primary battlefields, which afforded some time to build up his power base. In hindsight, Edo's location near the ocean with ample water resources and relatively flat terrain also made it very suitable for long-term growth (Schmorleitz 1974, 53-4).

In 1603, Tokugawa's rise to *Shogun* was made official, effectively making Edo the political, military and economic center of Japan. Tokugawa soon undertook massive expansion and reconstruction of Edo Castle itself, a process which continued past his death in 1616. The expansion of the castle was accompanied by large-scale civil works projects to improve the land surrounding the castle, including channeling tributaries and rivers, digging moats and water reservoirs, fortifying beaches and leveling small promontories. These changes laid the foundation for Edo's physical growth over the next 250 years, a time of peace and unity under a series of Tokugawa rulers. The population of Edo, which may have been just a few hundred when castle was originally built in 1457, climbed to 150,000 by 1636 (Schmorleitz 1974, 103).

The peripheral, proto-suburban areas around Edo castle were being transformed, as well. First, Tokugawa officials initiated significant efforts to build canals and reservoirs in the western part of Kantō Plain to improve agricultural capacity (Steiner 1957, 7-8). Second, the stability of the Tokugawa Era led to an expansion of the road system in the interior of the country (Traganou 2004). Third, as Edo grew in size and economic importance, the demand for foodstuffs, lumber, stone, and other products grew, thereby supporting the economy in places originally settled to serve Edo.

Physical improvement of the landscape, greater transportation access, and rising economic standards launched a self-reinforcing growth cycle for Edo and its periphery over the next two and a half centuries. This coincided with remarkable political stability in the country as a whole, causing Edo to decline in importance as a military outpost while rising as an economic center. The *samurai*, the class of warriors who fought incessantly in the Warring States period, gradually transformed into administrative bureaucrats responsible for tax collection and local governance. A ban on foreign trade and settlement, enforced since the ascension of the Tokugawa *Shogun*, insulated the city and the country as a whole from technological and political change. While Edo grew quantitatively by leaps and bounds from the early 1600s until the 1850s, eclipsing the one million mark in population by the middle of the 18<sup>th</sup> century, there was relatively little qualitative change to the city in the two and a half centuries of Tokugawa rule (Tokyo Metropolitan Government 2008).

#### 4.1.3 *Transition to Tokyo*

In 1853, however, an American Navy fleet sailed into the waters outside Edo demanding that Japan become open to foreign trade and that the Americans be allowed to establish a diplomatic mission. These demands eventually led to the *Shogun's* political system capitulating to internal forces demanding an end to self-imposed isolation. This upheaval's principal outcome was the so-called Meiji Restoration: the *Shogun* was deposed and formal power returned to the Emperor, who was to head a constitutional monarchy based on contemporary European systems. The 15-year old Meiji Emperor

took up residence at Edo Castle, renamed the Imperial Palace, in November of 1868. Edo was renamed Tokyo, or Eastern Capital, in recognition of this move.

Political transition significantly impacted Edo and its immediate surroundings. In the *Shogun's* political order, the provincial lords were required to keep an estate in Edo, near the castle. The Meiji Restoration stripped them of their feudal powers, eliminating the requirement to maintain residence in Edo, and the former lords and their expansive staffs returned to their home districts. The population of Tokyo dipped from the Edo era peak estimated at over a million to 873,646 in the first official census for Tokyo prefecture in 1876 (Sorensen 2002, 55). The departure of the formerly titled elites freed up much of the land immediately to the west of the castle, now the Imperial Palace, which was then bought by members of wealthy, non-titled elite who stayed. Other land was transferred to the public sector, and the local government mandated the creation of new areas for residential and institutional uses, including the establishment of a foreign settlement and embassy district to the southeast of the Palace. The architecture of the city changed immensely as foreign building materials, most importantly brick, and methods arrived. Many of the city's public thoroughfares began to be paved with stone and asphalt instead of merely packed dirt (Sorensen 2002, 56-62; Tokyo Metropolitan Government 2008).

The degree of physical change to Tokyo and its immediate environs was impressive, as was the transformation of the legal and political structures for governing them. In the feudal system, the local lord controlled all institutions of everyday life at the local level: tax collecting, land rights and property records, local peacekeeping, civil

courts, and even the local currency (Andrew Gordon 2003, 20-31). The national-level political changes of the 1850s and 1860s launched a major reform of local government in which nobles lost their titles; the system of local fiefdoms was formally disbanded in 1869. In its place, the national government created prefectures (most analogous to an American county) led by nationally appointed governors,<sup>33</sup> while the various institutions of local government were subordinated to national ministries, especially the Home Ministry (Sorensen 2002, 55-58). The new system left virtually no room for local control over government as prefectural governments and governors were agents of the national government, charged with carrying out national policy at the local level. Local institutions were managed by representatives of bureaucracies in Tokyo: the Ministry of Justice was responsible for local courts, for example, while the Home Ministry handled property disputes, tax collection, infrastructure construction, and similar civil functions (Andrew Gordon 2003, 63-6; Mabuchi 2001).

The top-down model of the national government vis-à-vis the prefectural governments was replicated within each prefecture, as well. Prefectures were divided into cities (*shi*) and rural districts (*gun*), which were then sub-divided into wards (*ku*) and neighborhoods (*cho*) in urban areas, and into towns (*cho*) and villages (*mura*) in rural ones. In 1878, Tokyo Prefecture was organized into fifteen wards, which made up Tokyo City,<sup>34</sup> and six districts, which covered the 380 towns and villages outside of the city (Tokyo Metropolitan Archives 2008). Modern day Setagaya was at this time a collection

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<sup>33</sup> This system continued until 1945, after which prefectural governors were popularly elected. Significantly, ministerial control over local affairs did not diminish despite the changes.

<sup>34</sup> As will be discussed later, in 1943 Tokyo Prefecture was reorganized and currently, there is no such entity as Tokyo City.

of villages in Ebara District, which ran southwest of Tokyo City towards Yokohama City in Kanagawa Prefecture.

Ebara was then an agricultural area producing crops for Tokyo's urbanites, though there were important differences among the district's farms and fortunes. Those in the parts of Ebara District abutting the urban wards, like the few farmers within the urban area, took the lion's share of the high profit trade in fresh vegetables. As one went farther from Tokyo's wards, however, the fresh vegetable trade became less profitable as shipping costs became more expensive. Up until the 1860s, people and goods travelled by horse-drawn carriages for long distances and a one-way journey from Setagaya to Nihonbashi, 15 kilometers away, would have taken several hours. This left Setagaya's 17,124 residents (as of 1873) decidedly on the fringe of Tokyo – physically and economically – as transportation constraints dampened their ability to participate more fully in Tokyo's growth (Setagaya Ward Historical Committee 1993, 286). Instead, Setagaya farmers grew mostly wheat and other minor grains on land that was too dry for rice cultivation (Setagaya Kuritsu Kyōdo Shiryōkan 2005).

Transportation also limited central Tokyo's growth and modernization. Early intra-urban transportation was based on rickshaws, horses, and, of course, walking. Early Tokyo was still very much like late Edo, with crooked, unplanned streets, chaotic intersections, and boisterous public gathering spaces. The inability to move very quickly or very far hemmed in city dwellers just as the urban population began climbing and new businesses and industries entered the city. Tokyo in the 1860s was clearly ripe for a transformation of its intra-urban transportation network, and economic exchange with

other cities would benefit by faster inter-urban transportation. Japan's political and commercial elite were becoming well aware of the railroad and its transformative effect on the United States and Europe,<sup>35</sup> and began thinking about importing the necessary technology (Hanes 2002, 15).

## **4.2 1870s and 1880s**

### *4.2.1 Early Railroad Policy*

In 1871, a group of wealthy industrialists and government officials arranged to import some track and an engine to Japan, along with a team of British and Scottish railroad engineers who were to set up the first line of track and train the first crop of Japanese railroad engineers (Paul H. Noguchi 1990, 20). The engineers chose Shinbashi,<sup>36</sup> a neighborhood on what would have been the southern fringe of the heavily urbanized area of the time, as the Tokyo terminus for the line to connect with Yokohama, an important city in its own right which also functioned then, as it does now, as the Kantō area's main port. Test runs began in June 1872 and the line opened officially in October. The government-owned railroad was an instant success and returned strong profits. National planners began charting routes throughout the country, especially a route to

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<sup>35</sup> The railroad was significant for very tangible reasons such as the ability to move people and freight faster over longer distances. In Japan, the railroad also became part of the process of nationalization (in its ability to bind the nation together) and modernization (as a symbol of progress). For many, these symbolic qualities were just as important as its tangible benefits. After its importation, the railroad was called one of the "Seven Standard Paraphernalia of Civilization and Enlightenment" (the others were: cameras, newspapers, the postal system, gaslights, industrial exhibitions and dirigibles) that would modernize Japan (Hanes 2002, 15).

<sup>36</sup> This is sometimes spelled Shimbashi.

connect Tokyo with Osaka, Kyoto, and Kobe in west-central Japan (Ericson 1996, 6). Meanwhile, Tokyo government officials began planning a new urban railroad network to expand farther into the heart of the city from Shinbashi (Eiichi Aoki et al. 2000, 81). Of course, expanding the railroad network on either the national or the urban scale would be an expensive proposition. Everything at this stage had to be imported from the West, even the people to run the engines and maintain the tracks. Starting in 1872, a portion of the national land tax was dedicated for railroad expansion, but this revenue source was inadequate. Meanwhile, tapping other sources for revenue for the railroads was difficult. The government was severely in debt from financing the myriad aspects of Japan's modernization, especially the military (Paul H. Noguchi 1990, 20).

In the mid-1870s, the Japanese government resorted to printing more money to finance both railroad expansion and other parts of the modernization effort. In time, this led to inflation and even higher borrowing costs for the necessary Western technology and expertise, but initially, the investment helped to increase total mileage: 18 miles in 1872 became 65 by 1878, 98 by 1880 and 171 by 1882 (Ericson 1996, 9). The railroads were entirely state-financed and operated, and were promoted by different interest groups for varied reasons. First, railroads were seen as a national economic modernization and growth lynchpin that would take Japan from a feudal society to a first-rate power. Second, railroads had great military support as the best way to move the troops and materiel of a modernized army. Third, rural commercial interests, small farmers and exporters saw the railroads as a way to lower transport costs and hasten transport times. Farmers in Ebara District, for example, would have seen great potential in the railroad for

solving the problem of high shipping costs to get their goods to Tokyo. Fourth, urban residents and the burgeoning working class saw the railroad, its affiliated industries and the economy it would help usher in as a path to better wages and a better life. Fifth, landowners everywhere were enthused by the government's purchase of land at favorable rates for expansion, and also hoped that railroad access would improve the value of land they still owned. In sum, railroads attracted political support from the Right and the Left, the modernizers and the traditionalists, farmers and industrial workers, who all saw the railroad as a means to achieve their vision of a Japan equal to the West in economic and military might (Hanes 2002, 55-56; Ericson 1996).

Support for railroad expansion was strong, but it was increasingly clear that government did not have the resources necessary to accomplish what many wanted to be done (Ericson 1996, 108-9). In the late 1870s and into the 1880s, the central question regarding railroad policy was: should the state should be directly involved by building lines itself as it had been doing, or should it foster and promote private railways to build the lines? As inflation continued and the treasury fell deeper into debt, the perspective favoring greater private investment became more popular. In 1881, the government approved a Special Charter approved for *Nippon Tetsudō* (or, Japan Railways), to operate a line from Tokyo to Aomori, a prefectural capital approximately 400 miles to the north. The terms were quite generous to the investors in the railway. The government guaranteed a return<sup>37</sup> of at least eight percent per year, starting from the moment

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<sup>37</sup> That is, they promised to make up the difference if the ventures returned less than that.

construction began, and for another ten years on the Tokyo to Sendai<sup>38</sup> portion of the line, and fifteen years on the Sendai to Aomori section. The Home Ministry took charge of purchasing and assembling the land, and lent it to the company for free. The government initially agreed to construct the line from Tokyo to Maebashi, a distance of about 60 miles, but later agreed to build the entire line from Tokyo to Aomori. The profits from railway operation were to be tax-free, as was any profit from any company-owned land (Ericson 1996, 11). It was, overall, an exceedingly good deal for the investors of *Nippon Tetsudō*, who had only to put up the initial capital and then manage the railroad. The line opened in 1883, and was, as expected, quite profitable (Eiichi Aoki et al. 2000, 11).

Masayoshi Matsukata, Finance Minister for much of the 1880s and later a two-time Prime Minister, was a key advocate for shifting railroad development towards the private sector. He had been influenced by the French experience of public-private cooperation and viewed the French example as the most appropriate for Japan, compared to the American approach of less regulated capital, and the Prussian approach of a stronger governmental role in the economy (Paul H. Noguchi 1990, 21; Ericson 1996, 108). Matsukata's support for more private investment was also for practical reasons: lax monetary policy and high amounts of government spending had led to terrible inflation. Beginning in 1881, Matsukata slashed government spending in an effort to get the economy under control (Yamamoto 1993, 45-9). The so-called "Matsukata Deflation" lasted until 1885 and was a watershed moment for the young Japanese economy. It caused severe distress to small farmers and the rural poor as commodities prices fell and

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<sup>38</sup> This is another prefectural capital, about three-quarters of the way from Tokyo to Aomori.

forced many small landowners to sell to larger landowners (Andrew Gordon 2003, 96). Unemployment in cities increased severely over the four years as businesses floundered, and more of the rural poor came to the cities to find work. The beneficiaries of the deflationary policies were the large merchant houses, such as Mitsui, Mitsubishi, Sumitomo, Yasuda and others,<sup>39</sup> who bought assets on the cheap and made loans to the government on favorable terms. The net effect of the deflationary period was a concentration of capital in private hands and a larger role for private interests in shaping the economy (Johnson 1982, 85).

#### 4.2.2 *The First Railway Boom*

The deflationary period succeeded in reigning in inflation and laid the groundwork for a stronger economy in the latter half of the 1880s. Private railway companies did especially well in this period, contributing to what Aoki et al. have called the “first railway boom” (Eiichi Aoki et al. 2000, 16). *Nippon Tetsudō* continued its success, and served as a model for other investors. Four others<sup>40</sup> roughly matched *Nippon Tetsudō* in extent and capitalization to create what was known as the “Big Five;” there were also scores of other smaller railroads throughout the country (Ericson 1996, 8-10). The table below shows the increase in length of railroad lines per year and the notable increase in private lines as a portion of the total:

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<sup>39</sup> In time, these merchant houses would become the *zaibatsu*: the family based conglomerates that have dominated Japanese capitalism for the past 130 years.

<sup>40</sup> The San’yo Railroad, running in western Honshū, the Kansai Railroad in the Osaka/Kyoto/Kobe area, the Kyūshū Railroad on the island of Kyūshū, and the Hokkaidō Colliery Railroad on Hokkaidō.

**Table 4.1: Total Length of Railway Lines, 1880-1890, in miles**

<b>YEAR</b>	<b>State Railroads</b>	<b>Private Railroads</b>	<b>Total Railroads</b>	<b>Private as % of Total</b>
1880	98	0	98	0%
1882	171	0	171	0%
1884	182	81	263	31%
1886	265	166	431	39%
1888	506	406	912	45%
1890	551	849	1400	61%
Source: Ericson 1996, 9				

Many railroads built in this period were long haul lines designed to connect major cities with each other or with important commercial or industrial regions. Steam engine technology necessitated long distances between stations, since so much energy was used to start and stop the train. High initial construction costs favored longer, more ambitious routes that would maximize the outlay for the engine, the iron for the tracks, and training engineers. Very few lines were built with urban passengers in mind, though a number of train lines did serve multiple stations in the larger Tokyo area. The Yamanote Line opened in 1885 to connect the silk producing areas of Gunma Prefecture (to the north of Tokyo) with the port at Yokohama. Along the way, it stopped at a small handful of stations in Tokyo and can be considered Tokyo's first intra-urban railway (Yamamoto 1993, 14). The Kōbu Railway opened in 1889 and connected another region devoted to

sericulture, Yamanashi Prefecture, to Tokyo, stopping at four stations in what are now Tokyo's western suburbs (Steiner 1957, 6).<sup>41</sup>

Funding for private railway ventures generally came from two types of sources (Eiichi Aoki et al. 2000, 20). The first was the large merchant houses that had amassed great wealth and political influence in the lean years of the Matsukata Deflation. Mitsui and Mitsubishi were especially active in railroad speculation, both as businesses in and of themselves, and to support their other businesses. The merchant houses had investments in practically every business venture in Japan; their basic strategy was to pursue horizontal integration by having subsidiaries support one another. Mitsubishi banks, for example, financed Mitsubishi private railroads, which then connected inland Mitsubishi factories for silk production or machine parts with Mitsubishi's shipyards and port facilities (Eiichi Aoki et al. 2000, 20; Johnson 1982). The second type was led by independent investors and entrepreneurs in larger cities, especially Osaka and Tokyo. Generally, the second group saw railways in speculative terms, and sought to make a quick fortune before moving onto the next project. These were not mutually exclusive categories: railroads were financed by a mix of large and small investors, practically all of whom made solid returns from 1885 until 1890 (Paul H. Noguchi 1990, 20).

Ericson cites three reasons for the private railway boom of this five-year span. First, there was an uptick in investment following the deflation. Savings had been encouraged by default as commodity prices and land prices fell for four years. When it looked that the bottom had been reached, there was a surge of investment to take

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<sup>41</sup> The Yamanote Line and the Kōbu Line, renamed in 1906 as the Chūō Line, are now two of the most popular lines in Tokyo's railway network.

advantage of the depressed prices. This applied to the railroads themselves, as well as the industrial and commercial firms who were their customers. Second, the price of stocks rose as the economy recovered. Public bonds were fixed at five percent, while stocks delivered higher rates, increasing the chance for a speculative gain, and increasing the capital positions of firms looking for long-term railroad investments. Third, the export sector prospered following the devaluation of the currency. This stimulated investment across the board, and brought back gold and silver needed to pay for the imported railroad technology (Ericson 1996, 115).

Another factor behind the profitability of private railroads was the on-going public support for private railroads. The deal that *Nippon Tetsudō* secured, in which they were guaranteed an eight percent return, received free land, and had only to manage a railroad planned and constructed by the government, was uniquely generous. It also established an expectation for public assistance for private enterprise in the railroad sector. Later private railways received terms similar to what *Nippon Tetsudō* received. These inducements took various forms: the Ministry of Finance offered direct subsidies to private railroads to induce expansion; all land used for railroads were exempted from taxes; and most importantly, the government helped private railroads acquire the land for their lines. Until 1889, when the Compulsory Land Purchase Law curtailed the practice by specifying the exact terms of purchase and the rights of original landowners, the government had free reign to seize any private land needed for a railroad project. The government compensated original landowners directly instead of the prospective railroad investors; prices were up to the government's discretion. The land was then leased (for

free) or gifted entirely to the private railways (Paul H. Noguchi 1990, 21; Ericson 1996, 108, 171). Between the subsidies, the promise of tax-exempt earnings on a large portion of their businesses, and invaluable help assembling land, private railway success was practically guaranteed.

By 1890, governmental efforts to encourage private railways proved to be almost too successful, and the private railway boom started to slow. The private railways were overbuilt in many areas, with too many lines competing for the same passengers and freight. Additionally, the macro-economic conditions that produced a robust economy after four constrained years could not last in the long run, as they were initially based on the depressed prices made possible by deflation. The Japanese economy as a whole suffered a recession in 1890; both operating profits and available credit for railroad expansion declined (Yamamoto 1993, 47). Moreover, expanding existing lines was made more difficult with the 1889 passage of the Compulsory Land Purchase Law, to end what landowners considered unfair support for railroads. All of these factors put a damper on the frenzy of the earlier 1880s. As the future of private railroads looked less appealing, the smaller, independent investors looking to make quick profits pulled out, hoping to sell their smaller railroads to larger investors (Paul H. Noguchi 1990, 21). The large investment consortia saw the benefits of an economy of scale, and began to buy out the smaller companies. In other cases, smaller railways were sold directly to the government, which added them to the national railway system (Ericson 1996, 179).

From the perspective of private capital, private railroads were no longer an attractive investment, but private railway investment did not stop altogether. The rate of

expansion slowed in the 1890s: 443 miles of private track were added between 1888 and 1890, and another 471 between 1890 and 1892, but only 217 between 1892 and 1894 and 338 between 1894 and 1896 (Ericson 1996, 9). From the perspective of a government still eager to see an expanded railroad network, the slow down was problematic, as was a second issue that had started to emerge in the boom period: the private railways were not well coordinated. Until 1887, there was no standardization of track gauge, track curvature, incline, or procedures for crossings and line sharing. Supporting private railways in the 1880s had been successful in promoting the absolute expansion of track length, but not for creating a nationally integrated system. The whole did not equal the sum of the parts. The first attempt to standardize railways came in 1887 with the Private Railway Ordinance, though the new standards were loosely written and applied only to new companies. It allowed companies already in operation to use the same technologies and procedures they were already using, and so had little impact (Yamamoto 1993, 14; Eiichi Aoki et al. 2000, 16).

The question in the 1870s regarding railroads had been whether they would be a public venture, be left to the private sector, or become a mixture of the two. The 1880s showed the answer to be a mix of private and public. Faced with the private investment slowdown as well as the problem of standardization, the pendulum began to swing towards more governmental control in the early 1890s. The new director of the Railway Bureau, Masaru Inoue, advocated for a more significant governmental role in railroad construction, and for government takeover of existing private railway lines. Advocates of this position noted that the public railways built during the 1880s, though just one-quarter

the total length of private railways during the same period, accounted for some of the most profitable lines, and could form the backbone of a truly national railroad network (Yamamoto 1993, 47-8; Paul H. Noguchi 1990, 21-3).

Inoue introduced two bills that together would have amounted to nationalization. His actions were opposed by private industry, especially the large merchant houses (Mitsui, Mitsubishi, et al.), and their supporters in the Diet. They proposed their own, more modest bill that called for more oversight, but no takeover of private lines. The railroad policy reform process in the Diet stalled as the two sides tried to reach a compromise. In the end, a middle ground was reached in the form of the Railroad Construction Law of 1892. This Law fell well short of nationalization, but did allow the government more oversight of the railway network. The Law included an approval system to ensure railway development in accordance with state interests: an integrated national network with emphasis on connecting major cities, important ports and key industrial regions, including the coalfields of Kyūshū and Hokkaidō<sup>42</sup> (Yamamoto 1993, 47). Interestingly, government subsidies for private lines and other inducements not only continued, but were increased, and private ownership of the lines was not threatened (Eiichi Aoki et al. 2000, 16-20).

#### 4.2.3 *Planning a New Tokyo*

Developing a national railway system was an important part of the plan to modernize and Westernize Japan, dubbed *bunmei kaika* or “civilization and

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<sup>42</sup> In practice, the selection of lines was a matter of back room Diet politics, as representatives from all over the country sought to have rail lines in their home regions built first (Yamamoto 1993, 47).

enlightenment,” by Japanese elites. Another, intertwined aspect of modernization was transforming Tokyo from its Edo inheritance to a modern capital city like those of the West. This was a key concern of Japanese political elites during the 1880s, after the initial issues of Japan’s political transformation had been settled. Old Edo’s urban form was determined by the commands of the military rulers who ruled it: housing areas were segregated by social class and by relationship to the *Shogun*, the industries in and around the city were those that had received his approval, and the basic shape of the city was as a military outpost, centered on Edo Castle.

Those who envisioned Tokyo as the modern capital of a modern Japan faced myriad challenges, especially to reduce the risk of fire, to improve the water supply, and to reconfigure and upgrade the street and road network (Sorensen 2002, 61). Fire had been a chief concern since the Edo period, given the wooden architecture and cramped quarters, and a devastating 1872 fire that destroyed 3,000 buildings across 85 hectares kept the threat fresh in people’s minds. Clean water became a priority after recent European discoveries about water-borne diseases such as cholera. The need to transform the transportation network in and through Tokyo became clear as new transportation technologies were introduced to the city. Edo had been suitable for transportation by foot, carriage, or horse, but was not suitable for the evolving train network or other types of inter- and intra-urban transport. Roads and streets were almost completely unpaved. Developed more or less organically save for the few main thoroughfares designated by the *Shogun*, they were almost always narrow and poorly constructed (Sorensen 2002, 61-8).

Pursuit of these goals was complicated by intense population growth throughout the 1880s. In 1880, the population was 957,000, but by 1890 it had climbed 60% to over 1.53 million (Yamamoto 1993, 26). Newcomers were drawn to Tokyo partly for employment opportunities and also to escape horrible rural poverty. They settled in already dense residential areas, such as those to the immediate east of the Imperial Palace. The poorest of the poor generally settled even further east in the marshy area between the two rivers in eastern Tokyo. There was some outward pressure on the urban fringes to the north, west and southwest, but this was not so pressing a concern as crowdedness in the core. The arrival of more and more people every year frustrated the wishes of municipal and national leaders for a rebirth of Tokyo (Sorensen 2002, 80; Ishida 1987).

In the 1880s, municipal administrators, working alongside national politicians and bureaucrats for whom Tokyo's modernization was an important national concern, enacted a series of laws and ordinances for urban improvement. After another devastating fire in 1881 destroyed more than 10,000 buildings in central Tokyo, the governor of Tokyo prefecture enacted a building code mandating the creation of 22 firebreaks within the central district, and that all buildings in the central district be upgraded to tile roofs within seven years (Shun-ichi Watanabe 1984, 408; Sorensen 2002, 65). Next, improvements to the water and road systems were introduced in the form of the Tokyo City Improvement Ordinance (TCIO), passed after much debate in August of 1888 (Ishida 1987, 64).<sup>43</sup> The TCIO provided for the "rearrangement of the city streets in view of the permanent

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<sup>43</sup> The TCIO was originally rejected by the Privy Council, the pre-democratic oligarchy that had functional legislative authority, but Finance Minister Matsukata intervened and submitted directly to the Cabinet for approval, where it passed.

advantages to be gained in the municipal administration of commerce, public health, fire prevention, and transportation throughout the entire urban area” (Yazaki 1968, 355; Sorensen 2002, 67). Specifically, the TCIO called for the creation of a freshwater supply system and other waterworks projects to improve sanitation. In terms of transportation, the TCIO authorized the construction or improvement of 315 streets within Tokyo’s central district. It also authorized the extension of the original train line that connected Shinbashi southward to Yokohama and northward with Ueno,<sup>44</sup> and proposed the construction of a new Tokyo Station in between Ueno and Shinbashi as the hub for Tokyo’s, and by extension Japan’s, railway network (Shun-ichi Watanabe 1984, 411).

#### *4.2.4 Improving Intra-Urban Transit*

The TCIO was modestly funded at first and made its greatest impact only after the turn of the century with increased funding. However, even in the first few years after passage, the TCIO significantly influenced Tokyo’s transportation geography. The TCIO enabled municipal authorities to widen and straighten particular streets, and TCIO planners focused specifically on streets important for either railroad lines or for smaller modes of intra-urban rail transit: first, the horsecar, a carriage on rails pulled by a team of horses, and later the electric tram. To implement these railroad network improvements, the TCIO funded the purchase of individual properties, and construction. A similar process expanded the network of horsecar lines, the first in 1882 connected Shinbashi with Ueno and other major points in the central district. The owner of this line, Tokyo

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<sup>44</sup> Ueno was the terminus for long-distance trains heading north. Early transportation officials were aware of the inefficient train network in cities like Paris and London at that time, where a handful of stations served as terminals for lines radiating from the city in different directions, and wanted to avoid this predicament.

Horse Tramway, was privately held and very profitable, but had trouble expanding due to constricted streets. The TCIO provided funds to widen and straighten streets for improved horsecar traffic (Makoto Aoki 2002b, 43-5). Rail length increased following the passage of the TCIO in 1888, and by the early 1890s, horsecars were a common sight on many Tokyo streets (Wakuda 1981, 17-21; Makoto Aoki 2002b, 44). Horsecar companies were not the only beneficiaries of street improvement, nor was the passage of the TCIO the sole reason why these horsecar lines proliferated. But increased profitability and expansion of these private interests certainly owed a great deal to the government's help preparing many of their routes.

The heyday of the horsecars in Tokyo was the late 1880s into the early 1890s, following the implementation of the TCIO, but prior to the introduction of electric trams. The highest concentration of horsecar lines was in the dense commercial areas to the east of the palace, and then southward to connect with points of interest like Shinbashi station and Tsukiji, the foreign settlement at the time (Makoto Aoki 2002b, 45). Travel was slow and few of the lines spanned more than a few kilometers. They mainly carried short-haul passengers looking for a lift within the already built-up area and were not a realistic option for long distance commuting (Harada and Eiichi Aoki 1973, 40-42; Wakuda 1981, 17-21). This made them similar to the steam engine railroads, which had stations placed far apart to avoid the inefficiencies of starting and stopping steam engines and infrequent service. For example, the Kobu Line ran only four trains a day in each direction. These were primarily freight lines, especially for transporting silk from the inland factories to

the port for export, which occasionally carried passenger traffic (Eiichi Aoki et al. 2000, 45).

Nevertheless, the 1880s transportation system of steam railways and horsecars was a crucial prelude for the age of suburban railways. First, many of the downtown lines initially laid out for both steam railways and horsecars still survive as intra-city train lines. Once the right-of-way was established for one form of rail-based transit, upgrading to a more suitable or advanced form was not difficult. The crucial work of buying advantageous properties, widening and straightening streets was easier to do in the 1870s than in the 1880s, and easier than it would be in the 1890s, and so on. Early commitment to rail in Tokyo was important for the city's later evolution. Second, the development of the intra-urban rail network, for both steam engines and horsecars, brought together two types of institutional support for privately owned urban transit, a combination crucial to later forms of intra-urban transit. At the national level, financial support from the Finance Ministry and the Home Ministry helped make private railways viable. Direct subsidies of course played a major role, but just as important was the governmental land purchase on their behalf, and exempting railroad-owned land from taxation. At a regional level, the TCIO established a pattern of local government assisting private railway interests, as well. The TCIO was invaluable in providing the conditions for privately owned mass transit to succeed first in downtown Tokyo and, subsequently, in the larger metropolis.

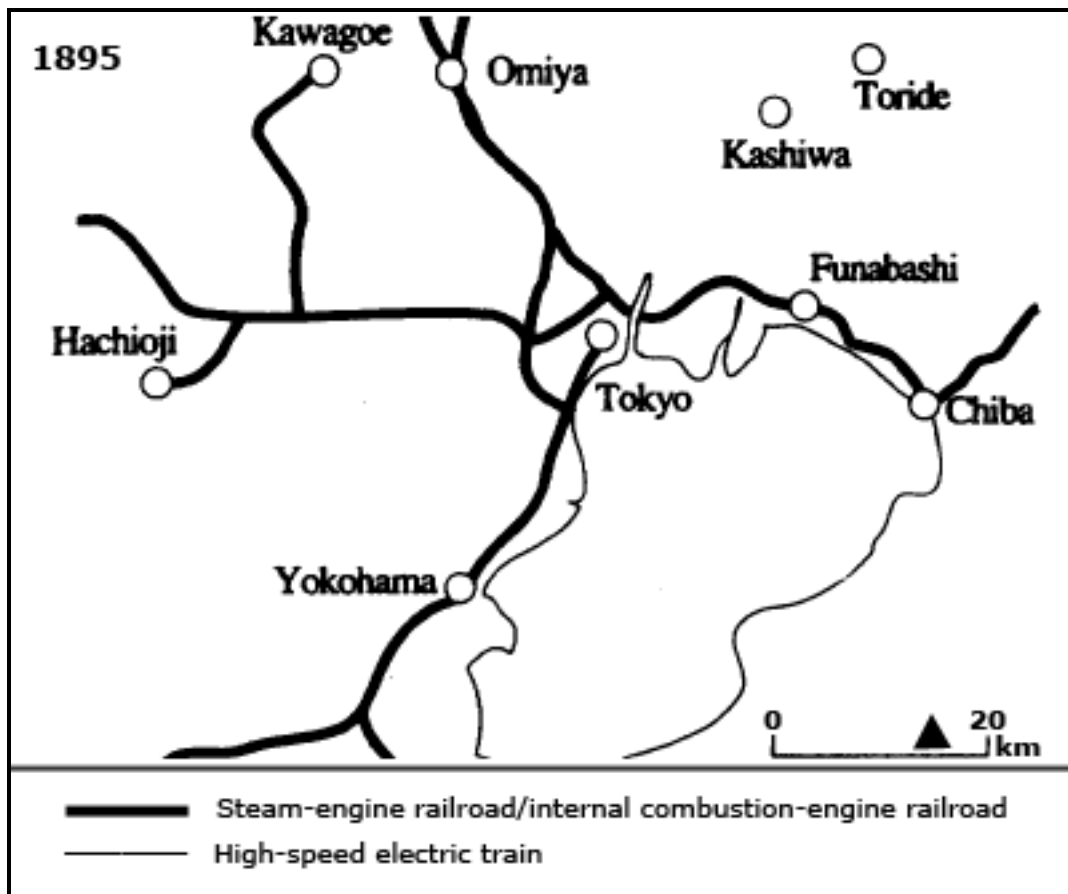
## 4.3 1890s

### 4.3.1 *The Second Railway Boom*

Following the first slowdown in railway construction around 1890 and the passage of the Railway Construction Law in 1892, railroads once again entered an expansion cycle, which lasted until about 1900. Aoki, et al. attribute the boom to a natural rebound after the bust, mirroring the experience of the Japanese economy as a whole, as well as to the victorious end to the Sino-Japanese War of 1894-1895 (Eiichi Aoki et al. 2000, 20). The most notable increase was of branch lines attached to the main trunk lines established about a decade earlier in the first round of railroad expansion (Yamamoto 1993, 48). The number of separate private railway companies also increased in the 1890s, following the recent period of consolidation. The 13 existing companies of 1893 had grown to 37, by 1906 even though many companies merged with one another (Eiichi Aoki et al. 2000, 20-1). Among the many new companies were ones with stations in and around Tokyo. These included the Kawagoe Railway, opened in 1894 to connect Tokyo with the namesake city about 25 miles to the northwest, and the Tōbu Railway, which in 1899 linked Tokyo with Kuki, a provincial town in Saitama prefecture about 30 miles north (Eiichi Aoki et al. 2000, 84).<sup>45</sup>

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<sup>45</sup> These two company lines are especially significant because of what they would become. The Kawagoe Railway was the first ancestor to the Seibu Railway Group, one of Tokyo's "Big Five" private railway companies and which dominates the northwest suburbs. Tōbu, another of Tokyo's "Big Five" is the largest private railway by total track length and dominates eastern and northeastern Tokyo (Wakuda 1981; Eiichi Aoki et al. 2000).



**Figure 4.1: Railways in Tokyo 1895 (adapted from Yamamoto 1993, 119)**

The total railway network length, from both private and public railways, increased 175% from 1890 to 1900; most was attributable to the three-fold expansion of private railways. Profits from owning and operating railroads increased as well. Subsidies had been crucial to helping private railway companies survive the downturn, and continued even as the economic situation improved. Both small and large companies received subsidies, though Ericson notes that the largest and most profitable companies (before factoring in the subsidies) benefitted disproportionately (Ericson 1996, 174-8). By 1896, private railroads or private companies with railroads, such as the Hokkaidō Colliery and Railway, accounted for seven of Japan's ten largest joint stock companies, and as a

group, private railway companies represented over one-fourth of the total capital in all Japanese joint stock companies (Ericson 1989, 51).

**Table 4.2: Total Length of Railway Lines, 1890-1900, in miles**

<b>YEAR</b>	<b>State Railroads</b>	<b>Private Railroads</b>	<b>Total Railroads</b>	<b>Private as % of Total</b>
1890	551	849	1400	61%
1892	551	1320	1871	71%
1894	581	1537	2118	73%
1896	632	1875	2507	75%
1898	768	2652	3420	78%
1900	950	2905	3855	75%
Source: Ericson 1996, 9				

A new possibility for intra-urban transit debuted around this time. Based on technology borrowed and purchased from the United States, the newly formed Tokyo Electric Light Company built a 400-meter electric railroad track at the 1890 Third Industrial Exhibition in Japan. Originally intended to publicize the power and versatility of electric power generation, not to show off a new transportation form, the railway became the star of the exhibition (Kobayashi 2005, 62). Mass implementation of the technology was still some years off, however, as the 1890s power generation potential did not exceed that of the existing intra-urban transportation power source, the horse. Only one electric railway was built immediately after the exhibition, the Kyoto Electric Railway, which opened in February 1895 (Wakuda 1981, 57). In Tokyo, several companies formed and sought approval for construction from the government: the Tokyo

Electric Tramway, the Tokyo City Tramway and the Tokyo Electric Railway, though actual construction of lines was still years away (Makoto Aoki 2002b, 44). The model established at the Industrial Exhibition, a power company that also ran an electric tram, typified electric railways in the early years. The primary business of the Tokyo Electric Light Company, for example, was electric power for commercial and industrial use; its Tokyo Electric Tramway was only a minor subsidiary (Kobayashi 2001, 28).

The approval process for Tokyo's electric railway companies was very slow. Resistance came from horsecar companies which quite rightly saw the electric tram as competition and from municipal bureaucrats unwilling to disrupt the extensive horsecar system before the electric railway technology was fully developed and ready to replace it (Wakuda 1981, 63). Construction approval was finally granted to the three companies in 1902 and the first electric tram service in Tokyo began in 1903 (Eiichi Aoki et al. 2000, 24). In many cases, the electric tramways bought out horsecar lines, replaced the track with a wider gauge, and ran the same routes (Harada and Eiichi Aoki 1973, 49). When they finally opened, they were clearly superior to the horsecars for distance and speed. Their top speed was around 20 miles per hour and average speeds were around 10 miles per hour (Sorensen 2002, 74).

#### *4.3.2 New Ideas for Setagaya*

In 1895, a group of landowners and business owners from Setagaya village in the north-central area of Ebara district applied to the prefectural government for a permit to open a small electric power generator for local use, and for an electric tram to serve the area. The company was to be called the Tamagawa Electric Railway (*Tamagawa Denki*

*Tetsudō*, also known as *Tamaden*). The proposed route started at Shibuya, now one of Tokyo's main shopping districts, but then merely an isolated way station on Tokyo's southwestern edge. The Tamaden was then to proceed southwest through the northern half of the Ebara District and end at the Tama River (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 41). A second company applied for a license a few months later to run a route in roughly the same area, though on different streets. The second line, the Tamagawa Gravel Electric Railway, was sponsored by a local company using electric power to produce gravel from river rock. Debate ensued about which company would get the license; both could not be approved since they shared a section of the route. In the end, the two ownership groups reached a compromise that brought investors of the second railway into the fold as co-owners of the first, and the business operations and route of the first company were approved in 1902 (Setagaya Ward 1976). The line opened in 1905.

The initial proposal to build the line came in the midst of significant changes to the Setagaya area in the 1890s. In 1891, the 1<sup>st</sup> Cavalry Division of the Imperial Army transferred to Setagaya from barracks near the Imperial Palace, bringing hundreds of soldiers, plus supporting staff and families, to the area. The barracks and training grounds were located practically adjacent to the road targeted for the electric tramway. The Cavalry Division's move was then followed by other military installations, including a large military hospital. The arrival of thousands of soldiers, military staff and their families, and then the multiplier effects of increases in local businesses and exchanges of real estate for multiple purposes, would transform the area and marked the first real departure from the former dedication to agriculture. The official municipal history of

Setagaya Ward, for example, marks the 1<sup>st</sup> Cavalry's arrival as the beginning of modern Setagaya (Setagaya Ward Historical Committee 1993). It was not instantaneous, however, as most of the initial development clustered around the particular military facilities and the main road, while areas farther away were still almost exclusively farms. Setagaya was also becoming the center for the burgeoning field of agricultural science with Japan's first agricultural school founded there in 1893. The school attracted students from all over the country. Its impact was not quite on the scale of the military's arrival, but the school brought new residents and spurred further local economic development (Setagaya Ward 1976).

#### *4.3.3 Pressure on the Urban Fringes*

Setagaya's growth in the 1890s was common to agricultural areas just outside the built up area of Tokyo. Throughout the region, small villages, anywhere from about 10 to 30 kilometers away from the city center (the Imperial Palace), underwent significant change as Tokyo's urban boundaries pressed outwards. The sheer population growth of Tokyo Prefecture as a whole was one factor. The population almost doubled in the span of thirteen years, from 1.02 million in 1884 to 1.94 million in 1897 (Tokyo Prefectural Statistics Bureau 2006). About 90% of Tokyo Prefecture's population was in the urban core and as more and more people arrived from the countryside and other smaller cities to look for work, the settled areas pushed outward (Andrew Gordon 2003, 96). Industries also looked towards the urban periphery for expansion, for cheaper land and places with better infrastructure, especially water resources, to support their activities (Sorensen 2002, 147). Finally, the extending city boundaries were facilitated by evolving

transportation technologies. Indeed, transportation access was the crucial factor distinguishing which places on the periphery grew and which did not. In western Tokyo for example, Kichijōji village and Sakai village, 15 and 18 kilometers from the Palace, respectively, grew quickly into towns following the construction of the Kōbu Line in the late 1890s (Steiner 1957, 6). Both had been nondescript agricultural areas like Setagaya; they only blossomed when they became stops along Tokyo's most popular rail line (Allinson 1979, 31).

Transforming rural land into more densely settled areas was difficult and inefficient until the late 1890s. Although the Meiji government made great progress in its goal to record the country's property ownership and to create accurate cadastral maps for taxation, the system of records inherited from the Edo period was still chaotic. Until 1868, local rulers owned large swaths of land. Individual peasants' land rights were traditionally determined by rope-based measurements from landmarks or other holdings (Shun-ichi Watanabe 1980, 135). Converting these to accurate property records was laborious, and became progressively more difficult as individual claims got smaller. Without property records, purchases and sales were inefficient, requiring much legal wrangling to determine who exactly owned what, and who had the right to sell it. A second obstacle for real estate development was the absence of a legal way to deal with holdouts in assembling larger parcels. Land rights for average people were significantly strengthened by the Meiji land reforms. Consequently, the state's power to compel transfer was weak, but for the crucial exception where land was needed for a rail line. After passage of the 1889 Compulsory Land Purchase Law, which limited this use of

eminent domain, the state was left with very little power to seize land (Hanayama 1986, 20-1).

In time, the Arable Land Readjustment Law of 1899 would address the problem of inaccurate property records and the Eminent Domain Law of 1900 would “solve” the issue of holdouts from the developers’ and railway companies’ points of view. But in the 1890s there were public policy limitations on possible suburban development, as well as transportation limitations. The need to keep steam railroad stations adequately spaced from one another caused strong growth around station nodes, such as at Sakai or Kichijōji, but left large agricultural lands in between those concentrations. The slow speed of horsecars meant that routes were fairly short, and only really suited for short haul rides in already dense places. In the 1890s, electric trains had been introduced and were moving toward wide implementation, but still were modest in number. Places like Setagaya, too far for horsecar travel but not served by any heavy rail line, were years away from becoming a part of Tokyo’s urban fabric. Setagaya’s population, 17,124 as of 1873, had grown to 26,621 by 1898, reflecting the arrival of the 1<sup>st</sup> Cavalry. But it paled in comparison with the population growth of Tokyo Prefecture as a whole, which roughly tripled over the same period (Tokyo Prefectural Statistics Bureau 2006).<sup>46</sup> Despite all the motivations for suburbanization by the 1890s, improved transportation technology, urban growth and industrial relocation, actual results were still quite modest.

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<sup>46</sup> This is a very rough estimate, since the earliest figures for Tokyo Prefecture are from 1877, when the population was listed at 877,027. By 1898, the population was 1,877,412 (Tokyo Prefectural Statistics Bureau 2006).

## 4.4 1900s

### 4.4.1 *Economic Volatility*

Two major financial panics, one lasting from 1897 to 1898 and the other from late 1900 through 1901, struck Japan as the modern metropolis was beginning to take shape. These came in the wake of the Sino-Japanese War of 1894-1895, ultimately victorious for Japan, but which involved such huge military funding outlays that it essentially bankrupted the country. A switch to the gold standard in 1897 was a strong long-term move for restoring the Japanese currency and encouraging foreign investment, but disastrous in the short run, producing bank runs, bankruptcies, and much social unrest (Andrew Gordon 2003, 118-35). The panics had a particular impact on the railroad industry. Existing lines of credit to railroads were halted, recalled prematurely, or had rates increased as passenger and freight business declined in the economic slowdown. New construction by private railways slowed sharply around the turn of the century: just 106 miles of track were built from 1900 to 1902, compared to almost 800 from 1896 to 1898 (Ericson 1996, 9). In addition, the railroad bust around 1900 effected a reorganization of the private railroad industry. Many smaller companies went bankrupt or were bought out at fire sale prices by larger companies taking advantage of the downturn to expand their networks. The result was a railroad industry dominated by a handful of large companies: in 1897 there were 66 separate private railways; by 1904 there were only 39. Among these, the five largest accounted for roughly two-thirds of total track length (Ericson 1996, 319).

The 1900 bust was the latest low period in the volatile early history of Japan's railroad development. The initial 1870s boom was followed by the devastating early 1880s downturn created by the Matsukata Deflation. The great recovery in the late 1880s produced the second boom, but led to new problems starting in 1898. This pattern vexed national policymakers who saw a complete and expansive railroad network as integral to the nation's economic, political and militaristic development. Investors lost out when broader economic crises at the national level sank railroads and credit dried up (Wakuda 1981, 42). After the second major bust, a long-standing push for nationalization among certain parts of the Railway Bureau and the Meiji government gained support among private interests as well. Some aspects of nationalization had already been partially achieved by the 1892 Railway Construction Law, which subjected railroads to increased scrutiny and made them conform to national railroad development plans, but also provided operational subsidies. Throughout the 1890s, there were consistent calls for complete state takeover of the railroads, as in Prussia and France, though these were resisted as long as private railroads were doing well. Actually, during economic good times, there was positive momentum in the opposite direction of selling off public railways to private investors. With the downturn, however, investors in and owners of small railway companies were more receptive to arguments for nationalization, since state purchase would likely mean higher returns than selling out desperately to their larger rivals (Ericson 1996, 242). As expected, those with an interest in the larger companies resisted nationalization quite forcefully, especially now that the larger companies managed to expand their networks at the expense of the smaller companies.

**Table 4.3: Total Length of Railway Lines, 1898-1905, in miles**

<b>YEAR</b>	<b>State Railroads</b>	<b>Private Railroads</b>	<b>Total Railroads</b>	<b>Private as % of Total</b>
1898	768	2652	3420	77.5
1900	950	2905	3855	75.4
1902	1227	3011	4238	71.0
1904	1461	3232	4693	68.9
1905	1532	3251	4783	68.0

Source: Ericson 1996, 9

The Japanese economy recovered somewhat after the 1901 financial panic, leading to a very modest recovery of the private railroad business around 1902. But consolidation continued, and the industry became further polarized between a few successful large lines and a greater number of struggling smaller lines. Throughout the downturn for private railroads, state railroad construction continued and a number of public lines, e.g. those connecting the major cities of Tokyo, Nagoya, and Osaka, were very profitable. Public railways increased their share of the total railroad mileage after almost twenty years of losing ground to private railways.

#### 4.4.2 *Railway Nationalization*

With public lines succeeding, and private lines mostly failing, it was easier to argue that the government should take on even more responsibility over railroads. The battle over nationalization, stretching back to the early 1870s start of the railroad in Japan, had always reflected the difference between those who saw the railroad primarily as a business venture and those who saw it as a matter of national interest. The balance began to tilt in favor of the statist as more and more owners and investors lost money and saw nationalization as a way to salvage their capital (Ericson 1996, 242). The makeup of the Diet at the time meant that neither side could dominate the debate, so the years from about 1902-1906 were spent trying to hammer out compromises about the details of nationalization: Would all lines be nationalized or just some? How much compensation would private companies receive in return? Was private railway investment possible in the future?

The Railway Nationalization Law passed in late 1906. It authorized ownership transfer to the Japanese National Railways of seventeen private railway companies, including the five largest. The Law transferred 2,812 miles of track, and left the state controlling 91% of Japanese railways (Eiichi Aoki et al. 2000, 40). It left the door open to nationalization of the remaining twenty or so private companies once the first round of purchases was completed, but also left room for future private railway investment (Saito 1997, 3). In considering which companies to nationalize, the Railway Bureau targeted long-haul lines capable of forming the skeleton of the national network that could be joined to the already existing system of public lines. The Law proposed a scheme of

publically owned, long-haul trunk lines supplemented by short-haul feeder lines, and intra-urban railways that would remain private and protected from future nationalization. The purchase price for the national treasury was 471 million yen, and was paid in government bonds that guaranteed five percent interest. The payment came on the heels of huge public outlays for the Russo-Japanese War of 1904-1905, leaving the treasury once again fiscally wrecked (Andrew Gordon 2003, 128-31).

The title, “the Railway Nationalization Law,” is somewhat misleading, however, as the final version is as notable for the protection of private interests as for their usurpation. For example, the purchase amount was extremely generous. Ericson compared the listed stock prices of the nationalized companies on the eve of nationalization, and found that all stocks could have been had on the open market for 217.6 million yen. Furthermore, there was not purchase consistency: some railroads received more favorable conditions than others. Not surprisingly, the investors of the five largest companies extracted the best deals, while the smaller railways among the seventeen typically were paid what their companies were worth. For example, the 28-mile long Kōbu line, worth 2.7 million yen in stock, was bought for 14.6 million yen in bonds, or a ratio of 5.5 to 1 (Ericson 1996, 359-61).

The payment method was also a boon to investors whose interests had been nationalized. The swap exchanged company stock, an inherently more risk-laden investment, for government bonds backed by the full faith and credit of the Japanese government. Treasury bonds were especially valued by foreign investors who, in the event of a sector-wide crisis, would have had little hope of liquidating the physical

collateral (the rails, rolling stock, etc.). Once the investors received government bonds, however, their ability to borrow improved both domestically and internationally since they could now put up government securities as collateral (Sato 1990, 14-6).

The railway nationalization thus produced a favorable set of conditions for investment in intra-urban railways. Investors of since-nationalized private railways had typically doubled their initial investment, and also now had solid, transparent and attractive collateral, national treasury bonds, to offer in exchange for credit. Furthermore, the limits of nationalization had mostly been set, as the national government declared its intention to take over parts of the railroad business but leave others alone. The policy directed railway investors towards the burgeoning light railway and electric tram industries (Ericson 1996, 362-3). One such, Keijiro Amenomiya, a major investor in the Kōbu Railway and the Hokkaidō Colliery Railway, reinvested in light railways in several Japanese cities and created the Greater Japan Tramway Corporation in 1908. Eventually, this business interest would evolve into the still extant Keihin Electric Railway, a suburban railway connecting Tokyo and Yokohama, as well as one of Japan's leading manufacturers of rail cars. In another case, the directors of the nationalized Hankoku Railway in the Osaka area used their capital to create a new local intra-urban railway, the Minō-Arima Electric Railway Company. This company has since evolved into the Hankyū Electric Railway Company, one of the largest railway conglomerates in Japan (Takechi 1986, 103-8).

#### *4.4.3 Tokyo in the 1900s*

Public policy changes in land rights, and the power of governments to obtain private land for public use, also shaped the future of intra-urban railway development and concurrent suburban growth. As noted, advocates of urban growth and modernization faced two important obstacles. First, the power of local and national government to appropriate private land for public use was quite minimal, especially after the Compulsory Land Purchase Law of 1889. Second, the property rights system up through the 1890s still reflected its Edo-era past in being confusing and inefficient. This was especially true in rural areas, and most acutely a problem where urban and rural land uses met. The Tokyo Municipal Government after 1889 had great ambitions to modernize and expand the city, but its ability to accomplish these aims was weak.

The mission of the 1900 Eminent Domain Law was to strengthen the powers of public expropriation. This Law allowed a wide range of governmental bodies (national, of course, but also municipal governments) to designate any area of the country as vital for a public project. The request would then be sent to a review board, the Expropriation Examination Committee, for approval and a judgment on compensation due to the “seller.” The Committee itself was made up of wealthy and well-connected citizens appointed by the Home Ministry, and it was protected from legislative or judicial interference or oversight. Obviously, the system was ripe for corruption, and that is exactly what ensued. According to Hanayama, almost all claims were approved; the decision-making processes were thoroughly and systematically corrupt, as committee members approved land claims that would benefit themselves. In addition, compensation

awards were extremely low, enabling the government to go on a virtual shopping spree after its passage (Hanayama 1986, 37-9).

The Arable Land Readjustment Law of 1899 addressed the second land policy obstacle. It mandated eliminating the hitherto-standard rope-based measurement system in favor of modern surveying and recording techniques (Sorensen 2002, 110). Municipal governments were required to create and maintain detailed cadastral records and maps, as well as adjudicate competing land claims. The Law also allowed land readjustment exchanges, where individual landowners would pool their lands together and designate areas for a road or a waterworks expansion, which would then be built by local governments. Landowners gave up some land in exchange for public improvements, which in turn made their remaining lands more valuable.<sup>47</sup> This Law was designed primarily to address the problems of rural land ownership, as well as stimulate land improvements in those areas. It had this effect, but its greatest impact was on the urban/rural border, where high-priced land sales could be accomplished if property records could be rationalized, and roads and sewers built. Watanabe writes that the Law was intended to modernize the agricultural sector, but its greatest significance was to enable the transformation of agricultural land to residential land on the urban fringes (Shun-ichi Watanabe 1980, 135).

Tokyo municipal authorities thus had two new tools to accelerate the city's development after 1900. In addition, the Tokyo Capital Improvement Ordinance, originally passed in 1888, entered its second stage and provided another boost to the

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<sup>47</sup> This system also had a method for dealing with holdouts, as only a certain percentage (varied, but usually around two-thirds) of the land owners in an area had to agree to undertake a land readjustment project for it to take place.

city's expansion of urban transit. In the first stage, from passage until 1899, municipal planners concentrated on establishing the water supply system, and funds available for all projects were modest. The second stage, from 1900 until 1910, saw a significant increase in funds available for TCIO projects, as well as a shifted focus on urban transportation. Projects in the first stage of the TCIO amounted to 9,851,600 yen: water supply improvement projects consumed 66% while road improvement and bridge construction projects accounted for 31%.<sup>48</sup> In the second stage, the total funds more than doubled to 19,620,000 yen, with the proportion of road and bridge projects climbing to 80% and water supply funding dropping to 9% (Ishida 1987, 85; Sorensen 2002, 72). While first stage road projects were a mix of upgraded major roads and improvements to minor ones to rationalize especially important parts of the city (i.e. the area around the Imperial Palace and the high-traffic commercial areas of Ginza and Nihonbashi), second stage road projects focused on building main arterials for horsecars and electric trams. Planners prioritized these over smaller-scale projects such as grading, repair, or improving minor streets (Sorensen 2002, 72-3).

Expanded governmental powers and funds arrived during a period of tremendous population growth, as well as industrial and economic transformation in Tokyo. The population of the prefecture increased by about 3.5% every year between 1898 and 1910, rising to 2.87 million from 1.88 million in that time period (Tokyo Prefectural Statistics Bureau 2006). Industrialization and the presence of increasingly better-paid factory jobs, especially in the years before and during the Russo-Japanese War, was the main catalyst

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<sup>48</sup> Other types of projects included river and canal improvements, parks, drainage ditches and, starting in 1911, sewer system installation.

for the demographic influx. Factories sprang up in Tokyo's eastern section as well as along Tokyo Bay to the southwest of the city, creating dense districts of working-class apartments near the factories and helping to expand the total urban area (Yamamoto 1993, 117-8; Tokyo Metropolitan Government 2008).

Like other industrial cities of the period elsewhere in the world, living conditions in Tokyo, Yokohama, Osaka, and other major cities were deplorable. As in other countries, a small but influential Progressive Movement formed to tackle the "urban problem" of dense, dangerous, and dark slums that contradicted the hopes that industrialization would lead to an era of civilization and enlightenment for Japanese society. Photo essays of downtown slum areas, evocative of the works of Jacob Riis in New York, became popular and helped stir sentiment for urban reform. A particular target for the Progressives and their sympathizers was the *nagaya*, literally translated as long house but more akin to wooden row houses, which garnered a reputation as a breeding ground for personal vice, public danger, and social unrest. Originally constructed by factory owners, *nagaya* provided short-term housing for labor migrants located just beyond the factory's gates, but by the 1910s, *nagaya* seemed to form whole neighborhoods or even mini-cities within the city. The Urban Reform Association, led by Hajime Seki, who would later become mayor of Osaka and who is now generally regarded as the most important figure of Japan's Progressive movement, led the fight for housing reform and the reformation of the *nagaya* and their inhabitants (Hanes 2002, 164-187).

The Urban Reform Association goals were manifold. They promoted social goals like workers' and tenants' rights, poor relief, and better education. They were also at the forefront of numerous urban planning initiatives, including more government spending on sanitation, introducing zoning to separate industrial and residential uses, the creation of public parks and other recreation spots in dense urban areas, and importantly, creating high-quality working-class housing to replace the *nagaya* districts (Hanes 2002, 206). Seki and others argued that new residential areas, with parks, lower densities, and separated from noxious uses, should be created anew outside of the existing urban core, i.e. in the suburbs. That these aims are redolent of Progressive thought in the United States, Britain, and elsewhere in Europe a few decades earlier should not be surprising. Japanese Progressives were indeed influenced by social and urban policy reforms that had been and were being introduced in those countries, and some government officials had read Ebenezer Howard's treatise on the Garden City,<sup>49</sup> which had been translated into Japanese in 1907 (Oshima 1996, 41). Interestingly, Seki and fellow Progressives' drive to tear down or at least reform the *nagaya* and relocate working and middle class housing was by and large shared by their usual political opponents: conservatives, factory owners, and commercial elites. Factories were having difficulty expanding, as neighborhoods around factories grew larger and denser. The residents of a particular working-class area, only a portion of whom worked for the particular factory that first built the *nagaya*, were in their eyes a noisome and meddlesome mass, too given to protest (Hanes 2002).

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<sup>49</sup> The Japanese translation of "Garden City" is *Denentoshi*, which translates roughly as Field Garden City. The name would become very important as it was the name given to the first major suburban planned development. Even today, *Denentoshi* is a common name for generally up-scale planned housing, whether in cities or suburbs.

#### 4.4.4 *From Horsecars to Electric Trams*

New government powers to acquire land, an expanded program of public financing for transportation improvements, and a rapidly growing and intensifying urban core all contributed to upgrading and expanding the city's urban transit network in the years after the turn of the century. The most noticeable change on Tokyo's streets during this time would have been the rapid phasing out of horsecars in favor of electric trams. The Tokyo Horse Tramway, the city's largest horsecar company, became the Tokyo Electric Tramway and introduced the city's first electric tram in 1903 on what had been one of the city's busiest horsecar routes, from Shinagawa to Shinbashi. This was quickly followed by conversion of the northward extension of that line from Shinbashi to Ueno later that year, and then several more in 1904 and 1905 (Sorensen 2002, 74). Two other electric tram companies, the Tokyo City Tramway and the Tokyo Electric Railway began service in 1904, on lines bought from smaller horsecar companies (Makoto Aoki 2002b, 44).

In many cases, the initial electric tram lines were merely electric versions of what existed previously, but the greater range, speed and carrying capacities of the electric trams soon led these companies to link shorter lines into longer routes and thereby transform the nature of Tokyo's intra-urban transit network (Wakuda 1981, 88). Cost was also a factor behind the extensions, as integrated service was more efficient and cheaper. The major cost for electric trams (and trains) was the high initial capital required for electric power generators. Once these were built, owners had the incentive to expand as much as possible: the marginal costs of producing additional power, laying additional

lines, or purchasing additional cars were comparatively small. These same factors led companies to pursue partnerships, and ultimately full mergers, with other electric tram companies, with the additional positive side effect (for the companies) of reducing competition for riders. In 1906, the Tokyo Electric Tramway, the Tokyo City Tramway and the Tokyo Electric Railway merged to form the Tokyo Railway Company. By the end of that year, the company operated 919 trams on 143.3 kilometers of track (Makoto Aoki 2002b, 44-5). Longer lines, faster travel, and more efficient service made electric tramways more cost-effective for operators and more attractive for riders. The writing was clearly on the wall for the horsecar era; while a few odd horsecar routes still continued to operate in the city into the early 1910s, electric trams had basically replaced horsecars by 1906 (Takechi 1986, 100).

Electric powered trains, larger and faster than electric trams, also appeared in Tokyo around this time. Some were electric replacements for steam trains that took longer to accelerate and needed more braking distance than the new electrics. In 1904, for example, operators of the Kōbu Line electrified the Tokyo portion of the line. They simultaneously double-tracked this portion of the route, and began offering much more frequent service between central Tokyo and the first few stations outside of the highest-density areas (Eiichi Aoki et al. 2000, 66). The electric trains were much better suited for the stop-and-start nature of intra-urban travel, while the steam powered trains continued to operate long haul service. Other private lines electrified over the next few years, and the state-owned Yamanote Line electrified in 1909 (Kobayashi 2005, 53). This trend did

not eliminate steam trains from central Tokyo, however, as long routes with Tokyo as a terminus continued to use steam trains for several decades.

Electric trains and trams also changed their business models to capture more riders. The state railways changed its fare structure in 1903, lowering fares across the board and providing additional incentive for frequent users in the form of commuter passes. These offered unlimited travel between two stations for a set period, typically one month, and represented about a 50% discount off of buying a separate ticket for each journey (Takechi 1986, 112). Private railways followed this practice, as well, and commuter passes became standard practice by the middle of the first decade of the 1900s (Ericson 1996, 92). Private and state railways also expanded lines to increase ridership, especially on the weekends. Following the example of the national railway's very popular line from Tokyo to Nikko, the site of one of Japan's most important temples, the Sōbu Railway extended its line to the seaside town of Chōshi and offered reduced fares on weekends. Other private railways opened a variety of attractions such as parks, amusement parks, gardens and hotels at the non-Tokyo ends of their lines, especially in the western foothills or at the beach. Railway companies also offered student and group discounts to encourage patronage. Weekend train excursions became popular for the middle classes, ushering in an era of widespread train travel (Eiichi Aoki et al. 2000, 144; Ericson 1996, 91-3).

The start of the electric train and tram era in Tokyo was not without controversy, however. As train travel became more popular, sudden fare increases, crowded trains, and bad service distressed a captive population now dependent on trains and trams to get to

work. Since private interests operated all electric trams and most electric trains, the fares charged reflected the owners' natural profit-seeking behaviors. Tram and railway mergers helped lower operating costs, but those savings did not always translate into savings for riders. In some cases, private companies used predatory pricing to drive out competitors, and then raised prices to a ridiculous level when the local monopoly had been won (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 43). In 1903, the Campaign Against Fare Increases began in Tokyo, hoping to appeal to governments to keep fares low. This campaign was politically connected to the some of the same forces behind nationalization and was just one form of protest in a very tumultuous time (Andrew Gordon 2003, 132). When partial nationalization came to pass in 1906 without any kind of oversight for intra-urban transit, the campaign intensified with numerous cases of direct action against tram and train companies. Passenger strikes were common throughout the rest of the decade, and more dramatic actions such as stoning and burning cars, rioting, and harassment and violence against train and tram personnel also occurred (Setagaya Kuritsu Kyōdo Shiryōkan 2005, 57; Takechi 1986)

Continued private ownership of urban tram and train companies following nationalization in 1906 was still an open question. True, the Nationalization Law had excluded them from immediate takeover by Japan National Railways, but advocates of complete nationalization had relented on that point temporarily in order to move forward with nationalization of important long distance routes. There was still broad support for local government takeover, or municipalization, of Tokyo's various transit lines, both at the local and national level. Advocates argued that transportation was a vital public good,

such as water or electricity, and should be operated for public benefit. Local governments generally favored the idea since trams and trains could provide a steady income stream to municipal budgets (Mizutani 1994, 9). Opponents argued against regulatory interference and restrictions on or elimination of profit opportunities. Of course, municipalization opponents neither acknowledged or advertised the role that municipal and national governments had *already* played in making those opportunities possible in the first place: by widening and straightening streets, purchasing and assembling land for routes, or by subsidizing and promoting the larger rail network of which intra-urban rail was a part. Regardless, from nationalization in 1906 through the end of that decade, municipalization was still debated, and private tram and train companies continued to expand services and routes in and around Tokyo.

#### 4.4.5 *Tamaden*

The process to bring electric transit service Setagaya Ward was many years in the making. In 1895, two companies applied for permits to construct an electric train line southwest from Shibuya through the Setagaya area via Tamagawa Road. Approval for the Tamagawa Electric Railway Company (Tamaden for short) came at last in 1902 (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 42). The railway was actually an affiliate business concern of the parent company whose main enterprise was electric power generation. This was a common pairing, as all prospective train or tram companies had to have some arrangement with a private electric power source to get started. In addition, a train line was an effective way to obtain a steady income after the high initial costs of

power plant installation.<sup>50</sup> Tamaden's power plant was built in 1905, and train construction began soon after in stages starting at the urban terminus in Shibuya and proceeding southwest. The construction process was aided by TCIO funded improvements to Tamagawa Road, as well as purchase of select properties for the train company to use as stations and rail yards. The train was also given the right of way down the middle of Tamagawa Road<sup>51</sup> (Setagaya Ward Historical Committee 1993, 98). Passenger service began in March of 1907, and in 1908, the electricity business for residential, commercial and industrial uses was fully operational (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 42-3).



**Figure 4.2: Setagaya Ward in 1912 (Tōkyū Corporation 2009b)**

The train suddenly brought large parts of Setagaya village into easy commuting distance from Shibuya, which in turn offered connections to districts in central Tokyo.

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<sup>50</sup> This connection also established a pattern that persists for privately held transit companies. Electric train companies have almost always been a part of a larger business consortium, not stand-alone businesses, and their growth strategies, profit/loss performance, service schedules, etc. need to be understood in that context.

<sup>51</sup> Admittedly, this was not that significant in 1907. Photographs of the period show the train practically alone in the road, save for a few odd pedestrians or carts pulled by horses

The distance between Shibuya and the end of the line at Futako Tamagawa adjacent to the Tama River, was a mere ten kilometers and reachable in about 30 minutes at a normal pace. In the decade or so before the train line's construction, Setagaya became home to important military installations and a growing commercial base. Improved transportation access starting in 1907 brought even more residents and businesses. From 1908 to 1918, the population of Setagaya grew from 30,370 to 41,738 (Tokyo Prefectural Statistics Bureau 2006). The landscape of Setagaya, especially Tamagawa Road, began to change as new stores opened along the train line. New residents patronized the electric power business and the train, leading to expanded service year after year (Setagaya Ward Historical Committee 1993, 104). The line was also popular among weekenders who came to Futako Tamagawa to picnic along the river, and in 1909, the electric company built the Tamagawa Amusement Park at the last station, which also increased weekend ridership (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 43).

## **4.5 The Era of Incipient Suburbanization**

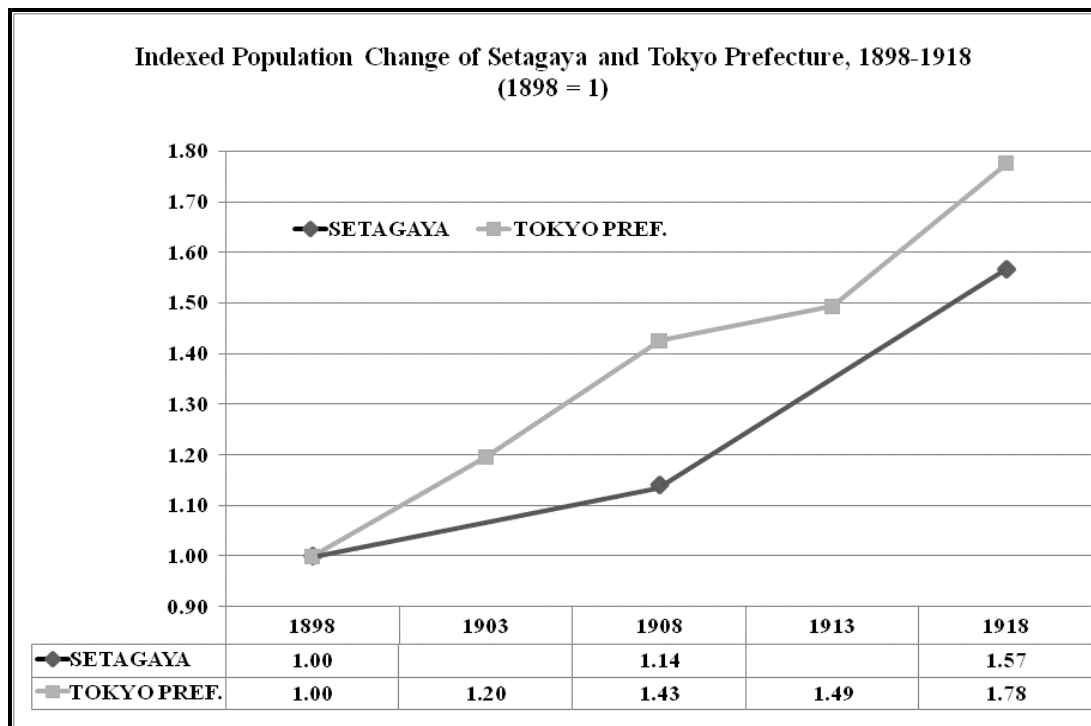
### *4.5.1 Suburbs in the 1910s*

The period before 1910 is best considered one of incipient suburbanization: places now seen as Tokyo's suburbs were on the verge of becoming commuter suburbs, but that outcome would not have been obvious in 1910. Setagaya and other places a similar distance from the urban core were still largely agricultural; where there was development, it was generally regarded as problematic, haphazard growth that should be avoided (Hanes 2002, 212-3). The term used most often to describe such fringe development,

*machi hazure*, is best translated as “disconnected city” and connotes pockets of urban-like places with no links between them or to the city as a whole. Indeed, this was certainly a fair description; the transition from rural to urban land uses was basically unregulated. The only exception, the Arable Land Readjustment Law of 1899, provided a limited degree of oversight on road construction and infrastructure provision in transforming urban fringes, but was informed neither by any grand vision or comprehensive plan.

There were, of course, pockets in these early suburbs that were quite pleasant and which offered a glimpse of what might come in the future. For decades, wealthy residents of Tokyo occasionally built second homes in various villages outside the city as weekend and holiday retreats. One popular suburban destination was Musashino City in western Tokyo that hosted a cluster of wealthy estates near Inokashira Park, the former Imperial hunting grounds and summer garden (Steiner 1957, 9). The push for second homes for the wealthy grew stronger as transportation infrastructure progressed and the problems of the downtown area, i.e. hygiene, density, and social unrest, grew worse. Setagaya in particular gained a reputation for its air quality, and became home to a few upper-class suburban estates by 1910, especially near the Tama River (Setagaya Ward 2005, T1; Katagi, Fujiya, and Kadano 2000). These estates were built on lots several times larger than a typical middle-class dwelling in the city center, and were usually influenced by Western architecture or were recreations of American, British or Continental homes. These weekend estates soon became the showpieces for a highly desirable, but still largely unaffordable, way of life (Sand 2005).

Since such moves were essentially confined to a small segment of the population who could afford them, the absolute and relative numbers of people moving to the suburbs was not very great. Comprehensive and accurate population statistics of Tokyo's suburban areas do not exist prior to 1920, due to the lack of a coordinated census then as well as disagreement about counting methods, but there is limited information on a few proto-suburban districts in previous decades. The following figure shows the population growth of one such area, Setagaya district, compared to Tokyo Prefecture as a whole. Setagaya's population did rise during the period in question, from 26,621 people in 1898 to 41,738 by 1918, but this growth rate of 57% nevertheless meant that it was falling behind the growth of the prefecture as a whole, which climbed from 1.8 Million to 3.7 Million over the two decades, a 78% increase.



**Figure 4.3: Early growth of Setagaya (Japanese Statistics Bureau 2009b)**

#### 4.5.2 *Institutional Support for the Transit-Oriented Suburb*

Within about ten years, however, middle-class facsimiles of elite homes became possible and popular, facilitated by expanding suburban electric railways, ambitious real estate ventures and supportive public policy. The 1920s boom period is the subject of next chapter, but it is first important to understand the conditions that made the boom possible, and which made Japanese suburbanization take the form it did. Certain institutional developments prior to 1910 would play an important role in what followed.

In terms of transportation policy, the period established the government's support for national railway development and the viability of private railway operations within that strategy. Since its introduction to Japan in the early 1870s, the railway system had vacillated between periods of boom and bust: the initial rush to build in the 1870s was followed by a severe recession and dramatically reduced construction in the early 1880s; a second boom commenced after the depression had run its course, leading to another bust as railways were overbuilt. In response, the government worked to stabilize the market and soften downturns by overseeing licenses for new lines and by serving as lender and purchaser of last resort when the industry was down. Nationalization was more an industrial bailout than a takeover, while the extremely generous terms of the buyout, plus the government's commitment not to encroach on private railways operating intra-urban lines, led to favorable conditions for private railway investment. In addition, the government also promoted private railways by providing direct subsidies, land grants, and tax breaks over several decades. By 1910, private railway companies were some of

Japan's largest and wealthiest enterprises, as well as a politically well-connected group (Ericson 1996, 375-85).

Furthermore, public policy concerning land use and urban development before 1910 generally meant governmental action on behalf of private enterprise and not a counterbalance to it, as is often assumed. The policy initiatives of the time helped business interests, especially railroads, accomplish goals they could not achieve themselves. For example, expanded eminent domain powers after 1900 helped railroad and tram companies gain lands "needed" for their lines. Land Readjustment allowed government planners an easy and efficient way to transform land holdings to benefit private interests. Most importantly for Tokyo's development as a transit-oriented metropolis, public investment money for transportation improvements authorized by the TCIO went towards making Tokyo streets straight and wide enough for rail service. Prior to the TCIO, the transportation landscape of the city could not have handled an appreciable amount of rail traffic, given its fundamental orientation as a city of small streets suited for foot and horse travel. Without these forms of support, it is highly doubtful that any private railway enterprise could have or would have accomplished such a transformation on its own.

## Chapter Five: The Peak of Japanese Transit-Oriented Suburbia

### 5.1 1910 to 1923

#### 5.1.1 *Evolving Railway Policy*

Government takeover of seventeen railroads practically quadrupled the size of the state-owned railway network over eighteen months. High-level officials at the Railway Bureau were competent and experienced, but the sheer volume of added track, cars, and personnel overwhelmed the institutional capacity to manage the system. The most difficult problem was standardization. Private companies had operated their myriad lines in different ways, using a wide variety of track gauges and operational standards. As a result, trains from one company could not use another company's track and neither was likely to be compatible with the national railway tracks. In the decade after nationalization in 1906, the Railway Bureau's main priority was solving these problems; plans for further construction were delayed until the former private railways could be integrated (Eiichi Aoki et al. 2000, 152).

On the local scale, municipalization<sup>52</sup> of urban trams and trains was a matter of intense debate during the same period. An organized passenger strike against the Tokyo Railway Company in 1910 resulted in major rioting; unorganized violence and

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<sup>52</sup> Akin to nationalization, but with a municipal government assuming control of a private corporation, not the national government.

destruction against particular trains was also frequent (Takechi 1986, 37). Profits and prospects for electric trams and trains dimmed, as public resistance to the fare increases, necessary to expand service, increased, and the specter of municipalization grew. In 1911, the Tokyo Municipal Government bought out the Tokyo Railway Company, the city's largest and most hated private line with a near monopoly on the downtown routes. It was renamed the Tokyo City Railway.<sup>53</sup> Like the national railways after nationalization, new construction dipped with the changeover to municipal control of the trams; remaining private tram operators were uncertain about their future and government officials were preoccupied with managing the City Railway (Eiichi Aoki et al. 2000, 26).

The many private railway companies operating after nationalization and municipalization can be divided into two types. The first was comprised of profitable intra-urban railways and trams left in private hands by the Nationalization Law. Despite fair to good economic performance, their owners were reluctant to make large capital investments in tunnels or in laying track in difficult terrain. Many private operators did not want to integrate their tracks with national lines for fear of losing market share, and would integrate with other private lines only if they could buy them out (Eiichi Aoki 1995b, 35). The second group of light railways consisted of those located in provincial cities and those that connected rural areas with larger cities. These tended not to be as profitable, but as a way to encourage regional development, they enjoyed great political support (Eiichi Aoki et al. 2000, 48). During this period, government railway officials

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<sup>53</sup> This company in time became the Tōkyō Toei subway system, which is fully municipally owned and operates four of the thirteen subway lines in the area. The other nine are run by Tōkyō Metro, which was initially private, then municipalized just prior to World War II, and now nominally a private corporation, though it has only two shareholders: the national government and the Tōkyō Prefectural Government.

promoted the growth of light railways as feeder lines to the national railways, and encouraged existing and new lines to conform to uniform standards (Takechi 1986, 55).

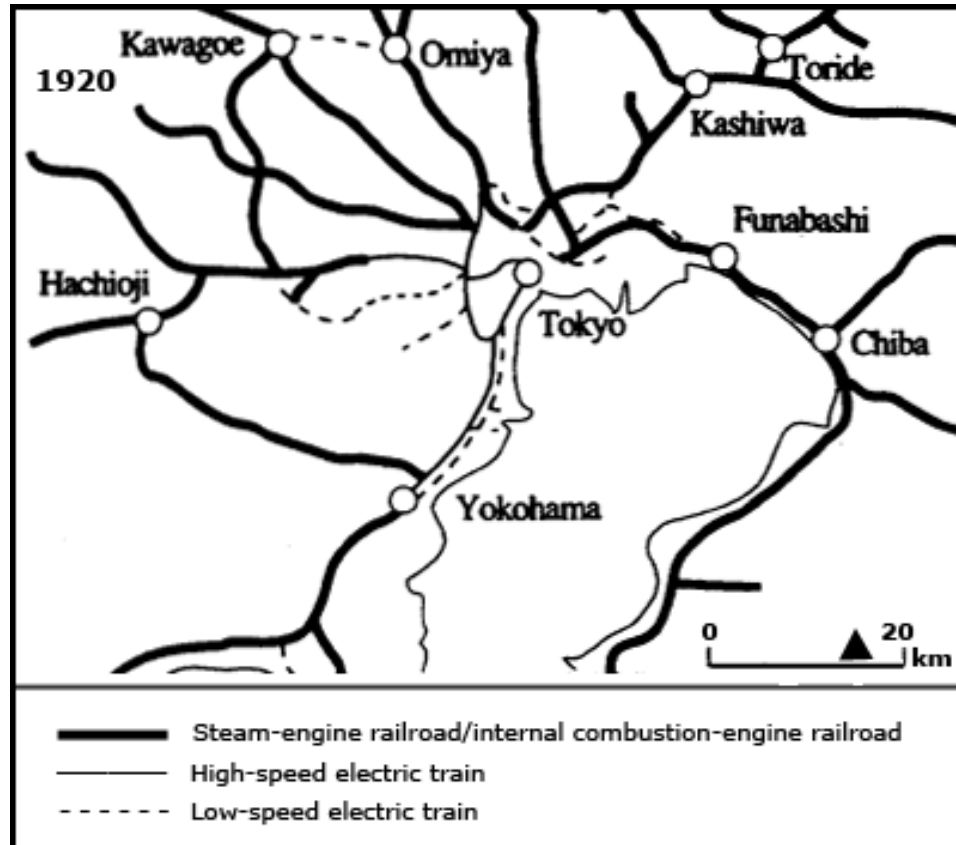
The Diet passed the Light Railway Law of 1910 and the Light Railway Subsidy Law of 1911 to support light railways without the expense of complete takeover. The first law established straight-forward procedures for local corporations to form railway companies. The second laid out the terms of financial support based on approval by the Railway Bureau,<sup>54</sup> including no-interest loans for construction, and even more importantly, an annual 5% profit guarantee for the first ten years of operation (Eiichi Aoki et al. 2000, 35-6; Wakuda 2002). From 1911 to 1921, the subsidy established a floor of profitability for all light railway companies, and paid the difference to shareholders if dividends were insufficient. Operators of light railways were enthusiastic about the new laws and many existing companies expanded their operations. The generous conditions encouraged newcomers to the industry and entrepreneurs formed many railways to take part in the bonanza. Companies took full advantage of the 5% profit guarantee by pouring profits back into the businesses, thereby reporting no or few dividends, which left the government to make good on its guarantee. Between the passage of the first law in 1910 until the end of 1911, 23 new light railways companies formed and 26 existing companies applied for official Light Railway status<sup>55</sup> (Eiichi Aoki et al. 2000, 77). The following years were almost as good, creating a boom in light railways from 1911 until 1915. In terms of total track length, after no new light railway

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<sup>54</sup> This was to ensure that new lines were standardized and integrated with existing national lines.

<sup>55</sup> Previously, all of them were officially considered “private railways.” Becoming a “Light Railway” meant eligibility for subsidies in exchange for compliance with railway bureau standards.

lines were built in 1910, there were an average of 225 kilometers built each year from 1911 until 1916 (Wakuda 1981, 145).



**Figure 5.1: Railways in Tokyo, 1920 (adapted from Yamamoto 1993, 119)**

The new support for this type of private railway would have a major impact on future suburban growth. Several new companies formed after the new laws passed in 1910 and 1911 are now major private suburban railways in the Tokyo area. The Keisei Railway began service in 1912 in eastern Tokyo, while the Keio Railway Company opened its first line in 1912 to connect Shinjuku with a series of smaller towns to the west. Two lines, now part of the Seibu Railway Company, also began around this time: the Musashino Line started in 1915 from Ikebukuro and ran northwest, and the

Tamagawa Line started in 1917. Most importantly, for this study at least, one of the main lines of the Tōkyū Railway empire, the Jōnan Railway, got its start in 1913 after the passage of the two laws, while another, the Musashi Railway, reclassified itself as a passenger railway company in 1911 after starting as a small freight railway in 1906 (Eiichi Aoki et al. 2000, 67, 212; Noda and Oikawa 2003, 108-9). Keisei, Keio, Seibu and Tōkyū are four of the seven major private railways still operating in the Tokyo area, along with Tōbu, Keikyū and Odakyū. The latter three were established earlier and expanded their operations during the 1910s to take advantage of governmental support (Wakuda 1981, 62-70).

The 1910 and 1911 laws passed to support local railways caused a railway construction boom in the first three years after passage. Whereas licenses were granted for 633 kilometers of new local railway track in 1910, licenses were approved for 1,762 km in 1911, 1,630 km in 1912 and then 1,468 km in 1913. By 1914, however, this brisk pace of expansion slowed, and just 456 km and 136 km were approved in 1914 and 1915, respectively (Eiichi Aoki 1995a, 36). Aoki attributes the slowdown to the natural bust cycle after such a boom, as the subsidies and other forms of assistance for railways led to initial over-construction, generating too much supply and declining prices as competition among carriers, especially for freight, accelerated (*ibid.*). The slowdown vexed national politicians, who still promoted a robust railway network for national economic development and local politicians and commercial industrialists who wanted railway investments in their particular areas.

The Diet passed the Local Railway Law and Local Railway Subsidy Law in 1921 in response to these concerns. These laws continued and advanced the same promotional policies of the earlier laws, most importantly the guaranteed annual dividend for railway shareholders. In the 1911 version, the 5% guarantee was valid for ten years starting from the time of the initial investment; in the 1921 version, this period was extended by guaranteeing the 5% for the entire construction period and an extension of its benefits for ten additional years. As with the 1911 law, the 1921 law promoted even more expansion than perhaps originally intended. The existence of the guarantee discouraged companies from declaring profits and paying out dividends, since it was more cost effective in the long run to pour revenues back into the company, expand services, receive the guaranteed 5% from the government, and then have a wider revenue base after the guarantee expired. The Railway Bureau also made zero interest loans available for the conversion process. Railway companies took as many loans as they could, as these could be counted as liabilities on the balance sheet to balance any revenues and thereby keep stated profits low (Eiichi Aoki et al. 2000, 69).

These new laws came with an important benefit for the national railways and the public as a whole. To be eligible for the guaranteed dividend or any other form of support, private railways had to agree to standardization with the national railways. Principally, this meant converting any non-conforming track to the national railways standard gauge of 1.067 meters. After the conversion process was complete, private railway owners were left with even more valuable lines, now fully compatible with the all-important trunk lines of the national railway. Meanwhile, the long-standing goal of

national policymakers for complete national railway integration and standardization had been achieved (Yamamoto 1993, 79).

A third important railway law in this period, The Railway Construction Law of 1922, was also an updated version of an earlier law, in this case the Railway Construction Law of 1892. The 1892 version was passed to support the quick construction of the backbone of the national network: heavy rail lines between major cities, especially along the Pacific Ocean coast from Tokyo in the north, south to Kyūshū. Under this law, funds had been doled out according to plans and priorities established by the Railway Bureau of the Ministry of Transportation and ostensibly reflected national interests. The 1922 version continued the provision of vast sums of money to the National Railways for operations and expansion of trunk lines. The Law specifically called for constructing 149 new lines and 10,158 kilometers of total track (Eiichi Aoki et al. 2000, 100; Yamamoto 1993, 115).

The 1922 Law also contained provisions that went far beyond the original mandate of its predecessor. Many of the newly authorized lines were in rural areas and primarily meant for local economic development, with little or no connectivity to the existing national network. The 1922 Law also created an expanded approval mechanism that gave the Diet more oversight of decisions about where to build and in what order. The Diet gained the power to authorize funds for new construction, as well as approval powers over mergers and expansions of existing private railways. By law, any private railway company that met the conditions of standardization was eligible for subsidy, but the administration of railway laws after 1922 gave Diet committees the opportunity to

grant immediate approval, or to slow the process through bureaucratic foot-dragging. All together, the 1922 Law was a recipe for political corruption and parochialism, and political connections became the most important factor in railway construction after its passage.<sup>56</sup>

Private railway companies in the suburbs participated in the corruption by making payments to Diet politicians to encourage fast processing of applications for new lines, to ensure subsidization and approve mergers, while also discouraging their competitors' plans (Nakanishi 1979, 2:182-9). Before 1922, the railroad industry was dynamic, with many new private companies beginning every year. Many such companies in rural areas wanted to profit quickly by exploiting many forms of government assistance available to railway ventures, including the guaranteed profit scheme for ten years as well as assistance with land purchases. They would then look to sell to larger competitors. Other railroads, especially in suburban or urban areas, took a more long-term perspective, hoping that governmental assistance would help them get started and survive the early years until urban growth and rising populations provided a steady stream of passenger fare income (Wakuda 1981, 46).

The arrival of new competitors became problematic for the larger, already established private companies. The new competitors, with the support of generous subsidies, could offer cut-rate prices for freight or survive without much passenger revenue and, thereby threatened the larger, pre-existing investments of the bigger players.

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<sup>56</sup> Political corruption in Japan in the 1920s went far beyond the field of railway policy, resulting in a decade of political chaos, radical policy shifts and multiple assassinations of prime ministers and other top government officials. Incidentally, the need to correct the excesses of 1920s "democracy" became one of the rallying points for fascism and militarism in the 1920s through the 1940s (Andrew Gordon 2003, 161-73).

The new laws of 1922 provided an important safeguard for these larger businesses, as they could thereafter use their political connections to control entry into the market. After 1923, there was a noticeable consolidation of the private railway industry, as already powerful and wealthy private railways added to their position by making smart “investments” in the political process. Smaller companies unable to afford such generosity found themselves at the mercy of those who could, and newer competitors were effectively shut out through the Diet’s gatekeeper functions. In the end, the 1922 Law along with the two new laws of 1921 led to expanded railway construction, as promised, but also led to an important shift in the industry as a whole. Already well-established companies accounted for the lion’s share of railroad investment beginning in 1923 (Saito 1997).

#### *5.1.2 Urban Growth and Consequences*

Just as the Russo-Japanese War of 1904-1905 was a major catalyst for Japanese industrialization, World War I in Europe profoundly affected the Japanese economy, especially the manufacturing sector. With German goods embargoed and their French, British, Russian and American allies needing particular imports for the war effort, Japanese exporters were given a tremendous opportunity to enter European markets (Johnson 1982, 90). In total, Japan’s industrial output between 1914 and 1918 almost quintupled, from 1.4 billion to 6.8 billion yen (Andrew Gordon 2003, 139). The broader social impacts of the World War I boom were especially felt in the cities, where the factories were located. Industrial employment climbed, wages rose, and migration from rural Japan to the four major industrial areas (Tokyo/Yokohama, Osaka/Kobe, Nagoya,

and northern Kyūshū) increased. In Tokyo, for example, the population jumped 14.5% in 1918 alone (Tokyo Prefectural Statistics Bureau 2006).

The rapid growth of Japanese cities and the economy as a whole also had a downside, however, and as industrial growth slowed towards the end of the War, the negative consequences from such rapid growth became more obvious. Inflation in the 1910s was severe, and rising food costs soon nullified the effects of higher wages. Housing in urban areas became ever more difficult to find with so many new migrants arriving (Shun-ichi Watanabe 1984, 415). During this period, vacancy rates in Osaka fell from 8.4% in 1914 to 5.5% in 1915 and by 1917, were at a mere 0.3% (Hanes 2002, 205). Urbanites had little choice but to pack existing housing to the highest densities humanly possible, or to start small tent cities, many on the banks of rivers, at the fringes of the few parks in cities or under bridges. In the thirty-one square miles that defined Tokyo's city center, average densification reached levels of 70,000 people per square mile in 1915, up from 28,000 people per square mile in 1880 (Allinson 1979, 20).

Increasingly dense cities gave rise to more land use conflicts within them. Factory owners during the prosperous 1910s experienced limits on growing their businesses when they could not expand their facilities to increase output, or to use scale to increase returns. Residents, meanwhile, often lived cheek by jowl with industrial operations, which were noisy, smelly, and often dangerous. The 1910s were a period of major social unrest in Japan, and land use issues were a prime source of anger (Andrew Gordon 2003, 161-73). In one case, residents near a cement factory in eastern Tokyo regularly protested against the air pollution caused by the factory. The factory wound up having to relocate

to conduct its business (Okata 1980, 18). This struggle between the factory and residents exemplified the many local battles which eventually led to Japan's first zoning system in 1919. The cement company and other heavy industries, not the residents,<sup>57</sup> advocated implementing a zoning system that would define a portion of the land area for their use and prevent encroachment or protest by local residents (Sorensen 2002, 114-5). This and other similar struggles convinced more conservative elements of the government that progressive housing reform, zoning, and suburbanization would benefit industry by removing residential competition for land use and by quieting the volatile masses.

### *5.1.3 The 1919 Planning System*

A variety of factors led to Japan's first comprehensive set of planning regulations in early 1919. Social conflict based on incompatible land uses, exemplified by the cement factory case, caused various constituencies to push local governments and the national government for clearer guidelines and for comprehensive reform. Such conflict was becoming more serious due to the rapid growth of urban population and urban manufacturing over the previous two decades, and urban planning became part and parcel of the broader social reform movement. A second factor was increasing interest at the municipal level in planning regulations of various types. The Tokyo City Improvement Ordinance (TCIO) had been more or less successful in achieving its stated goals, and other municipalities across the country began to put together their own versions of Tokyo's plan. Such moves attracted resistance from the national government, which saw

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<sup>57</sup> This is an important point. Many people tend to see zoning as a power of the state against private enterprise. Looking at the origins of zoning in Japan, like in the United States, shows that zoning was more often than not advocated by private enterprises as a protection against the public at large in order to define a space where industrial or commercial activities could be pursued freely.

land use planning as a national concern, in keeping with governmental structure at the time. Local governments were merely the agents of national governments and the all-powerful national ministries were the ones to formulate and enforce public policies. Local governments began pressing the ministries, arguing that the national government had to act if local governments were prevented from doing so.

Third, a growing number of Japanese bureaucrats were gradually becoming familiar with developments in urban planning in the United States and Europe and looked to borrow and adapt new laws to the Japanese context. They viewed Tokyo, Osaka, and Nagoya as comparable to New York, Paris, and Berlin and noticed the important role that urban planning was playing in the economic modernization of those cities. Bureaucrats like Kiroshi Ikeda, who would later be the chief of the Home Ministry's City Planning section and the prime architect of the 1919 laws, made the case that modern cities required modern tools to govern them and pushed the national government to act (Sorensen 2002, 108-9). Of all the foreign exemplars, the German urban planning system was the most influential on the emerging cohort of Japanese urban planners as well as higher-level bureaucrats whose support was necessary to adopt any new laws. Above all, German urban planning was very highly centralized at the national level, which matched the balance of power in the Japanese political system. In addition, German urban planning came as part of a broader move to address social unrest that also included social insurance and the advent of public health policy. This appealed to Japanese leaders facing similar problems (Sorensen 2002, 87).

Ikeda and others in the Home Ministry drafted and proposed a five-part urban planning system in late 1918 that included two new laws (The City Planning Law and The Urban Buildings Law) plus an update to the Tokyo City Improvement Ordinance (TCIO) that made it applicable nationally. The five elements were approved and implemented over a span of a few months in 1919. The first part was a very basic zoning system written as the centerpiece of the City Planning Law; it employed just three broadly defined land use zones: residential, commercial, and industrial. Ikeda intended the zones to guide long-term development rather than form strict categories to enforce a rigid separation of uses (Okata 1980, 14). As Table 5.1 shows, the zones were highly inclusive and allowed significant overlap between housing, shopping and manufacturing; they merely forbade a few extreme cases of incompatible uses instead of spelling out exactly what the zone should include:

**Table 5.1: Zone and Height Restrictions in the 1919 City Planning Law**

<i>Zone</i>	<i>Prohibited Land Uses</i>	<i>Height Limit</i>
Industrial	No prohibited land uses	30.3 meters
Commercial	Garbage incinerators, crematoria and slaughterhouses; factories with more than 50 employees or with engines greater than 10 horsepower	30.3 meters
Residential	Garbage incinerators, crematoria and slaughterhouses; parking garages with more than 5 spaces; theaters and cinemas; warehouses; brothels and massage parlors; factories with more	19.7 meters

	than 15 employees or with engines greater than 2 horsepower or with steam boilers.	
Sources: (Ishida 1987, 134; Sorensen 2002, 116)		

In addition to these three zones, three special zones were created which could be overlaid onto the basic system and take precedence: scenic zones, applied to areas around shrines, temples, or other urban landmarks; fire prevention zones; and Beautiful City zones, used for key commercial and governmental districts. These three special zones allowed planners to take comprehensive control over certain districts when necessary, but have been used infrequently and when used, have applied to small and specific areas (Dawson 1985).

By and large, the 1919 zoning system did not allow government very much control over the shape of the urban environment. Having just three zones is one limitation, but additionally, merely formulating the zones in the manner of allowing “anything but...,” leads to much more diverse zones than are possible when zoning regulations are formulated in the opposite direction. For example, residential zones defined by this “negative” method only preclude a small number of things, and subsequently could have included a wide array of stores and even some small factories, while commercial zones could have housing of any type and all but large-scale industrial locations. In addition, the Japanese system did not spell out a “highest and best use” for each zone, that combined with a limit on the number of zones that could contain a particular use, served to discourage lower uses from being established in that zone. In the American practice, the application of “highest and best use” provisions cause more

restricted uses (namely industrial and commercial) to outbid other (namely residential) land uses in a particular zone when they are allowed. In Japan, since practically every zone could have any land use type within it, there was no need for a prospective business owner to focus in on a particular location and pay a land price premium to obtain it.

Notably, the system recognized and protected the tradition of jumbled and diverse urban neighborhoods that formed in the Edo period, and though the zoning law was expanded in 1968, it is perhaps the main reason for the noticeable mixture of land uses in Japan today. As will become clear, this loose zoning system was an important building block for producing mixed-use suburbs and transit centers with housing, shopping, offices and even industrial uses all located close to train stations. This stands in contrast to the American planning system, which tends to have stricter qualifications on what can be placed in each zone, or else define “highest and best uses” for zones that cause those “higher” uses to proliferate in areas at the expense of “lower” uses, and hence, diversity within a zone.

The second component of the 1919 city planning system was the Urban Buildings Law that essentially spelled out the physical dimensions of buildings in each of the three zones. Most importantly, it defined lot coverage maximums, but no minimums, as Euclidean zoning does in the United States. It also defined slant plane restrictions for roofs, restricted building materials, especially the use of wood in buildings of a certain size, and mandated fire-resistant roofs (Sorensen 2002, 116-7). These applied only to new buildings, however, and left undisturbed a great number of wooden buildings and thatched roofs in Tokyo and other urban centers.

The third and fourth parts of the 1919 planning system were the building-line and facilities designation systems, which together effectively controlled future construction, especially roads, in designated areas. Borrowed from the German building-line system, Japan's system allowed planners to designate existing roads at least nine feet wide as public thoroughfares. It then stipulated that all edges of those roads were and would be building lines, and that future construction could occur only on lots that faced a building line (Koshizawa 1991, 83-8). The facilities designation provision, which was first introduced in the TCIO, allowed planners to designate areas of a municipality as future sites for public use, including spaces for parks, public buildings, water systems, and, most importantly, roads. Once designated, even private lands were forbidden future development and owners had to make them available for public purchase when so requested. After enactment, municipal authorities, operating under the direction of the Home Ministry, quickly drew up future development plans for local areas, but were not required to compensate the landowners until they were ready to build (Sorensen 2002, 121).

These twin provisions helped correct some of the worst elements of unregulated suburban growth that had existed previously. The provisions had an enormous impact on transportation planning as they effectively constrained landowners from encroaching on lands set aside for roads, and caused them to reorient future construction to those roads. After 1919, transportation planners became key determiners of suburbia's once and future shape, as they could determine the growth of undeveloped areas through selecting where to place roads. Since electric trams and suburban light railways were always constructed

down the middle of large public thoroughfares, this regulation was also valuable to railway operators and investors. The building-line system ensured that suburban development would be oriented toward the roads/train lines, rather than forcing the roads/train lines to adjust to suburban development. It also ensured that space would be provided for future line extensions.

The final element in Ikeda's five-part urban planning system was the expansion of the Land Readjustment (LR) process to make it easier to implement and more suited to urban redevelopment. As mentioned earlier, LR allowed governments or groups of landowners to designate an area for improvement: land was grouped, developed, and then redistributed, with a portion of each individual landholding (as much as 30%) sold to pay for the project costs. The biggest merit of this scheme for governments was that it was cost neutral, since the expropriated land paid for redevelopment; this scheme also appealed to landowners because they could trade larger undeveloped parcels for smaller but still more valuable ones. In addition, the LR system prevented holdouts: only two-thirds approval was necessary to launch the project, and "free riders" looking to take advantage of increased value without contributing, were all required to contribute (Sorensen 1999, 2348). LR was first used in 1899 after the passage of the Agricultural Land Consolidation Law, but was ill suited to urban redevelopment without the 1919 revisions. Specifically, the 1899 Law was aimed at redeveloping agricultural land and required two-thirds approval for redevelopment of fields or unused land. Unanimous consent was required when any structures were to be built. The 1919 revision lowered the threshold for structures to the same two-thirds approval needed for land (Sorensen 2002,

123-4). In conjunction with the building-line system and the facilities designation provision, LR has been a major determinant of the basic approach of Japanese land use planning that continues into the present. Simply put, Japanese planning law and practice is oriented towards project-based redevelopment, where perceived problems can be corrected and specific goals can be accomplished in limited areas over a limited time span. Governments can use the building-line system or facilities designation to reserve particular spaces for future development and then carry them out through the use of one single coordinated act when needed (Ishizuka and Ishida 1988).

The five-part urban planning scheme passed in 1919 formed the bedrock of Japanese urban planning and is essentially still in effect today. Formally, the 1919 laws and guidelines were replaced by the New City Planning Law of 1968, but the 1968 Law kept more of the 1919 system in place than it changed. More recent planning laws have made additions without wholesale changes to the 1919 system.<sup>58</sup> Meanwhile, there are virtually no planning powers outside of the ones established in 1919.<sup>59</sup> Furthermore, it bears repeating that the 1919 system, the 1968 Law, and even the later 1992 City Planning Act, are national laws, written and managed at the ministerial level. There has

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<sup>58</sup> The major addition to the 1968 Law was the *senbiki*, or “line drawing” system that allows the national government to define certain areas as Urbanisation Promotion Areas, where urban development is encouraged, and Urbanisation Control Areas, where it is not. In practice, the designation has meant little, since there are so many exceptions to the restrictions of the UCAs. The 1992 Revision of the 1968 Law established a Master Plan requirement, with every municipality charged with comprehensive land use planning with a citizen participation component. These later planning regulations will be addressed further in chapter 6.

<sup>59</sup> One exception is eminent domain, which has its roots several decades before 1919. The 1945 Constitutional reforms curtailed its powers significantly but it can still be used for very special projects, as was the case with the development of Narita International Airport in the 1960s and 1970s. Japanese planners have stayed away from eminent domain for a few reasons: one, LR accomplishes many of the same things, and two, Japanese law requires compensation well above market value, for both land and loss of use.

been some decentralization of land use planning since 1992, but until this recent change, planning was not at all a local matter in Japan (Dawson 1985, 59-60).

The various provisions in the 1919 system defined the general shape of Japanese urban planning: loose zoning allowed a great degree of mixed use; an orientation that reacted to project-based redevelopment rather than proactive; standards-based planning; absence of local control; and, a generally weak position for governments compared to landowners. The 1919 system also has specific relevance to the particular form suburban development in Japan has taken. The zoning system means that areas with different types of housing, shops, bars, and office buildings, such as at suburban transit centers, is the norm in Japan, unlike the United States, which struggles under the regulatory burden of rigid, exclusive zoning. Second, the emphasis on project-based redevelopment has been of great use to private railway companies, who can use LR to launch station area revitalization projects. Third, from a planning perspective, private interests have had a great deal of freedom to operate and build in the absence of strong regulatory power. Since 1945, the only significant compulsory power planners have is the LR process, but even that is advantageous in some ways for landowners and often welcomed.

#### *5.1.4 The Start of Denenchōfu and Tōkyū Railways*

One important flaw of Ikeda's 1919 five-part planning system was the absence of action on the problem of haphazard development on the urban fringe, or what the Japanese called *machi hazure*, or "disconnected city." Without any sort of regulatory framework to anticipate and shape growth patterns, the inevitable transition from

farmland to housing in the soon-to-be suburbs was essentially an individual decision. Buyers sought out landowners, negotiated prices and then built what they wished. The resulting outcome was less than ideal for the public as a whole: roads and streets were often not connected; there was no attention to appropriate densities or infrastructure needs; and costs of ameliorating the scores of problems after the fact were several times larger than they would have been to do things correctly in the first place. For individuals, though, the “disconnected city” was a source of great profit. Peripheral landowners could fetch prices from prospective suburbanites far beyond what land sold for farmland would attract, while prospective homeowners found a bargain compared to city land prices. The ongoing expansion of the electric railways and trams promised to bring even more remote rural land into the reach of downtown, and predictably, speculators connected eager buyers and sellers, always trying to anticipate where the next development hot spot for development would be.

Landholders on the urban fringe tried to determine the ideal time and price at which to sell. For example, in 1915, a group of wealthy landowners from the Ebara district came together to try to maximize the prices they could receive for their land in Setagaya, just to the southeast of the barely developed corridor plied by the Tamaden. Their land was ideal for development, located just beyond the already built up part of southwestern Tokyo, but close enough to the city to be within easy commuting distance *if* a train line could be built to serve it (Shun-ichi Watanabe 1980, 130-1). They wanted to share in the high prices that would come with land sold at the “retail” level, that is, after the formation of individual plots and the construction of infrastructure, especially the

train line. The price of improved land would be much higher than the “wholesale” prices landowners typically made selling to speculators. Through a connection, the Ebara landowners approached one of Japan’s wealthiest men, Viscount Eiichi Shibusawa, asking for advice about how and when to develop their land. Shibusawa was seventy-seven at the time, well travelled, and starting to turn towards public service after a lifetime in business. Notably, Shibusawa knew of Ebenezer Howard’s Garden City concept, and expressed interest in urban and civic improvement in Japan, though he did not necessarily wish to import Howard’s idea in its entirety (Oshima 1996, 140-1).

Over the next few years, Shibusawa worked to find other investors, negotiated with the landowners and formulated a business plan. In January of 1918, Shibusawa, seven other investors, including Keizo Owake, director of the Musashi Railway, and dozens of landowners announced the prospectus of the Denentoshi<sup>60</sup> Limited Company. As Watanabe notes, the prospectus denounced cities as overcrowded, inconvenient, unhealthy, and a moral threat to their residents, while promoting the fresh air, convenient homes, and healthy lifestyle of well-planned suburbs as the perfect alternative (Shun-ichi Watanabe 1980, 132). The prospectus outlined plans to develop Denenchōfu, a “Garden City” of 138.6 hectares with 500 houses for sale to generally middle-class and upper-middle class customers. Landowners were to receive an initial payment for their land at modest prices, plus shares in the company according to the size of transferred land, which could lead to great returns for the landowners if the project was successful (Matsubara 1982, 170). The prospectus projected an overall return of seven to nine percent. The

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<sup>60</sup> *Denentoshi*, which translates literally as “Field Garden City,” was the Japanese term used in the translation of Howard’s 1906 pamphlet

company officially formed in September of that year, with total capital of half a million yen<sup>61</sup> (Shun-ichi Watanabe 1980, 132).

The first step was to begin land assembly. This started in earnest by December of 1918, taking most of 1919 and 1920 to accomplish. By the time the purchase was finished, the Company controlled 160 hectares in an oddly shaped but contiguous parcel, which was about 30 hectares larger than originally intended. The site consisted of land in Setagaya and Ota Wards, and ranged from two to six kilometers beyond the limits of Tokyo's built up area (Matsubara 1982, 165-6). The next step for the Company was to work on providing the infrastructure to serve what was still farmland. The Company arranged for the local governments that had jurisdiction over parts of the site to supply police and fire services, convinced the Ministry of Communication to construct telephone and postal service, and applied for grants from the prefectural government to build the necessary waterworks (Koshizawa 1991, 102). Establishing electric power in the area was more difficult since none of the private power generating companies could be persuaded to build power lines far in advance of any customers. Instead, the Company contracted as a wholesale purchaser and later retailed electrical power to the residents (Shun-ichi Watanabe 1980, 133). The fact that governments and government agencies did all of this prior to any significant population in the area is notable, as is the fact that all infrastructure, save for electricity, was paid for publicly with no guarantee that later tax revenue would reimburse it.

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<sup>61</sup> Watanabe writes that this was equivalent to about £50,000, or two and a half times the capital of the Garden City Pioneer Company, the developer of Letchworth.

The most important infrastructure element was transportation; without a train line, the idea of a commuter suburb was moot. As soon as it was formed, the Company applied for a license to build a railway, named the Ebara Electric Railway, to connect the area to Oimachi, a busy station in southwestern Tokyo on the popular Tōkaidō Line. The roster of applicants for the train construction license was nearly identical to that of the original investors in the Denentoshi Company, including Mr. Owake, director of the Musashi Railway. The line was approved in 1920 and subsequently transferred to the Denentoshi Company, to be run as a company subsidiary under a new name, the Meguro-Kamata Electric Railway. A second application was then submitted for a new portion of the line connecting Meguro Station on the Yamanote Line with the project area, where the line would continue on to Oimachi (Shun-ichi Watanabe 1980, 138-9; Takechi 1986, 342).

Later that year, Keita Gotō, a high-ranking bureaucrat in the Ministry of Transportation's Railway Bureau, was hired as the new director of the Musashi Railway. Gotō immediately took over Owake's place on the board of directors for both the Meguro-Kamata Railway and the Denentoshi Company. The Musashi Railway had been formed initially in 1906 as a freight line for agricultural products in Tokyo's periphery, but switched to a passenger railway after the 1910 and 1911 laws subsidizing local private railways passed. In the 1910s, the Musashi Railway expanded greatly, and then took over another private electric railway, the Jōnan Railway, in 1913 (Wakuda 1984, 4:100). Its ambitious expansion plan had been financed by a great deal of borrowing, and Gotō was brought in for his political connections and abilities to bring fresh government funds to finance operations and expansion (Wakuda 1997b, 46-7). Officially, the Musashi

and Meguro-Kamata Railways were separate entities by the time of Gotō's hiring in 1920, but the connections between them were hard to miss. In time, the connection would lead to the formation of the Tōkyū Railway Company, the subject of this paper.

As for the Denentoshi project, site planning took place in three stages. Senzoku, a 19.3 hectare section closest to Tokyo proper was to be built first, followed by a 30 hectare middle section called Okayama, and then, finally, Tamagawadai, which occupied the 56.6 hectares farthest from Tokyo. Final official approval for the Senzoku development came in February of 1922, and the site plan was finished in the spring. The planned design was nothing too unusual or impressive, merely rectangular streets. The plots averaged about 660 m<sup>2</sup>, with some as large as 3700 m<sup>2</sup>. Some smaller, end lots were set aside for commercial use. Architecturally speaking, the plan's closest model was not the Garden City of Howard's pamphlet or even the actual versions such as Letchworth or Welwyn, but, rather, St. Francis Wood, an exclusive residential district that had recently been built in San Francisco (Oshima 1996, 144). Like St. Francis Wood, the plan for Denentoshi consisted of large, detached houses on broad, tree-lined streets, with a few central fountains and small parks or tree groves. Importantly, the social reform provisions that were part and parcel of Howard's plan were nowhere to be found in the Senzoku parcel or anywhere else in the Denentoshi project. It was formulated and executed solely as a profit-making opportunity.<sup>62</sup>

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<sup>62</sup> The Denentoshi project was thus only very superficially like the Garden City which it supposedly emulated. In Howard's original idea, increases in land values that accrued after the start of the project were captured by the community, not individual homeowners, under the belief that it was the community's original investment which made land prices increase. In the Denentoshi project, there was no such clause, and any profits were taken by the individuals when selling their houses. In this way, the project amounted

The first stage of the project, Senszoku, was an almost instant success. Hideo Shibusawa, Viscount Shibusawa's son and the general manager of the project, wrote the following in a later history of the project, as selected and translated by Watanabe:

...As soon as the site plan for Senszoku was completed, it was printed, and 'lots' were put up for sales (sic). It was even before the first train ran and, I think, was around May 1922. We had only strips of land dug for streets according to the plan. The other part remained a field with green wheat plants and white potato flowers. There the potential purchasers wandered around with the site plan in their hands and sought the lot they wanted to buy (Denentoshi Kabushiki Gaisha 1922, 7:7; Shun-ichi Watanabe 1980, 136).

Almost all of the lots sold within the first few weeks after the publication of the site plan, at prices that were around ten times their original cost (Shun-ichi Watanabe 1980, 137). Next, company officials and architects turned their attention to the second stage at Okayama and the third stage at Tamagawadai, though both areas were still months away from being ready.

## **5.2 The Great Kantō Earthquake**

### *5.2.1 Metropolitan Destruction*

The Great Kantō earthquake and fire struck on September 1, 1923. The earthquake itself was devastating, measuring 7.9 on the Richter scale (about the same as the 2008 Szechuan earthquake in China, and larger than the 2010 Haitian earthquake). Its epicenter was in Sagami Bay, very close to Japan's preeminent port city of Yokohama, as well as to downtown Tokyo. Yokohama suffered the most immediate damage, though

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to a scheme of public funding for private gain, with no money (other than property taxes) returned to the local municipalities who supplied the infrastructure that made Denentoshi possible.

tremors were felt for hundreds of kilometers, and devastation spread throughout the whole Kantō Plain. The main quake hit just before noon, and was followed by more than 200 aftershocks the same day, then more than 600 over the next four days (James 2002, 1-2). The soil in the plain is alluvial which led to liquefaction and the instantaneous collapse of countless buildings. Damage caused by the shaking turned out to be just a prelude to even more devastation as fires followed soon after. The timing of the quake, just as people were preparing lunch, caused kitchen braziers to overturn, resulting in many small house fires all over the metropolis. The mostly wooden architecture of urban areas, seasonably warm and dry temperatures, plus a very windy first night contributed to these small fires spreading into a much larger conflagration. The fires raged for days and self-extinguished only when there was nothing left to burn (Hanes 2002, 240; Seidensticker 1983, 3-8).

The damage statistics from the quake and fire are incredible. There were at least 100,000 deaths, and 1.3 million people, or about 58% of the area's population, were left homeless. The damage spread over 3,500 hectares, or about one-half the extent of the total metropolitan area. Over 310,000 dwellings were destroyed, and another 500,000 were either partially burned or structurally damaged. In the days following the quake, in a rush to flee the fires, many people found housing on ships docked in Tokyo Bay, and railway companies ran free trains to transport thousands of people to the countryside. Many people were away for months and returned in early 1924 to find their homes and workplaces destroyed. The unemployment rate in Tokyo right after the earthquake and

fires climbed to 45%, reflecting hard times for the country as a whole as Japan struggled to rebuild its most important city (James 2002, 2).

### 5.2.2 *The Aftermath*

The government responded quickly to the quake and fire. On September 6<sup>th</sup> it convened a special Imperial Capital Reconstruction Board to address the plentiful rebuilding issues: destruction of vital infrastructure, factories, warehouses and commercial buildings, and the biggest problem, an acute housing shortage. The Board proposed a 3 billion yen plan for reconstruction focusing on 1) infrastructure repair and new construction, especially of streets and rail lines,<sup>63</sup> and 2) purchase of land for re-sale (Shun-ichi Watanabe 1984, 420). The Board proposed acting as a temporary broker for land sales in the hardest hit areas: people wishing to rebuild somewhere else could sell their damaged land to the Board and receive the instant capital to build somewhere else. The Board could also transform oddly configured lots into more easily saleable ones. The Board also hoped to use the crisis to tighten building standards and to rebuild the city in a more orderly fashion (Koshizawa 2001, 154). The Board received just about a third of what it requested, however, thwarting many of its grand plans for a new Tokyo. Of the 690 million it did spend, more than half went to street and rail line reconstruction, and 15 percent went toward site consolidation. Expenditures for purchases were offset by revenue gained in subsequent sales (Shun-ichi Watanabe 1984, 420).

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<sup>63</sup> Tokyo's railway system, including national railways, private railways and trams, suffered greatly from the quake and fire. 18 stations burned down or collapsed, 36 more were seriously damaged, 1836 pieces of rolling stock were destroyed and miles of track were rendered impassable (Eiichi Aoki et al. 2000, 86).

The Kantō earthquake, fire and recovery played important roles in the development of economic policy (Johnson 1982) and militarism (Hammer 2006) in the decades to come. They also had a significant impact on the structure of the Tokyo/Yokohama metropolis, setting in motion major land use shifts between the centers of urban areas and their peripheries. Before 1923, Tokyoites lived in a city that was still largely an inheritance from Edo. Despite increasing flows of people to suburbs like Setagaya and other areas within commuting distance, these were still quite minor, and most of the metropolitan population stayed in the dense mixed-use districts encircling the Imperial Palace. The post-quake geography was markedly different. Over the next ten years, office buildings dominated a number of the densest downtown areas, while people and industries generally relocated to the suburbs.

From the perspective of individual landowners, the quake started a shift in patterns of land use. Recall that the pre-quake city was one where different uses were situated cheek by jowl with other, often incompatible, ones. Industries had a hard time expanding when areas that originally had become nearly empty in, for example, the 1880s, became dense with workers housing by the 1920s. The quake destroyed thousands of factories, large and small, all across the metropolis, including more than 500 in Sumida Ward to the east of the Imperial Palace. Most large factory owners chose not to rebuild in downtown areas, leading to a mass shift in industrial location even farther east towards the city limits (Waley 1991, 19). Others wishing to move into the downtown areas matched the willingness of some to move outward. The national and prefectural governments were two examples, and many of the properties purchased by the

Reconstruction Board were re-sold for institutional uses. Large commercial firms, and major retailers, banks, insurance companies, and law offices were other eager purchasers of land in Tokyo's most central districts (Havens 1994, 27).

But the biggest shift in land use was the relocation of residential districts. The pre-quake urban core was dense with small homes, apartment buildings and *nagaya*, the long tenement houses of the poor. People wanting to rebuild on the same land after the quake were allowed to do so, but in order to rebuild, rubble needed to be cleared while the city center infrastructure needed almost complete reconstruction. Not surprisingly, many urbanites jumped at the chance to sell their urban plots (once ownership could be verified, which was a difficult task) to either the Reconstruction Board or a private party. Many people took these payments and looked to buy land on the urban fringes, where it was cheaper and unburdened by the costs of demolition and debris removal. Governmental decisions regarding where to place temporary housing reinforced the trend of peripheral settlement, as they located tent cities in open areas outside of the urban core (Allinson 1979, 51; Koshizawa 2001, 188).

## **5.3 1923 to 1930**

### *5.3.1 Denentoshi After the Quake*

These relocation trends proved advantageous for suburban landholders who suddenly found even more potential buyers for their land. In some cases, agricultural areas on the urban fringe were subdivided and sold within days, and new owners built cheap, temporary houses soon afterwards. Places that had already been subdivided and

had even partial infrastructure in place experienced a rush of customers. The Denentoshi project, for example, was extremely popular. The area was barely affected by the quake or the fire, save for a few cracked walls in some of the houses in the Senzoku area. While downtown was destroyed beyond belief, the suburbs were almost idyllic. Hideo Shibusawa, general manager for the Denentoshi project, was downtown when the quake struck, but survived and walked back to Senzoku the same day. He later wrote:

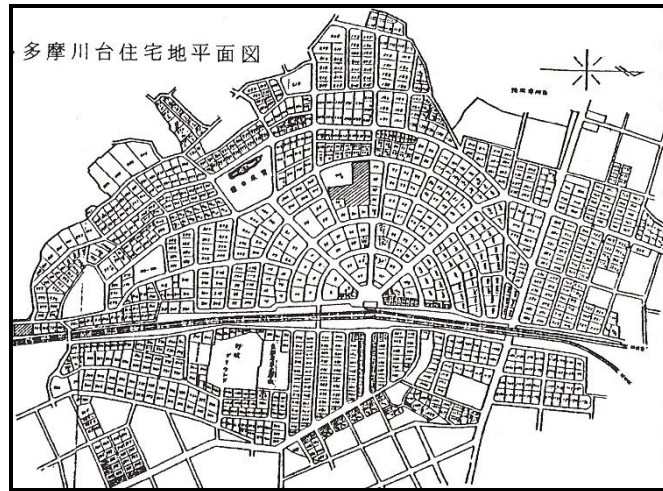
In contrast to the hell-like tragedies and miseries in the City area, how beautiful the Senzoku area was! Here the sun is shining over the green forest, and the birds are singing peacefully. This is heaven and that, hell. (Tokyo Fudōsan Kaisha 1973, 10)

Another suburban real estate developer, Yasujiro Tsutsumi, who would later become head of Seibu Railways and one of Japan's the richest men, made the first of his many fortunes after the disaster. He ventured into the city after the quake with a suitcase full of money and advertisements for his real estate company based in western Tokyo. He bought downtown properties at bargain prices and told people of great deals to be found in the suburbs. He set up meetings to show his suburban properties and then sold plots, at inflated prices, often to the same people from whom he had just bought downtown properties (Downer 1994, 69).

The Denentoshi Company also profited from land exchanges on an even larger scale than did Tsutsumi. The Tokyo Technical School at Kuramae, along the Sumida River, was severely damaged in the quake and so school officials approached Denentoshi Company officials about trading their downtown land for suburban land where they hoped to open a new campus. The two parties struck a deal to trade their 426,000 square foot site downtown for the entire 3.2 million square foot Okayama section of the

Denentoshi project, already scheduled to open for purchase in late 1923. Denentoshi officials enthusiastically agreed, given the location of the Kuramae campus, and then quickly resold the Kuramae plot to the Reconstruction Board for 1.8 million yen, seven times the pre-quake value of the Okayama plot. The Denentoshi Company then reinvested this windfall in stocks and other downtown real estate. This wealth was transferred to the Tōkyū Corporation when the Denentoshi Company was dissolved. Meanwhile, administrators from the Kuramae school took advantage of the expanded space of the Okayama plot to build a much larger campus, which later became the Tokyo Institute of Technology, Japan's version of M.I.T.

After the fortuitous trade of the Okayama parcel, officials at the Denentoshi Company turned their attention to the third stage of the project, the Tamagawadai section. This was the jewel of the entire project: it was the largest and best shaped, with rolling hills and views of Tama River and even Mount Fuji in the distance (Sorensen 2002, 138). This development plan was most like Howard's ideal Garden City, centered on a train station with broad diagonal boulevards and concentric, semi-circular streets producing a fan-shaped pattern. Tamagawadai was scheduled to become available in early 1924, but housing demand after the Kantō earthquake caused officials to hasten the process. The first lots were sold in October of 1923, fetching very high prices, sometimes as much as ten times the acquisition cost (Shun-ichi Watanabe 1980, 137).



**Figure 5.2: Plan for Tamagawadai (Nihon Jutaku Sōgō Centā 1984)**

### 5.3.2 *Private Railway Diversification*

The train company that the Denentoshi Company started simultaneously with its real estate company, the Meguro-Kamata, suffered little quake damage and played a part in the company's success after the tragedy. The first section of the line, from the northern, urban terminus at Meguro Station to Maruko Station, to the south of the Denentoshi site, opened in March 1923, and then the full line to the southeastern terminus at Kamata opened eight months later. The first trains consisted of one 64-person car, operating at 15-minute intervals and at average speeds of 30 kilometers per hour, allowing residents of Denentoshi to reach practically any downtown job in less than an hour. By the end of 1923, over 10,000 people rode the train each day (Takechi 1986, 230).

Train revenue combined with revenue from land sales to make the Denentoshi Company extremely profitable until its dissolution in 1927. Its original promise in the 1918 prospectus had been to return between seven to nine percent over the life of the

Company, but these projections proved too modest. The company was able to return a five percent dividend even before its first land sale in 1922. After that, the dividends increased to 10% for every year until 1927, when it returned 20% (Kodama 1933, 17). These returns were especially impressive given the general economic downturn in the years right after the quake, and the onset of a severe depression that lasted from 1925 to 1927. In comparison, the company handling the Letchworth Garden City project took eleven years to pay its first dividend, of just one percent, and then needed another eight years to reach four percent (Shun-ichi Watanabe 1980, 139). The profits ended in 1927, however, with the sale of the last plot. The year-end dividend distributed all of the Company's liquid assets, while non-liquid assets were "sold" to its subsidiary, the Meguro-Kamata Railway, in 1928. Keita Gotō, Denentoshi Company board member, exchanged his dividend for a greater investment interest in the Meguro-Kamata Railway, and became the principal overseer of its extended operations. Gotō had originally come into a prominent position in the Denentoshi Company through his leadership in the Musashi Railway Company, which had been renamed the Tokyo Yokohama Railway Company (nicknamed Tōyoko) in 1924. He did not gain a majority stake in the Meguro-Kamata Railway, however, until 1939, after which Gotō managed to merge the Tōyoko<sup>64</sup> and Meguro-Kamata Railways. This merger evolved into the Tōkyū Corporation, as described later (Tōkyū Dentetsu Kaisha 2007; Oshima 1996, 146).

The intertwined business model of real estate speculation and railway expansion demonstrated by the specific case of Denentoshi and the Meguro-Kamata was part of a

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<sup>64</sup> Along the way, Gotō also acquired the Ikegami Electric Railway Company, a suburban private railway southwestern suburbs of Tokyo, in 1934 (Eiichi Aoki et al. 2000, 86).

larger pattern of the private railways evolving into broad enterprises with multiple business areas. As discussed, some degree of diversification had been present with private railways from the beginning. Electric power companies formed the early electric tram and light railway companies to maximize the return on all of the machinery and infrastructure necessary for electric power generation. Railway companies invested in brand-new tourist attractions, especially at the ends of lines, or developed facilities at already popular tourist sites. There were countless examples of the former, such as the Tamagawa Amusement Park built at the end of the Tamagawa line in 1909, while other railway companies built zoos, rose gardens, parks, horse racing and bicycle racing tracks, baseball stadia, and museums to attract riders, especially on weekends (Eiichi Aoki et al. 2000, 91). Many railroads also began operating bus companies to transport people from train stations to popular tourist sites, and to and from small towns not served by rail (Yamamoto 1993, 98).

In the 1920s, private railway companies began to grow and diversify even more, to the point where they are better termed “empires.” The most prominent example was Ichizo Kobayashi’s Hankyū empire in the Osaka/Kobe area. Kobayashi originally founded the Minō-Arima Light Railway Company in 1906 and, after buying out two small companies also operating in the Osaka area, created the Hanshin Kyūko Electric Railway (nicknamed Hankyū) in 1918. Kobayashi then began a very profitable express route from Kobe to Osaka in 1920 and gradually took over numerous other railways in the Osaka region in the 1920s. Yet Kobayashi was not primarily concentrated on railway operations, viewing them just as a method to move customers from one part of his

business to the next. Kobayashi envisioned a mutually beneficial operation whereby easy railroad access delivered customers to varied businesses, while the businesses became destinations in and of themselves that, in turn, increased passenger fare revenue for the railways.

His Hankyū Company followed every established diversification strategy and invented new ones. The most famous part of his empire was the Takarazuka Revue, an all-female musical theater company specializing in spectacularly lavish musicals and operatic adaptations,<sup>65</sup> which he founded in 1913 at Takarazuka, an already well-known tourist destination due to its natural hot springs. Kobayashi built several hotels and restaurants in the town, and turned Takarazuka into a nationally famous tourist site, not just one with regional appeal. In 1924, Kobayashi built the 55,000 seat Koshien Stadium, the largest stadium in Asia, and later, brought the Hanshin Tigers Baseball club to play there. He also integrated the various parts of Hankyū as no railway company had been integrated before, especially through the use of cross-company promotions, discounts, and package deals. Kobayashi also plastered the inside of his trains and station wall spaces with advertisements for his attractions. This dense visual promotion was a quite a departure from what had been standard practice of unadorned trains and stations (Uda 1995, 44-9).

Kobayashi also maximized the business opportunities of Umeda Station, his downtown Osaka terminal. Until the early 1910s, Japanese train stations had been largely functional spaces, including just the bare essentials beyond the tracks: ticket windows,

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<sup>65</sup> For more on Takarazuka, see (Robertson 1998)

waiting areas, and timetables. Kobayashi's vision for Umeda Station was radically different. He saw it as a business opportunity with a captive customer base (Eiichi Aoki et al. 2000, 91). He opened up Hankyū-owned cafés, restaurants, newsstands, and small retail stores. He also rented out space to other businesses, both inside the station and immediately outside. By the mid-1910s, Umeda Station was far more than a transportation hub; it had become one of the central shopping destinations in all of Osaka. It was extremely profitable, leading Kobayashi to initiate a major remodeling of the station in 1929. The new Umeda Station featured the seven-story Hankyū Department Store, the first of many railway company-owned department stores, and the first department store in Japan targeted toward middle-class shoppers<sup>66</sup> (Young 1999, 58). Kobayashi's transformation of Umeda became a model for Gotō's plans at two of his urban terminals: Meguro Station on the Meguro-Kamata Line and Shibuya Station on the Musashi Line. These two stations became vibrant commercial hubs in the 1920s. Gotō copied Kobayashi's idea for a station-based department store and opened up the Tōyoko Department Store, now Tōkyū Department Store, in Shibuya in 1934 (Cervero 1998, 194).

Private railways' diversification strategies, and their entrepreneurial successes, came about while they were still receiving various forms of state support for their railway operations (Uda 1995, 29). The Local Railway Law and Local Railway Subsidy Laws had fulfilled their mission of promoting private railway construction, and these railways

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<sup>66</sup> Japan experienced a department store boom in the middle of the 19<sup>th</sup> Century, at roughly the same time such stores caught on in Europe. The earliest Japanese department stores, such as Mitsukoshi, Takashimaya and Wako, grew out of centuries old trading companies with ties to the Imperial family and to the shogunate. They carried high-class goods, including many imported products, at prices that were far beyond the means of average citizens (Young 1999).

continued to draw state support throughout the 1920s and into the 1930s. The guaranteed 5% return for up to ten years after the construction of a particular section of a line was an effective inducement for expansion. Diversification was sensible: a company could be guaranteed a 5% profit for a decade on *any* line built, so it could afford to take chances with lines and with businesses that might languish without convenient rail access. Absent this guarantee, building lines to the suburbs, or building stations in the middle of rice fields, would have been far more risky investments too far in advance of the population needed to make those lines at least somewhat profitable. In addition, any profits gained by the ancillary businesses, such as the shops at the stations, would not have counted as railway profits, and not cut into the 5% guarantee. The Railway Construction Law of 1922 also played a part in the evolution and aggrandizement of existing railway companies. The 1922 Law gave more power over railway licenses to the Diet, which then devolved into a corrupt scheme of political payoffs to solicit favors, effectively freezing out new competitors. Without fear of competition from the railroad sector, private suburban railways like Hankyū, Tōyoko, and many others could devote their energies and capital to pursuing other business opportunities.

### *5.3.3 Suburban Real Estate Development in the 1920s*

The most important business opportunity for these diversified railway companies was real estate development, especially for residential suburbs. In this realm, Gotō and his Tōyoko empire were the indisputable pioneers, followed by Kobayashi and his Hankyū empire. Based on his experience with the Denentoshi project, Gotō realized that there was great demand for suburban housing, given the speed with which people

snapped up lots at Senzoku, even before the calamity of the Great Kantō Earthquake. He had also seen that those land sales depended on the existence of the Meguro-Kamata Railway to get residents to and from their downtown jobs. As a business strategy, integrating real estate and railway businesses was an unbeatable combination. The land sales generated huge, quick profits while the railway portion continued to bring in steady, long-term profits even after all the lots had been sold.

Gotō and Tōyoko replicated the Denentoshi/Meguro-Kamata example many times in the 1920s and sold thousands of suburban lots along its small handful of suburban lines. Thanks to an informative table supplied by Katagi, Fujiya and Kadano on suburban real estate development in Japan, one can track the projects of every major developer from 1908 until World War II (Katagi, Fujiya, and Kadano 2000).<sup>67</sup> During the 1920s, the Tōyoko Company developed twelve suburban areas, amounting to almost 10.2 million square feet of real estate. If we take an average figure for lot size in Japan at the time as 1400 square feet,<sup>68</sup> that amounts to approximately 7,300 lots. Most of Tōyoko's projects in this decade occurred in 1925 and 1926, before the arrival of the 1927 depression, and were carried out in the southwestern suburbs of Tokyo, including Setagaya Ward and its neighboring wards, Ota and Meguro. The Meguro-Kamata Company was a smaller player in the 1920s, carrying out six projects in the 1920s for a total of almost 1.1 million square feet (approximately 780 lots). Of the Meguro-Kamata's projects, four were

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<sup>67</sup> Unfortunately, the database does not include street addresses of the projects.

<sup>68</sup> For some entries in the table, the number of lots per project was included next to the size of the project. I took the average figure of the entries for which both size and numbers of lots were listed to figure out the average.

located in Setagaya and one each in Ota and Meguro (Katagi, Fujiya, and Kadano 2000, viii-ix).

Gotō exploited to the fullest what many earlier railway companies practiced only in part. There had long been natural similarities between the railroad and land development businesses; to build a suburban line, Hankyū, Tōyoko and other railway companies had to acquire the land on which their lines would be laid. To do so, they took advantage of the myriad forms of governmental assistance, including publicly initiated Land Readjustment projects, eminent domain, and land purchase funds made available by the Tokyo City Improvement Ordinance. Gotō went further and purchased not just land for the track and stations, but also targeted the land that abutted the tracks, as well as clusters of land at possible sites for future stations. In order to solve the issue of holdouts driving up the prices of the final parcels, Gotō usually kept station locations a secret, but sometimes used a possible new station as a bargaining chip in negotiations with landowners. This gave landowners an incentive to offer their land at reasonable prices: if their asking prices were too high, Gotō would build the stations somewhere else, depriving those landowners of their chance for profit from the sale and the chance to profit later on the land they kept (Matsubara 1982, 167-9).

Gotō and his staff used another tactic when they still could not get landowners of particularly valuable plots to sell. Gotō would buy up the land around such plots until he owned 70% of all the land and would then initiate a Land Readjustment project to force the holdout landowners to adjust their holdings to fit around the railway tracks or the stations. Using Land Readjustment in this way was initially a unique tactic to Tōyoko and

then its successor company, Tōkyū. Eventually it became known as the “Tōkyū Method” (Hanayama 1986, 32). The Tōkyū Method kept costs down, since the company only had to target 70% of the land in a given area, not every last parcel. Furthermore, the existing owners of the unattained 30% had to pay their share for readjusting their land, also to Tōkyū’s advantage. This method was also good for taking fast advantage of profitable opportunities and helped generate cash for the next round of land purchases. On the downside, the Tōkyū Method was not as profitable in the long run as a more comprehensive approach, since the company’s inability to acquire all the land outright meant it was subsequently unable to carry out large-scale developments (Matsubara 1982, 169; Hanayama 1986, 32-3).

Gotō and Kobayashi used the suburban land to build tracks and stations first and foremost, and then to build the various other attractions like the theater, the baseball stadium, and other consumer magnets. They also practiced land banking by buying up large amounts of cheap, undeveloped agricultural land, holding it until after they had built the line, station or other attraction, and then selling it for a much higher profit. Gotō parceled off smaller lots for single-family homes all along his train lines, and sought to “prime the pump” by initially selling off a small portion of land at affordable prices in certain areas to attract attention and immediate investment. Once an area became popular, he would sell off remaining lots slowly to take advantage of enthusiastic demand. Around train stations, Gotō followed a similar strategy oriented towards retailers and office buildings. Tōyoko kept initial prices low to create pockets of activity that would in time draw even more commercial activity through a multiplier effect; Gotō made up for the

initial low prices with higher prices as the area reached maturity (Yamaguchi and Inaba 1987, 17). Of course, such activity also helped boost the revenue stream of the train company by increasing passenger traffic.

Another tactic practiced by Gotō, Kobayashi and a few other railway barons was to control the image of their land holdings through the selective pursuit of private schools and universities, creating *gakuen toshi*, or academy towns, along their train lines (Eiichi Aoki et al. 2000, 91-2). They offered cheap land and other inducements to entice downtown schools with a solid reputation to either move to the suburbs or to open a branch school. The idea was that elite private schools would confer an air of culture, progress, and gentility to the suburbs, which would attract a wealthier clientele and higher prices for land they sold around the school (Havens 1994, 28). At the same time, the schools could become anchors for the passenger service to and from that particular station, for if the students' parents did not move to the area around the school, the students would become regular train customers. Countless primary and secondary schools, along with a few universities, opened up along suburban private railway lines in both the Tokyo and Osaka regions (Katagi, Fujiya, and Kadano 2000; Robertson 1994, 151).

Their attention to urban and suburban land development made Gotō and Kobayashi somewhat different than most other railway leaders. The majority of railway leaders at the time were still quintessentially “railway men” – interested first and foremost with rail operations who, when they did diversify, did so rather modestly and with the focus still on improving passenger revenue. As far as the railways themselves,

Hankyū and Tōyoko were not all that successful and rarely turned a profit. In the 1920s and 1930s, both companies kept fares as low as they possibly could and focused on keeping riders content by expanding service and paying attention to customer relations, almost regardless of their cost. This business practice differed greatly from the standard practice of most tram and train operators, who essentially sought to find a captive population and then extract as much as possible from it. Their service schedules were geared towards making sure trains ran fully packed in order to maximize profits (Uda 1995, 82-9; Wakuda 1981).

In terms of generating maximum revenue for their combined businesses, Kobayashi and Gotō's strategy was brilliant. They sacrificed immediate railroad profits to take advantage of the railways' greatest economic potential in the long run: delivering customers to a wide array of profit-taking opportunities. The transformation of downtown stations like Umeda, Meguro, and Shibuya became models for maximizing returns in already dense areas. Koboyashi's ideas for an anchor department store at key stations would soon become standard practice. Gotō's innovative methods for developing suburban land, such as using the Land Readjustment to force and shape redevelopment, and the practice of selling land cheaply at first to fetch higher prices later, would also be widely copied in the coming decades (Eiichi Aoki et al. 2000, 91-2).

#### *5.3.4 Declining Economy, Growth of Tokyo*

The 1920s were generally difficult years for the Japanese economy. World War I led to a major economic boom for the country, especially its export sector; the cessation of the War in 1919 meant a slowdown and return to normalcy. European powers that had

dedicated their industrial base to war production re-entered the manufacturing and export fields vacated during the war, thereby crowding markets that the Japanese had recently entered and exploited. In addition, the end of the Great War meant reduced demand for many goods, especially high-value products such as industrial chemicals. The 1923 earthquake was another obstacle for economic development. The quake destroyed hundreds of factories in the Tokyo/Yokohama region, as well as train lines, electric plants, and port facilities. This led to a major decline in export capacity, the very thing that Japanese political and economic elites had made the centerpiece of their economic development strategy. Political instability and corruption also deterred the leaders' abilities to make effective policies to reverse the decline.

Economic problems came to a head with the Panic of 1927. The Japanese stock market dropped precipitously after a string of bank runs in March and April (Shun-ichi Watanabe 1980, 139). The Bank of Japan responded by printing money to prevent people from hoarding what little they had, but the atmosphere of panic produced the opposite effect, setting in motion a vicious cycle of even more bank runs and greater reluctance to invest in anything, causing extreme inflation. This dried up the sources of debt financing for small and medium-sized companies, putting many out business (Johnson 1982, 100-2). Their losses were gains for the *zaibatsu*, the large, family-centered conglomerates that had begun to dominate the Japanese economy and society beginning in the 1880s. The *zaibatsu*, many of which had substantial investments in railway businesses, acquired smaller, distressed companies at bargain prices, and were then able to supply them with capital from the banks and holding companies also under their control (Andrew Gordon

2003, 139-44). The overall effect was a concentration of capital and power in fewer hands.

The 1920s economic depression was a problem for all Japanese, but especially for the rural poor, who still made up the bulk of Japanese society (Johnson 1982, 96). As economic opportunities in rural areas slipped farther and farther behind those in cities, ever more people moved to the cities in search of work (Allinson 1979, 19). Tokyo, Osaka, Nagoya, and other major cities experienced population booms during the decade. For example, the population of Tokyo Prefecture increased 43% over the 1920s, even considering the drop in population caused by the tragic earthquake:

**Table 5.2: Population Increase in Tokyo Prefecture, 1920-1929**

<b>Year</b>	<b>Population</b>	<b>New Residents</b>	<b>% Increase</b>
1920	3699428	-	-
1921	3830700	131272	3.5
1922	3984200	153500	4.0
1923	3859400	-124800	-3.1
1924	4185500	326100	8.4
1925	4485144	299644	7.2
1926	4694400	209256	4.7
1927	4897400	203000	4.3
1928	5101400	204000	4.2
1929	5300000	198600	3.9
Source: (Tokyo Prefectural Statistics Bureau 2006)			

### 5.3.5 *Suburbs and Setagaya in the 1920s*

Economic depression, the earthquake, and the region's population growth combined created intense pressure for decent housing in Tokyo in the 1920s. Building improved, larger scale housing in the urban core's traditional residential neighborhoods was essentially impossible. Those areas were already at high densities and planners had a long-standing desire to move people out of downtown to remove the *nagaya*, the tenement slum housing, to modernize the urban core. The earthquake, tragic as it was, ironically "helped" in this regard, as it destroyed thousands of housing units in the city, allowing many downtown districts to start fresh.

Development of the urban periphery was the only practical solution to the problem of insufficient housing in the 1920s. This basic pressure for population relocation within the Tokyo metropolis was the main driver of Tokyo's first suburban boom. To be clear, the 1920s were not the first years of suburbanization. As the previous chapter showed, Tokyo's first suburbs started to take shape in the 1880s and 1890s, and suburban housing became more popular in the 1900s and 1910s with the development and expansion of light railways and trams. Suburbanization prior to the 1920s, however, was relatively modest, leading me to categorize that era as one of "incipient suburbanization." Many of the suburbanites prior to the 1920s were members of the upper-middle and upper classes who could afford custom-built houses and daily train fares to and from their downtown jobs. Of course, not all members of these classes left the downtown core, making suburbanization in this period more of a trickle than a trend.

Developments on two fronts combined to make suburbanization a more middle-class phenomenon in the 1920s. The first was the new business model pioneered by Gotō and Tōyoko for suburban real estate development. Even though Denentoshi was very much an elite suburb, with little thought given to creating a place the average citizen could afford, it held an important lesson about the economic possibilities of large-scale, coordinated development. Subsequent projects by Tōyoko or other companies (many of which were affiliated with private railway companies) were not as architecturally grandiose or built on lots as large as the Denentoshi project, but they were created, packaged and sold more or less the same way. Economies of scale helped to drive down company costs of developing land, which in turn lowered the price for consumers. Prospective homebuyers also faced more affordable transportation costs, since new suburban housing was almost always oriented around a train line and station offering cheap and quick access to the downtown core (Yamaguchi and Inaba 1987, 33-5).

The second assisting condition behind the 1920s suburban boom was the expansion of Tokyo's mass transportation network. Private companies like Tōyoko, Keio and Tōbu all improved their networks in the 1920s by extending existing lines, building new branch lines off of main lines, offering express service and by adding stations (Takechi 1986, 74). Generally, extension meant building new sections of lines away from Tokyo, but in some cases, regional private railways operating around Tokyo were extended all the way into the city. One important example was the extension of the Odawara Express Railway to Shinjuku station in Tokyo in 1927, after which it became a

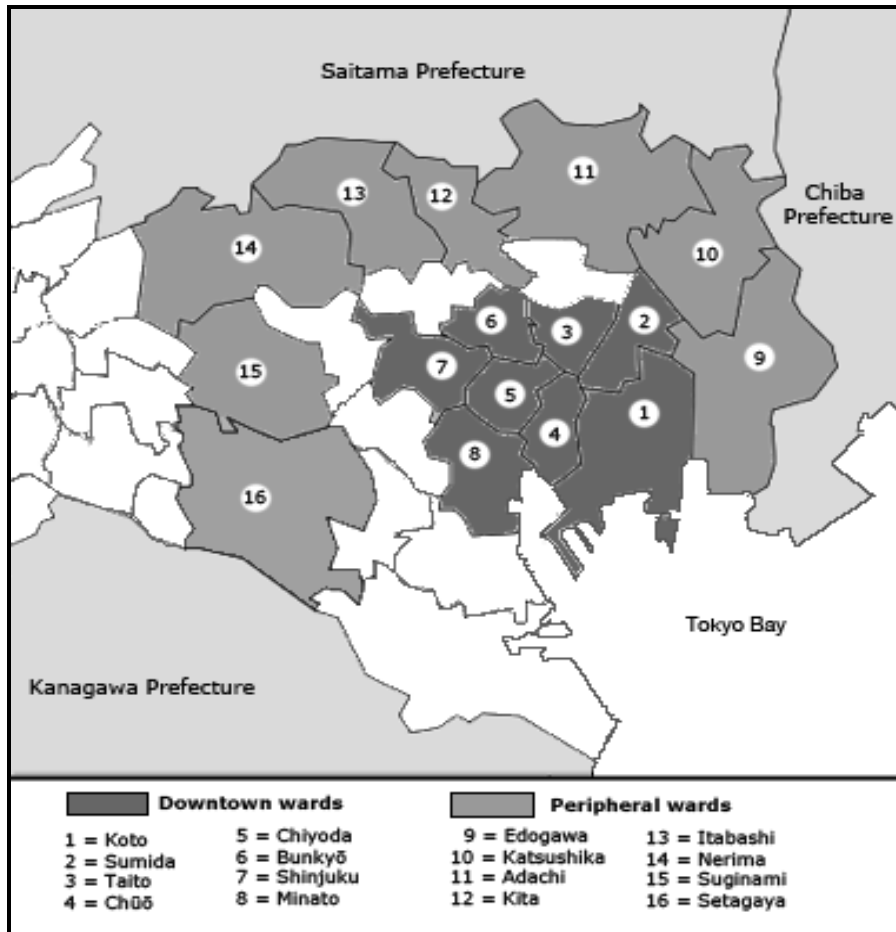
very popular commuter line in western Tokyo (Eiichi Aoki et al. 2000, 86).<sup>69</sup> Meanwhile, several national railway lines operating in Tokyo also became popular with commuters after improvements in the 1920s. The final section of the Yamanote loop line was completed in 1927, after years of incremental construction, and when finally completed, the line encircled Tokyo's most built up areas. Although it was conceived and carried out as a project of the national railways, the Yamanote loop line had an important impact on private railways, as it linked the most important suburban transfer terminals with the major national railway stations. This allowed suburban commuters to take a private line to the urban terminal, transfer to the Yamanote, and then easily get to the most important districts of Tokyo.

A minor factor in suburban growth during the 1920s was increasing relocation of various institutional land uses to the suburbs. To borrow Jane Jacobs' term, the national and municipal governments began placing "chess pieces" like major hospitals, large parks, and prisons in the suburbs partly to recognize the demographic shifts underway, but also partly to accelerate them (Allinson 1979, 51-8). For instance, Kiyose City in the northwest suburbs was selected as the site for a new national hospital and medical school, Musashino City was awarded a water filtration plant and a large park, and Setagaya got several more military facilities, as well as land grants which it made available to private schools and universities (Setagaya Ward 1976, 326-31). These created more jobs in those suburbs and attracted additional residents.

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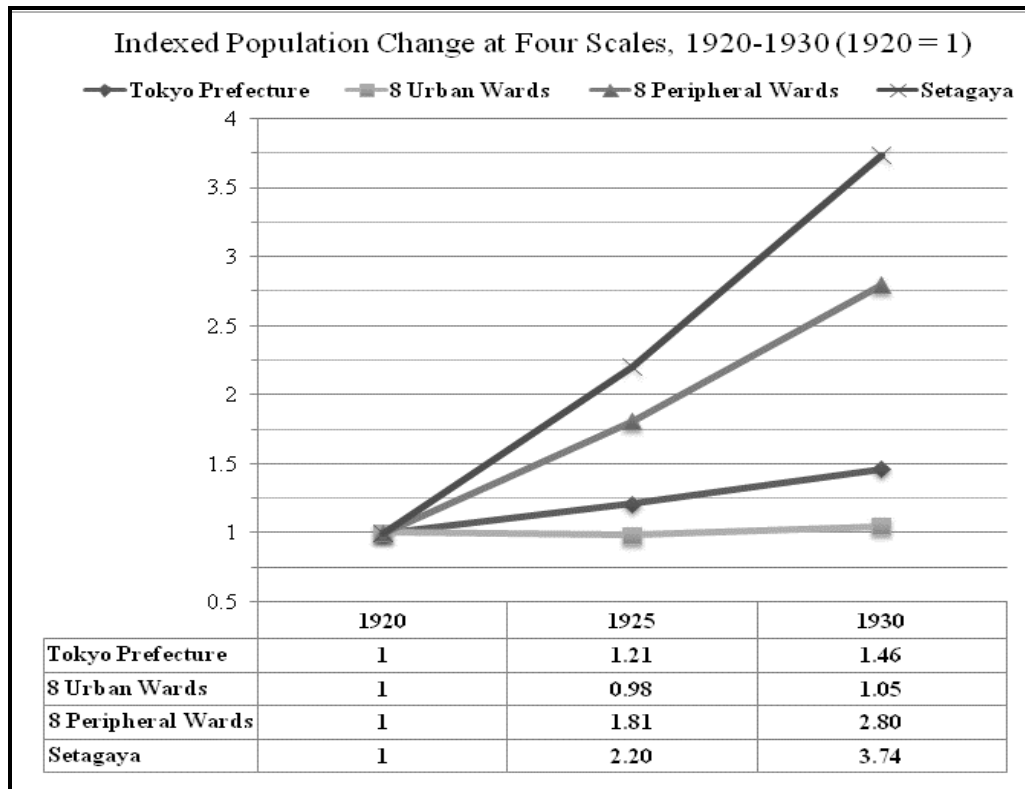
<sup>69</sup> In time, the company behind this line expanded and would become the Odakyū Electric Railway, one of the main suburban electric railways in Tokyo at present.

The confluence of population pressure, inadequate housing, already crowded central districts, cheaper suburban housing, expanded transportation systems and suburban facility investments produced a significant transformation of the metropolis. In short, Tokyo grew outward in the 1920s as suburbs boomed and growth in the traditional center practically stopped. One way to convey the growth is to compare the population growth of the eight wards that defined Tokyo's traditional core with the eight peripheral wards of Tokyo that defined its first ring of suburbs.



**Figure 5.3: Downtown Wards and Peripheral Wards in Tokyo**

Within the eight downtown wards, the population went from 2.4 million in 1920 to 2.36 million in 1925 and then to 2.52 million by 1930, an incremental gain of just five percent. In contrast, the population of the eight peripheral wards almost tripled over the same period, climbing from 334,000 in 1920 to 605,000 in 1925 and 934,000 in 1930 (Tokyo Prefectural Statistics Bureau 2006). The magnitude of change in metropolitan population distribution is perhaps best visualized by the figure below which compares populations at four geographical scales according to an indexed number of their populations in 1920.



**Figure 5.4: Population change, 1920-1930 (Tokyo Prefectural Statistics Bureau 2006)**

Setagaya’s explosive growth in the decade is attributable to the area’s large number of speculative real estate projects and increasing levels of transportation access.

Setagaya was Tōyoko's home base for railway service and the main location for its real estate development efforts; likewise for the Meguro-Kamata Railway Company (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 44-5). In 1929, the Meguro-Kamata opened a new branch line in Setagaya, the Oimachi Line, which ran from Futako Tamagawa, the southwestern terminal of the Tamagawa Electric Railway (Tamaden), to Oimachi Station on the Yamanote loop line (Tōkyū Dentetsu Kaisha 2007). Meanwhile, the Tamaden Company opened the Tengenji Line in 1924 to connect Setagaya with Suginami Ward to the north, and also extended its main line past Futako Tamagawa and into Kanagawa Prefecture in 1927 (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 44).

## **5.4 1930 to 1945**

### *5.4.1 Militarization and Centralization*

By the 1930s, the Japanese economy had begun to recover somewhat from the 1927 Panic and years of deflation, but the 1930s depression in the United States proved to be a significant damper to economic expansion. The stock market crash, widespread bank insolvency, and a series of worldwide trade barriers dealt a severe blow to the export sector, the crux of Japanese economic strategy since the 1890s. In response, Japanese economic policy shifted toward boosting domestic demand through deficit financing for public works projects and the military.<sup>70</sup> This led to numerous new bridges, roads, and railroad lines throughout the country in the early 1930s, while military spending in the

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<sup>70</sup> The effort was led by the finance minister, Korekiyo Takahashi, who argued for practically the exact same policy responses that John Maynard Keynes promoted a few years later. Takahashi has since been dubbed the “Keynes of Japan” (Johnson 1982, 119).

general budget went from an already high 28 percent in 1930 to an astonishing 43 percent by 1935. In addition, the government took control over all foreign exchange transactions, and by extension, gained *de facto* control over the value of the yen (Johnson 1982, 119).

Increased military spending also came about due to the growing strength of right-wing, pro-military parties in Japanese politics. By 1930, Japan had shifted far to the Right, complete with assassinations of prominent left-leaning politicians and brutal suppression of the labor movement. The army invaded Manchuria in 1931 and created a puppet state, Manchukuo, which soon became home to tens of thousands of Japanese colonists. In 1932, right-wing groups assassinated liberal Prime Minister Tsuyoshi Inukai, then launched a full-scale *coup d'état* in 1936 to oust remaining liberals in the Parliament, who had tried to cut military spending and slow down the army's campaigns in China. The insurgency was defeated in a few days, but the incident did turn out to be the tipping point in the country's trend toward militarization (Andrew Gordon 2003, 196-203).

Since 1868, at least, Japanese political power had always been tilted toward national concerns, but the country's militarization meant a significant centralization of power; existing local powers were transferred to the national level and put in the hands of relevant ministries (Ishizuka and Ishida 1988, 194-9). This shift impacted all of Japanese society including transfers of power in areas related to suburbia; any oversight local communities had over taxation, infrastructure, or land use was lost to the Home Ministry. Eminent domain became quite common during the late 1920s and 1930s, as the military seized increasing amounts of land in and around Tokyo for its own use and to build

firebreaks and other defensive measures (Steiner 1957, 8). The military footprint in Setagaya, already home to numerous military installations and barracks for the Army, grew even more as it became one of the main residential areas for Army officers (Setagaya Ward 1976, 118).

In 1932, the national government achieved greater control over local affairs in the Tokyo Metropolis through reform of the political divisions (Yamamoto 1993, 119). Tokyo Prefecture annexed 82 villages and towns in its peripheral areas, enlarging its physical dimensions and expanded the number of urban wards from 15 to 35. Setagaya was one of these new urban wards, reflecting its newfound status as more urban than rural. It was formed through the consolidation of what was then Setagaya village with three other villages. In 1936, the Tokyo Prefectural government added two more neighboring villages to Setagaya Ward, thereby creating the ward boundaries still in effect today and bringing the total land area to 58 square kilometers (Tokyo Metropolitan Archives 2008, 1-2).

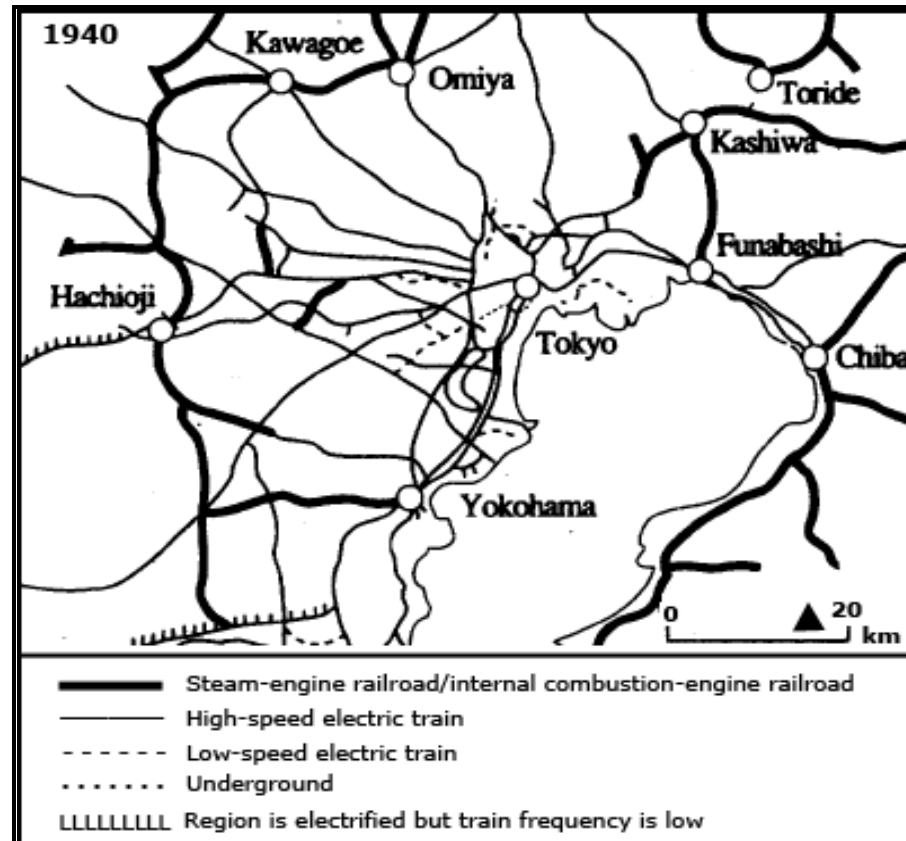
#### *5.4.2 Railways in the 1930s and the Evolution of Tōkyū*

Since the first appearance of trains in 1871, Japanese policy makers had spent considerable time and energy to increase their presence all across the country. A wide array of railway supporters arose, so the goal was little in doubt, but the diversity of supporters also provoked a number of questions. For example, would railways be a public venture, a private one, or a mixture of both? What was the best way to encourage their spread: by mandating at a national level where and when they would be built or by leaving those decisions to parochial interests? Railway policy over the decades vacillated

between almost all possible answers, and by 1930, Japanese railways formed a hybrid system that was partially both private and public, in some ways nationally planned and in some ways not. Long-haul railways between major regions were exclusively public, owned and operated by the *Kokuyū Tetsudō* (National Railways), while regional railways were a mix of lines operated by the national railways and by private railway companies. The layout of long-distance lines and intra-regional feeder lines had been completed under the directives of the Ministry of Transportation. Railways at smaller scales, such as suburban commuter lines and intra-urban, were almost exclusively private, the only exceptions being portions of the national railway lines which operated in cities.

By 1930, this hybrid system was by and large settled, and railway policy retreated into the political background (Eiichi Aoki et al. 2000, 84). No significant railway legislation was passed after the 1920s promulgation of the Local Railway Laws and the Railway Construction Law until the National Mobilization Law of 1938. The reasons for absence of new laws are impossible to define. But if the goal of railway policy was to promote the development of the railway network, then one could conclude that the railway network of Japan was already sufficiently developed by this period. By the middle of the 1920s, railroads connected all the important cities of Japan, and cities like Tokyo, Osaka and Nagoya were each crisscrossed by suburban electric lines and trams operating in the densest districts. Osaka had a thriving municipally owned subway system, while Tokyo had two competing subway systems, both privately owned (Eiichi Aoki et al. 2000, 96). Ridership, meanwhile, was strong and growing throughout the

1920s and into the 1930s, climbing from 460 million passengers in 1921 to 1.65 million by 1939 (East Japan Railway Culture Foundation 1996, 3-4).



**Figure 5.5: Railways in Tokyo, 1940 (adapted from Yamamoto 1993, 119)**

The increase in passenger figures was accomplished without a great deal of new lines or new companies. There was a significant expansion of existing lines, though, and private railways in the 1930s still took advantage of the subsidies provided by the 1921 Local Railway Subsidy Law to expand service (Uda 1995, 29). Public support for railway operations helped support other aspects of railway companies' diversified operations, primarily suburban real estate development, but also tourist activities and retail stores. The Keio Railway Company, for example, drew on subsidies to build the Inokashira Line

from Shibuya on the Yamanote Line out to Kichijōji Station in suburban Musashino City, where it already owned significant commercial property (Allinson 1979, 153). The Odakyū, Tōbu and Keihin companies also expanded their networks at this time (Kishi 2002; Takashima 2002).

The growth of the Tōyoko Railway Company, through mergers, acquisitions and diversification, was emblematic of the path that many of the large private railway companies took during the 1930s, though the growth of Tōyoko did exceed its competitors. Still under the control of Keita Gotō, Tōyoko completed a major rail network reorganization, built several new connections, and opened an extended version of the Tokyo Yokohama Line, connecting Shibuya and Sakuragicho in the heart of Yokohama City (Wakuda 1981, 52). In 1934, the company opened Tokyo's largest department store, Tōyoko, at Shibuya Station, the first example of a private railway company owned store in the Tokyo area. In the same year, the Meguro-Kamata Railway, in which Gotō also had a major, though not controlling stake, bought and incorporated the Ikegami Railway, and then bought two trucking companies and a taxi company. Tōyoko then acquired the Tamagawa Electric Railway (the Tamaden) in 1938, giving the company two lines in Setagaya, including the tram line responsible for the area's earliest suburbanization in 1903 (Tōkyū Dentetsu Kaisha 2007; Setagaya Kuritsu Kyōdo Shiryōkan 1989, 11). Finally, in 1939, the Tōyoko and Meguro-Kamata Companies officially merged, after years of being run as sister companies under Gotō's influence. The conglomerate, now known as Tōyoko Railway, had six major rail lines, trucking companies, a taxi company, the department store, and major residential and commercial

real estate holdings throughout the area (Tōkyū Dentetsu Kaisha 2007; Tōkyū Dentetsu Kaisha 2009).

#### *5.4.3 Suburbs and Setagaya in the 1930s*

The suburban housing boom, led by real estate development companies affiliated with private railway companies, continued until wartime restrictions curtailed civilian economic activity in 1940 and 1941. Many of the leading developers during the 1920s maintained their pace in the 1930s, and as before, a very small handful dominated the market for multi-unit projects. Of special interest are the real estate development companies of the Tōyoko Railway, which built 38 large-scale projects between 1930 and 1941, and the Meguro-Kamata Railway, which built 25. In terms of land area, Tōyoko developed 11.5 million square feet of suburban residential property, while Meguro-Kamata developed 5.3 million. Other railway companies such as Odakyū, Tōbu, and Keihin constructed 39 large projects between them (Katagi, Fujiya, and Kadano 2000, xix-xxii). Other large suburban developers included the Hakone Real Estate Company, named after a mountain resort area west-southwest of Tokyo, where the founder, Yasujiro Tsutsumi, had made a fortune selling vacation homes. Though this company was not directly affiliated with a private railway in this period, Tsutsumi had substantial investments in various railway companies and made deals with them to ensure rail service for his land holdings. After the end of World War II, Tsutsumi used his real estate fortunes to take over a number of small private railways, combining them with his various real estate companies to form the Seibu group. Incidentally, the Hakone Real Estate Company in the 1930s was one of the main business rivals to Gotō's emerging

Tōyoko group in the southwestern suburbs, and Seibu would become Tōkyū’s main rival in the late 1940s and afterwards (Downer 1994; Havens 1994).

In terms of the geography of suburban development, the 1930s pattern mimicked that of the 1920s, with residential construction weighted towards Tokyo’s western and southwestern suburbs, with some expansion to the north of Tokyo, and relatively little to the East. There was a “weather front” effect as the suburban limit was pushed a little further out from Tokyo’s center every year (Shun-ichi Watanabe 1984, 423; Allinson 1979, 52). The “weather front” metaphor is not a perfect one, though, as many projects in the 1930s were in the same municipalities as in the 1920s, indicating that those areas had not yet been filled in by 1929 and 1930. Setagaya, for example, continued to be a popular location for multi-unit developments, and was home to 11 out of 38 projects of the Tōyoko Company and 15 out of 25 built by the Meguro-Kamata Corporation. Other frequent sites were Setagaya’s neighboring wards in Tokyo Prefecture: Ota and Suginami (Katagi, Fujiya, and Kadano 2000, viii-xxii). The population of Setagaya climbed in the 1930s as it had in the 1920s:

**Table 5.3: Population Increase in Setagaya, 1920-1940**

<b>Year</b>	<b>Population</b>	<b>New Residents</b>	<b>% Increase</b>
1920	39952	-	-
1925	87965	48103	120
1930	149323	61358	69.8
1935	210701	61378	41.1
1940	281804	71103	33.7
Source: (Tokyo Prefectural Statistics Bureau 2006)			

Even though suburbs such as Setagaya had grown exponentially in the 1920s, opportunities for purchasing cheap land were by no means gone in the 1930s. Building homes on suburban land still made a great deal of economic sense. According to data assembled by Allinson, land along the Yamanote Line in places like Shinjuku and Shibuya, still part of the city but not downtown, rented for about 15% of the price of land in Nihonbashi in the heart of the city. Outside of Shinjuku and Shibuya, land prices went down even further. Land in Suginami ward, north of Setagaya and a bit more convenient to downtown due to its better train service, cost one-third less than in Shibuya, while land in Setagaya cost one-half. Thus, rental rates in Setagaya were 7.5% of peak value rates in the city center (Allinson 1979, 53-4). Within these suburbs, there was also still plenty of room for more housing. In Setagaya, for example, only about 40% of the total land area was covered by structures of some type in 1936 (Setagaya Ward 1976, 226), while in Musashino, farms still accounted for 65% percent and forests 10% of the total land area even as late as 1940 (Allinson 1979, 66). In both of these suburbs, as elsewhere across the region, development was clustered around train stations and farmland still covered land between train lines and away from stations.

#### 5.4.4 *War*

Setagaya's landscape in the 1930s changed with the influx of people, but also due to the increasing militarization of the economy, and increased likelihood for a larger war beyond the one with China in which Japan was already engaged. A 1937 military decree

mandated that all factories for war materiel should immediately be moved outside of dense population districts, but still within convenient access to railroads and highways (Allinson 1979, 56). In Tokyo, local politicians identified a semi-circular band in the suburbs, approximately 20 to 30 kilometers outside the dense areas, as a suitable area for relocation. Within this band, military suppliers would receive free land and grants to rebuild factories at sites an appropriate distance from one another, in order to limit air raids and lessen the impact of fires on war production (Steiner 1957, 8-9). Military production would soon have a major impact on suburbs throughout the region, especially in terms of job creation. Since the factories had to be spread out, practically every suburb got its share of factories, including Setagaya (Setagaya Ward Historical Committee 1993, 455).

The relocation decree was a prelude to a much more sweeping law passed in 1938, the National Mobilization Law, which reorganized all Japanese industries for wartime production, including establishing a rationing system for civilian goods. This included building supplies for civilian housing. Suburban housing development declined after 1938, though a few projects already underway continued (Katagi, Fujiya, and Kadano 2000, 22). Civilian train use also became more difficult, as more and more train lines and cars were reserved for military uses. The 1938 Mobilization Law was followed by more specific laws, targeted at specific industries. One of these, the Land Transport Business Coordination Law, had an especially strong impact on the railroad industry. The Law gave the Ministry of Transportation power to reorganize the entire railroad industry to eliminate redundancies and waste in the railroad sector. The Ministry then nationalized

a few private railroads and forced other private railways to merge (Yamamoto 1993, 175; Eiichi Aoki et al. 2000, 110). In practice, this meant forcing sales of smaller railways to larger competitors at prices determined by the Ministry, and by 1940, only nine private railway companies were left in Japan (Kobayashi 2005, 66).

The early years of the war economy was a period of strong economic growth. The military build up caused a significant expansion of industry, and helped bring Japan out of the economic doldrums left over from the mid-1920s (Johnson 1982, 118-27). By 1942 and 1943, however, the tide had turned overseas and the situation at home had become much more desperate. All production for non-military needs ended and civilians could only get military rations bought on the black market, or food they were able to grow themselves. In 1942, the Ministry of Transportation made a second round of consolidations, forcing Odakyū and Keihin to merge with Tōyoko. The new conglomerate was known as Tōkyū, or Tokyo Express Railway. Tōkyū was larger than either of the other two companies, but not to the degree that it could have realistically taken either over without government intervention, much less both (Wakuda 1981, 55). The merger left Tōkyū with almost a complete monopoly over all rail traffic in southwestern Tokyo. In 1944, the monopoly in that area was complete when Keio was forced to sell out to Tōkyū, creating Dai Tōkyū, or Great Tōkyū (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 46). That same year, Gotō left his CEO position at Dai Tōkyū to become Minister of Transport and Communications under Admiral Tōjō, a post he would hold until Japanese surrender in 1945 (Tōkyū Dentetsu Kaisha 2007). By the end of the war, there were only four private railway companies left in Tokyo, each with its own sphere of

control: Seibu in the northwest, Tōbu in the north, Keihin in the east and the biggest of them all, Dai Tōkyū in the southwest (Eiichi Aoki et al. 2000, 111).

The 1942 Doolittle Raid on Tokyo began a long series of aerial bombings. This mission had just a few bombers and did very little damage, but proved that American bombers could reach the home islands. This realization caused considerable panic among Japanese war planners and, of course, civilians. The development of the long-range B-29 bomber, plus the advancing naval campaign in the South Pacific, especially victories in the Northern Marianas (Guam, Saipan, and Tinian) in June and July of 1944, brought Tokyo within easy reach of American air power. Larger air raids began in February, 1945 and went on throughout the rest of the war. The most horrific air raid occurred on the night of March 9, 1945, when more than 300 B-29s dropped incendiary bombs for six hours throughout the Tokyo metropolis. Casualty estimates ranged between 87,000 and 97,000, making the toll of one this night practically the equal of the Hiroshima and Nagasaki nuclear bombings. More than 250,000 buildings were destroyed, leaving approximately 1,000,000 people homeless. The bombing campaign of March 9 was just one out of sixty-five. The final tallies for Tokyo alone amounted to about a half million people killed or wounded, almost a million homes destroyed and over 2.6 million people made homeless (Selden 2007; Andrew Gordon 2003, 225).

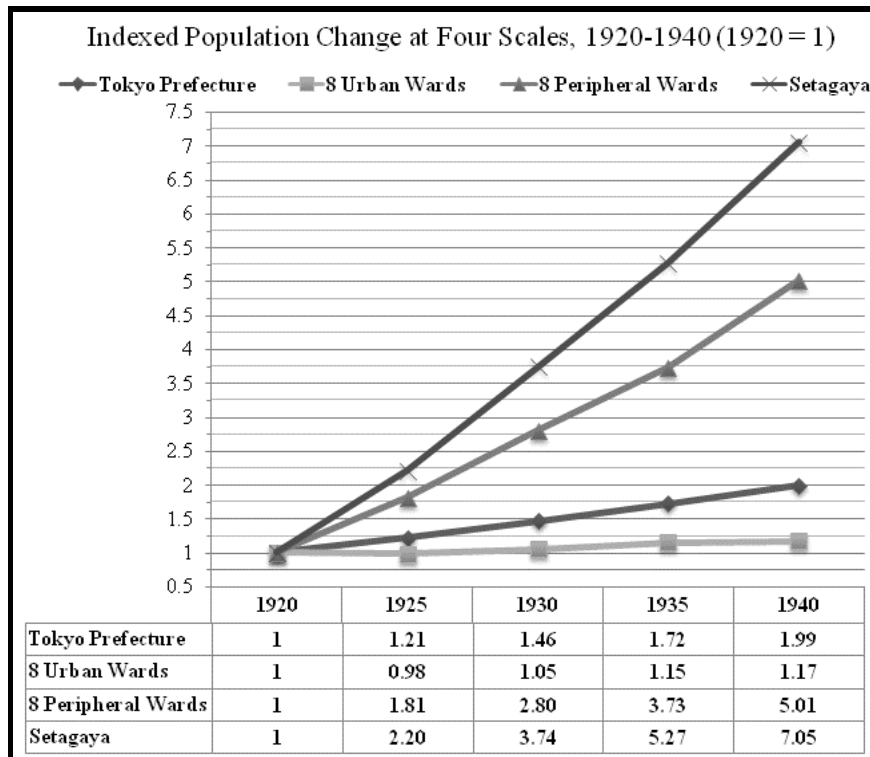
Most of the raids on Tokyo had two targets: the dense districts downtown to turn public morale against the war; or industrial areas to hamper the war production effort (Yamamoto 1993, 177). The Americans focused particularly on aircraft production sites, since towards the end of the war, winning the air battle was Japan's only hope for

success. Major bombing campaigns were conducted against airplane factories and airfields in Tachikawa, Musashino, and Hachioji, all to the west of Setagaya. A few bombs struck Setagaya in April and May of 1945, resulting in a few deaths (Setagaya Ward Historical Committee 1993, 498). By and large, though, Setagaya was a rather safe place to be during the air raids, and tens of thousands of residents of central Tokyo evacuated to Setagaya and other suburbs during the raids (Allinson 1979, 95).

## **5.5 The Era of Peak Suburban Growth**

### *5.5.1 Reasons for Growth*

The strong growth of suburbia over the 1920s and the 1930s, including the tremendous growth of Setagaya in particular during that time, underlies the indexed statistics above. Although the prefecture's population doubled over those two decades, this growth varied across parts of the metropolis. The downtown areas grew .85% a year on average, while the population of the suburban wards went up five-fold and that of Setagaya seven-fold. As described, this explosive growth began even before the 1910s, but a number of crucial developments in that decade and in the 1920s created the suburban boom period.



**Figure 5.6: Population change, 1920-1940 (Tokyo Prefectural Statistics Bureau 2006)**

Japan's expanding economy in the decade of World War I and into the first half of the 1920s was a primary factor. The number of jobs in Tokyo and other cities in Japan increased greatly in these years, leading to an influx of prospective workers into urban areas. The nature of the growing economy drew immigrants; factory jobs offered higher wages than many other types of employment available to the unskilled, and were a large step above agricultural work. Increased number of workers, many living clustered around the factories that employed them, led to urban congestion and a housing shortage in the city center. This naturally led some to look to peripheral areas for larger, cheaper housing. Governmental directives to place more and more public facilities on Tokyo's outskirts also directed residential development to the suburbs.

The entrepreneurial acumen of a few individuals in the railroad and real estate industries, or rather, the railroad/real estate industry, also played important roles in the 1920s and 30s suburban boom. Gotō and Kobayashi's perspicacious analyses of population shifts, consumer demand and organizational structure helped them amass fortunes. Specifically, their strategies to diversify and integrate their operations proved brilliant. This approach favored long-term wealth building over short-term profit-taking and differed from the typical business practices of railroad owners of the day. Their business empires, Tokyū and Hankyū, respectively, were key elements in building the suburbs, and getting people to and from them, in this era of growth.

Two important supporting factors for understanding this boom are technological change and historical accident. Improvements in electric power technology in the 1900s and 1910s led to the full-scale use of electric trams in the 1920s and 1930s. Unlike steam engines or horsecars, the trams were perfect for moving commuters from the city center to homes ten to twenty kilometers away. The Great Kanto Earthquake of 1923, meanwhile, had an important catalytic effect on settlement patterns. Although most of the conditions for mass suburbanization existed in the very early years of the 1920s, the quake, the subsequent fires and the government's response to the disaster all helped direct people to settle in Tokyo's outskirts.

#### *5.5.2 Institutional Support for the Transit-Oriented Suburb*

To explain why suburbs in this period took the form they did, one must look at institutional factors. That the earthquake, the changing economy, a housing shortage, entrepreneurialism and technological progress would have led to some kind of suburban

growth is not in doubt. To understand the particular pattern of transportation and land use established then, and still more or less in effect today, however, one must acknowledge that governmental framing of the ostensibly private railway and real estate industry played a crucial role.

Railroad promotion legislation from 1910 until 1922 was invaluable in creating the profitable system of electric trams and light railways that connected job centers and residential areas. The Light Railway Law of 1910 and the Light Railway Subsidy Law of 1911 were the first of five such pieces of policy, and established that the Diet would play an active role in promoting the private railway business. They helped to launch a surge in railway investment early in that decade. After a minor slowdown in construction due to over-building, the Diet passed two updates to those two laws: the Local Railway Law and Local Railway Subsidy Law, both in 1921.

Taken together, these pieces of legislation provided private railway enterprises with access to abundant sources of lending, available at zero interest. Most importantly, these laws stipulated that private railway investment would be guaranteed a return of 5% for at least ten years.<sup>71</sup> This anomaly promoted construction of light and local railways beyond existing market demand; even if a new railway line were theoretically more profitable than that, it encouraged railway owners to reinvest earnings into expanding their land holdings. In this way, investing in the private railroad industry was more akin to putting money into a secured savings account rather than the risky stock market. The existence of these laws casts considerable doubt about just how entrepreneurial the early

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<sup>71</sup> The first two laws guaranteed ten years of profitability at 5%, the last two guaranteed ten years after construction.

railway barons were, since they took virtually no risk. In order to build a railroad, “speculators” had little more to do than fill out the appropriate paperwork, have the right political connections, and then prepare the accounting books correctly. They were then rewarded with a healthy rate of return and long-term ownership of a profitable business.

If there was a flaw to this system, at least in the eyes of the owners of the private railway interests, it was that the legislation encouraged too many entrepreneurs to enter the market. A company’s investment in land and track in a given area could be undone if other subsidized competitors were allowed to poach the area for passengers and customers. The 1922 Railway Construction Law provided the means to control market entry by giving politicians in the Diet greater oversight over who could be registered as a local railway, and thus be eligible for the subsidies. Larger businesses in the private railway sector used the 1922 Law to great advantage by supporting politicians who would look out for their interests. The Land Transport Business Coordination Law of 1938 was another step in the direction of limiting competition in favor of the largest companies, and finally, the forced consolidation of the industry in 1944 put Tōkyū in control of what had been its three main competitors.

The 1919 urban planning system was also significant in creating the land use pattern of Japanese suburbs. The 1919 planning system established a permissive zoning system that allowed landowners great leeway over how they used their land. The system contained only three zones, and allowed for “grandfathering” of existing land uses at the time it passed. In addition, the zoning specified only a limited number of uses that were prohibited in a certain zone, rather than specifying what a given zone must contain. This

allowed for a great number of conforming uses in each zone. Meanwhile, building standards were relatively lax in the 1919 system. Although the zoning system of 1968, and again in recent years, has become stricter with regard to zoning and standards, Japanese landowners, whether individuals or large companies, still have great latitude when making real estate development decisions.

The burgeoning railway/real estate conglomerates took full advantage of the freedom allowed by the 1919 planning system. Tōkyū, Seibu, Hankyū and others maximized their land holdings by building residential units, department stores, small office buildings and tourist attractions throughout the metropolis. Tōkyū, in particular, also took advantage of the Land Readjustment process promoted in the 1919 regulations. This functioned as a kind of private version of eminent domain for Tōkyū, as they could leverage partial ownership in a given area to initiate a transformative redevelopment of the entire project area. The company used this strategy to guide the development of the areas around its stations and along its lines. All told, the 1919 system contained many of the elements necessary for a real estate developer to create dense, mixed-use areas that suited the emerging pattern of rail-based intra-metropolitan transportation.

## Chapter Six: The Maturation of Japanese Transit-Oriented Suburbia

### 6.1 1945 to 1950

#### 6.1.1 War Destruction and the “Prison of Hunger”



**Figure 6.1: Aftermath of aerial bombing of Tokyo (Selden 2007)**

American air raids in 1944 and 1945 destroyed most of central Tokyo and significant parts of outlying areas. The photo above, taken by an American aircraft a few days after Japanese surrender, shows the extent of damage in the city center. The photo looks east, with the Marunouchi district, Tokyo’s central business district before the war, in the foreground and the Sumida River and eastern Tokyo, Tokyo’s factory area and densest neighborhoods of working-class housing, at the top of the frame. This photo shows the damage that was widespread throughout most of the city’s traditional core. The degree of damage that Tokyo suffered from repeated fire bombing campaigns was also

common in other urban areas. 115 Japanese cities suffered aerial bombardment, with 2.3 million dwellings lost and 10 million people made homeless (Sorensen 2002, 158-9).

Tokyo's physical destruction was just one aspect of the war's effect. The city's political structure, the economy, and culture as a whole were broken by over twenty years of dedication to a military purpose that ultimately failed. The Supreme Command of the Allied Powers (SCAP), headed by General Douglas MacArthur, carried out a thorough overhaul of the Japanese government, created a new role for the Emperor, wrote a new Constitution in 1947, and overrode local and national laws that hampered the mission to rebuild Japan as a liberal democracy. Militarism and nationalism were strictly suppressed in popular culture through the destruction of schoolbooks, rigid censorship of music, films, and literature, and the promotion of American values in their place (Dower 2000).

With the militarization of the economy beginning in the 1930s, and the passage of the War Mobilization Law, the Japanese economy was almost entirely oriented towards war production, while the civilian economy withered. When the war ended, industrial capacity was just ten percent of what it had been in 1930 and what little capacity there was still needed to be refitted towards civilian goods (Sorensen 2002, 177). The country's agricultural sector was also in dire straits. There were no fertilizers for crops for example, since the entire chemical industry had shifted toward weapon production and then had been a major target of American air strikes. The ration system used during the war had led Japanese citizens closer and closer to the bare minimum needed for survival, but even this basic means of supply collapsed in the chaotic years after the war. Starvation and

severe malnutrition was not uncommon at the time, leading to the idea that the defeated Japanese were now trapped in the “prison of hunger” (Johnson 1982, 177).

Rampant inflation exacerbated the destruction of industrial and agricultural capacities. To pay end of service allowances to soldiers, and recompense factory owners for assets, the Japanese government flooded the market with money despite the lowered supply of basic goods, resulting in drastic price increases. According to one study, if the price level in August 1945 were set at 100, it climbed to 346.8 by September, 584.9 by December, and 1184.5 by March of 1946 (Kakuma 1979). Starting around 1948, the SCAP turned its attention to economic issues, especially the problem of runaway inflation. Ambassador Joseph Dodge introduced policies designed to reverse the trend, including an end to all repatriation and wartime compensation payments, fixed exchange rates and a mandatory balanced budget. The so-called “Dodge Line” led to drastic deflation as the money supply plummeted. Inflation had been cured, but not without bringing the entire economy to a halt, and the plight of ordinary Japanese became harder than ever (Andrew Gordon 2003, 239-43).

### *6.1.2 Tokyo Transformation*

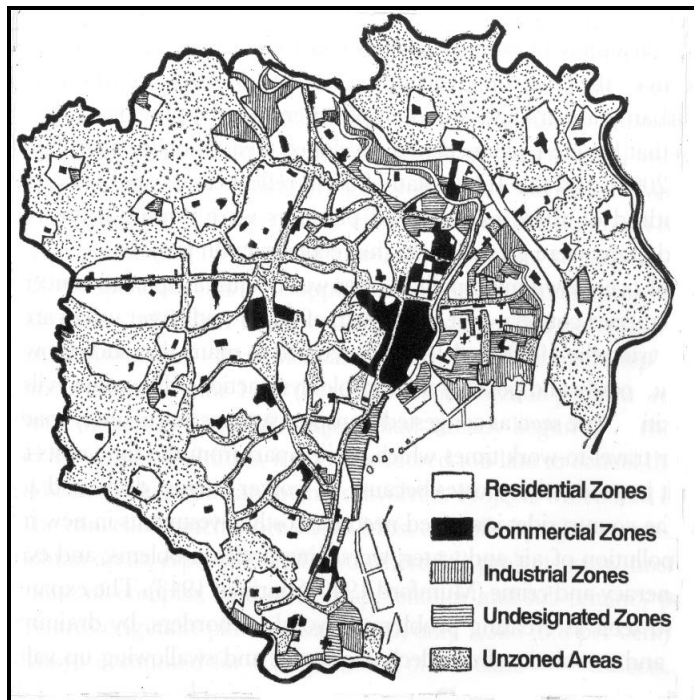
The economic nightmare of the late 1940s was the backdrop for major changes in Tokyo. The first of these was demographic, as people poured into Japanese cities, especially Tokyo, following the end of the War. Tokyo residents who had fled the city in the last few years or months of the war returned *en masse* from relatives’ houses in the country to reclaim their properties and rebuild their homes. A large wave of repatriated soldiers and colonists flowed into major cities as well (Ishida 1987, 210). Meanwhile,

people from rural areas poured into urban areas based on the misguided perception that they could find work as the country recovered from the War and defeat. All told, Tokyo's population, which in 1945 stood at 2.7 million, doubled in five years. The months immediately after surrender were particularly dramatic for Tokyo's central city population: approximately 200,000 people came every month from September until December of 1945, and then 400,000 arrived in January of 1946 alone. Tokyo's population recovered despite the fact that Tokyo offered few jobs, or decent housing and better living conditions to attract newcomers. In 1947, the number of total jobs was just over half of what it had been in 1940, and the number of manufacturing jobs had shrunk from 1.2 million down to 500,000 (Allinson 1979, 96). New and returning Tokyoites faced another problem in the immediate post-War years: rapid inflation of land prices. General inflation was so rampant, and so much of the city had been destroyed, that prices for still structurally sound buildings became astronomically high, and even land still covered in rubble fetched high prices. Between 1945 and 1950, land values in Tokyo multiplied 200 times, where in the previous eight years they had risen barely one percent (Downer 1994, 103). Rents climbed along with land prices, and squatter areas and tent cities in parks, public spaces, and on marginal land became very common (Whiting 2000). Severe land price inflation was beneficial for some, of course. Seiji Tsutsumi, the baron of Seibu Railways, made enormous profits on lands he had purchased in the 1930s and during the war. After the surrender, he directed his company to seek land exchanges with people looking to relocate from the central city, offering large parcels in the suburbs for more centrally located properties that would inevitably rise in value once the post-

War crisis was over. This was essentially repeating the same strategy he used after the earthquake of 1923 (Downer 1994, 103).

### *6.1.3 Recovery Plans*

Beginning in late 1945, the Japanese government proposed various methods to address post-War Japanese urban problems, especially the housing crisis. Much like the response to the quake, planners established a series of goals for rebuilding war-damaged areas that went far beyond just rebuilding what had been destroyed. Planners determined that ten percent of all Japanese cities should be reserved for parks, playgrounds, and other recreational facilities, and they proposed greenbelts to encompass cities and prevent sprawl. These plans also included provisions for greater governmental oversight of land use planning, stricter building standards, and lot coverage specifications. The 1945 plans also called for widening streets in major cities to make them more suitable for car traffic, as planners envisioned a much greater role for the private automobile in cities of the future (Koshizawa 2001, 200-2). Combined, these proposals showed planners were very much thinking that the devastated state of Tokyo and other cities was somewhat of a blessing for developing as a modern metropolis. Saved the burden of clearing out the devastated areas, or of needing to convince local residents and politicians of the need for change, urban planners had blank canvases on which they could draw up entirely new cities (Sorensen 2002, 164).



**Figure 6.2: Plan for the Reconstruction of Tokyo (Hoshino 1946, 6).**

Hideaki Ishikawa, head of the planning division in the Tokyo Metropolitan Government, submitted an especially ambitious plan in 1946 that offered a total makeover of the city. He proposed the reconstruction of 20,000 hectares, which was 4,000 hectares more than had been destroyed in the aerial bombings. Ishikawa drew plans for greenbelts to surround the city and green corridors to traverse it, with the end goal of dividing the city into a collection of smaller sub-cities. An elaborate system of highways, feeder roads and major urban boulevards was drawn up to connect all the parts of the metropolis, thereby creating a more automobile dependent city. Setagaya and other similar suburbs would be outside of the main encompassing greenbelt, and more roads would be built to connect Setagaya with other sub-cities. The Tokyo plan was designed

for a maximum population of 3.5 million, more or less the population of the city at the time. All excess population was to be settled in suburban satellites (Ishida 1987, 220-6).

Government-initiated Land Readjustment (LR) projects and some funding from national and local governments were supposed to finance Tokyo's reconstruction. A special 1946 city planning law gave the post-War government greater latitude to pursue LR projects by eliminating the need to gain a certain level of public acceptance before beginning. In other words, the 1946 law turned LR into a variant of eminent domain: it could now force landowners to participate, instead of mandating that government gain approval from 50 to 70 percent of landowners in the project area. At the same time, the 1946 law increased to 15% the percentage of land the government could seize for a project without needing to pay any compensation (Sorensen 2002, 159). This was especially important to the mission of building roads, as it allowed planners to make more and wider roads without any additional expenses. Post-War planners thus had a great deal of leeway to reconfigure the city's street and road pattern, underscoring LR's strength as a planning tool. LR remained the most effective way to improve areas after they had been built up and to cut through various complicated and irregular land holdings at minimal public expense. The Tokyo plan took that idea to the extreme as it superimposed a new vision on the existing but destroyed city. Once again, though, other important elements of urban planning such as meaningful zoning regulations or infrastructure planned in advance of development were not considered.

The Ishikawa plan carried important implications for Tokyo's suburbs. Through greenbelts and expanded road networks, suburbs were to become better integrated into

the metropolis, but also more distinct from the central city. The new plan meant that the metropolis would grow outward, with more of the population in the periphery. The new metropolis would be more suited for car travel, though suburban train lines would remain an important means of intra-metropolitan transportation. To manage this new system, planners and local government officials proposed a reorganization of Tokyo Prefecture's municipal units. In 1947, Tokyo city was dissolved as a separate entity; the 35 wards that had been the city's constituent parts were consolidated into 22 special wards,<sup>72</sup> each of which was to be managed almost as a separate city itself. This move made the special wards the political equals of the prefecture's other suburban cities (Tokyo Metropolitan Archives 2008). Setagaya became one of these special wards and thus earned a greater degree of local control over civic functions such as garbage collection, local playgrounds, and elementary schools.

The imposition of anti-inflation measures put an end to any hopes to remake Tokyo on a grand scale, however. Although the Tokyo plan mainly depended on LR projects, and hence only needed partial financial support to carry out the plan, the severe 1949 anti-inflationary measures made any governmental expenditure basically impossible. The planning staff of the Tokyo Metropolitan Government was pared back to the bare minimum; it did not have the labor power to initiate any plans, even if they were entirely participant funded (Koshizawa 2001). The only parts of the Tokyo plan actually carried out were a few LR projects at train stations on the Yamanote and Chuo Lines, both parts of Japanese National Railways. All other projects were scratched, and Tokyo

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<sup>72</sup> A few months later, one of the larger special wards was divided again, creating the 23 special wards that still exist today.

was rebuilt according to the pre-War urban pattern. By the mid-1950s, the stringent “Dodge Line” policies were no longer in effect, but the opportunity to massively reconfigure Tokyo had passed. The planners’ 1946 “blank slate” was by then no longer blank, and the population had already tripled the maximum that Ishikawa had set (Sorensen 2002, 165).

#### *6.1.4 Railways*

The lost opportunity to rebuild Tokyo after the war was also an important watershed moment for the metropolitan transportation pattern, for the Ishikawa plan would have meant a major expansion of the highway system. In retrospect, the immediate post-War period offered the last best opportunity to transform Tokyo in this way. In 1949, there were still many open spaces in the city, while the government had the ability to seize land outright, and a virtually unchecked ability to launch Land Readjustment projects. Once the momentum for wholesale change was lost, however, it was practically impossible to regain. The population and construction levels in central Tokyo rebounded so quickly that future major changes would have to negotiate with thousands and thousands of stakeholders. SCAP officials scaled back local planning powers in the 1950s, depriving planners of the strong hand that they had in the late 1940s. Lastly, the virtue of Land Readjustment as a planning tool – that it worked well to fix problem areas after the fact – was also its major limitation since it prevented wholesale change across the entire metropolis. Reconfiguring the transportation network required anticipatory planning tools, and officials who could think much more broadly about Tokyo’s form. As long as LR was the institutional standard, that was unlikely to happen.

Rebuilding Tokyo according to the metropolitan pattern established before the War left the railroads as the dominant form of transportation. Both public and private sectors of the industry were relatively well positioned in the late 1940s. The national railways had received heavy investment in the 1930s and after surrender Japanese officials prioritized rebuilding damaged train lines and stations (Noda and Oikawa 2003). The blank check funding for this reconstruction was halted with the imposition of the “Dodge Line,” but not before the national railway system had returned to pre-War levels of service (Harada and Eiichi Aoki 1973, 183-191). In that same year, the former Imperial Railway was reorganized as a public corporation<sup>73</sup> called the *Nihon Kokuyū Tetsudō* or Japanese National Railways (JNR).

For the private sector, the immediate post-War years were more mixed. On the negative side, the decades-old policy of subsidies for local railways ended with the elimination of the 1921 Local Railway Subsidy Law (Wakuda 1984, 4:120-3). On the positive side, at least for the surviving companies, the war years had helped to pare down the railroad business by forcing takeovers of small companies by larger ones. This benefited a few companies, such as Tōkyū, Seibu and Tōbu, as they could acquire competitors’ lines that operated near theirs, and had newfound abilities to achieve economies of scale as they centralized operations and connected services (Eiichi Aoki et al. 2000). These few dominant companies emerged from the war years with vast holdings

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<sup>73</sup> In the Japanese version of this entity, the corporation is run like a private company with a CEO and a Board and is supposed to be profitable. Initial funding, however, is provided by public sources, in the form of low-interest loans with long amortization periods. The state is usually the largest stockholder in the corporation and can buy more shares in order to fund expansion or to help profitability. Public Corporations have been quite popular in Japan, including NTT, the telephone utility, Japan Post and Japan Tobacco (Andrew Gordon 2003).

that could not have been assembled without government help. In addition, those companies also found great profits in the other half of their business model: real estate. Several companies, most notably Seibu and Tōkyū, were very aggressive land buyers during the 1930s and early 1940s when the real estate market was essentially flat. Their strong business acumen paid off after 1945 as prices skyrocketed (Downer 1994, 84-5).

Tōkyū was unable to maintain its dominant position in the Tokyo private railway business for long, however. In 1947, Keita Gotō became ensnared in the SCAP-led purge of wartime public officials. Gotō had served for a year in Tōjō's cabinet as the Minister of Transport and Communications. SCAP forced him to resign his position from Tōkyū, but the forced resignation mattered little for actual business operations as he continued to rule Tōkyū through proxies. In 1948, SCAP then moved to break up Tōkyū as part of its effort to unravel the system of crony capitalism that had flourished during the war (Eiichi Aoki et al. 2000, 111). Tōkyū was re-split into the four main companies that had existed prior to 1942: Tōkyū, Odakyū, Keio, and Keihin (Tōkyū Dentetsu Kaisha 2009). Anti-trust legislation also forced all the major private railway conglomerates to split off their affiliated businesses such as the taxi companies and the department stores. In theory, this was to increase competition in the industry by reducing the size of dominant players, though in the case of Tōkyū, Gotō's use of voting proxies enabled him to control all parts of the empire behind the scenes.

## 6.2 1950s

### 6.2.1 *Economic Recovery*

The bleak 1940s eventually ended and gave way to a twenty-three year long period of rising prosperity in Japan known as the “era of high speed growth.” Japan’s GNP rose an average of ten percent per year, from \$12 Billion in 1950 to \$320 Billion by 1973 (Nakamura 1981, 35). A few years were particularly spectacular: in 1960 and 1961, GDP rose 13.4 and 14.4%, respectively (Arisawa 1976, 371). This remarkable period of growth changed Japanese society profoundly and marked the transition from a war-torn, devastated, economic basket case into a politically stable and economically innovative world power. Japan in 1951 had a nominal GNP just 4.3% of that of the United States, but by 1975 Japan’s GNP was almost a third of the USA’s (Keizai Kōhō Sentā 1983, 5).<sup>74</sup>

The immediate reasons for the economic takeoff were manifold. For one, American policy *vis-à-vis* Japan centered on helping the Japanese economy to recover and prosper. The first efforts were the austerity measures initiated in the Dodge Line, which provided the cure for the late 1940s’ economic chaos, painful as those measures were. From 1945 to 1949, inflation negated any productivity gains and provided a disincentive for saving and long-term investment. By stabilizing prices, SCAP economic advisors helped calm domestic markets. In a related move, the Dodge Line fixed the exchange rate for the yen at 360 to the dollar, a figure unchanged until 1973. This rate

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<sup>74</sup> In real numbers, Japan’s nominal GNP climbed from \$14.2 Billion in 1951 to \$498.2B in 1975, a rise of 3500%, while that of the United States climbed from \$328.4B in 1951 to \$1.549 Trillion in 1975 (Keizai Kōhō Sentā 1983).

was accurate for assessing the strength of the currency as it stood in 1949. But by not allowing the yen to rise as Japan exported more goods, the fixed exchange rate kept Japanese exports artificially cheap, and in demand in foreign markets (Andrew Gordon 2003, 247).

The Korean War was another important catalyst for Japan's economic success in the 1950s. Japan became the major staging ground for the war, which started in the summer of 1950. Since Korea was so remote from the United States and the US had few other allies in the region, Japanese companies received orders for base construction, transportation, repair work, weapons, ammunition, and other kinds of military support (Yamamoto 1993, 199). The work orders generated by the war amounted to a rescue of the foundering industrial sector, and brought in very much needed hard currency for future expansion. The Korean War was of particular importance to Japan's small automotive industry. In 1950 and 1951, U.S. and United Nations forces placed orders for 7,000 trucks, reviving the car industry and pushing Nissan and Toyota, among others, to invest in expansion (Johnson 1982, 200).

A third catalyst for the high-speed growth era was the development of a set of institutions and policies dedicated toward long-term economic growth, mainly through close government/business ties (led by the Ministry of International Trade and Industry or MITI), strategic import substitution, and export promotion. The banking system underwent a complete reorganization in the early 1950s and the Bank of Japan increased the amount of loans to private banks, even extending loans far in excess of the recipient bank's reserves. The loans came with low-interest rates and long terms, and dramatically

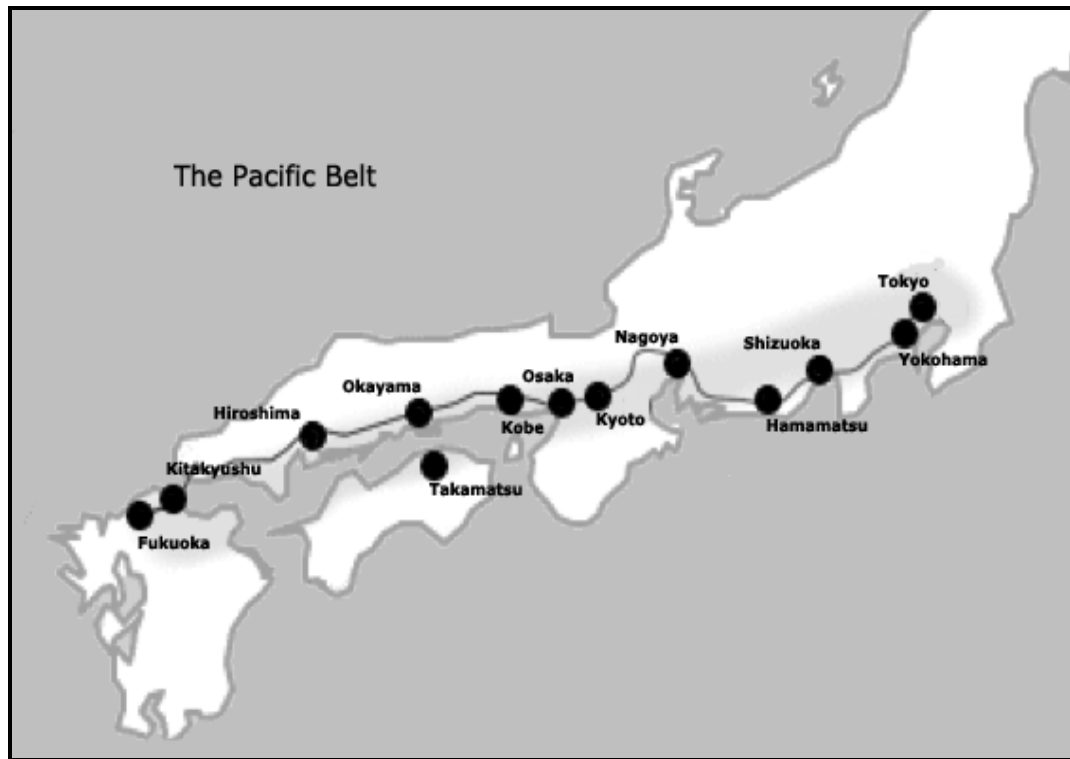
increased the ability of industries to find financing. Around the same time, the Japanese government founded the Export-Import Bank of Japan, which made direct loans of foreign currency to firms, and set up a Postal Savings system, which offered Japanese citizens tax-free opportunities to save. Next, the Japan Development Bank was established in 1951 to redistribute those postal savings to select firms. Industrial promotion boards were organized to coordinate, advise and indirectly subsidize particular industries, especially those firms the government thought could compete in foreign markets, such as steel, shipbuilding, petrochemicals and above all, electronics. This process became known as “administrative guidance” and has come to define modern Japanese capitalism (Komiya 1991; Johnson 1982; Calder 1995).

The Enterprises Rationalization Promotion Law of 1952 further increased the degree of public institutional support for private enterprise. This law had three main parts: 1) providing direct government subsidies for experimental research and technology upgrades; 2) authorizing accelerated depreciation for equipment investments; and 3) a mandate to central and local governments to provide high levels of infrastructure spending on railroads, ports, highways, and planned industrial parks. The third of these had a tremendous impact on urban planning in Japan since it ordered local planners to prioritize planning for economic growth over planning for residential quality of life. MITI bureaucrats wrote and promoted this third provision, believing that the strategic use of land and first class infrastructure would lower production and transportation costs for producers. This directed the Ministry of Construction to set aside land, especially on the

coasts and near already existing highways and train lines, for large industrial parks (Johnson 1982, 218).

### 6.2.2 *The Growth of Tokyo*

The emphasis on land planning to maximize economic output concentrated resources and attention on already well developed regions, namely the “Pacific Belt,” a corridor in the central part of Japan that connects Fukuoka with Tokyo. While it comprises just 23% of Japan’s land mass, in 1950, the Pacific Belt was responsible for 72% of total manufacturing output, and by 1960, 78% (Murata 1980, 248). Population growth in the Pacific Belt was almost triple that of the rest of the country over the 1950s, and more than triple during the 1960s. The region also received the lion’s share of job growth over the two decades, typically gaining about five jobs for every two created anywhere else in Japan (Glickman 1970, 248). The Tokyo area, at the northeastern end of the Pacific Belt, was the most dynamic part of this fast-growing region. The decision to invest more in industry and infrastructure in places already strong in both created a self-reinforcing cycle of industrial agglomeration (Hanayama 1986, 27-9). The Tokyo/Yokohama area boomed as its infrastructure, labor markets, and pre-existing firms attracted other firms, which then led to better facilities, a stronger local market for related goods and services, more jobs and most importantly, more people.



**Figure 6.3: The Pacific Belt**

Rural migrants were the main source of Tokyo's increased population (Glickman 1970, 29). Rural to urban migration had long been a central fact of Japan's growth in the modern era, but the scale of post-War migration was unprecedented. According to Hama, earlier rural to urban migration streams consisted of excess rural dwellers (generally young men) seeking jobs in cities because opportunities in rural areas were closed off, though rural population generally remained steady. In the post-War period, however, a rural population drop accompanied the urban population boom. That meant that much more than the "excess" population was leaving. Despite higher birthrates in rural areas, most rural areas experienced population decreases in the 1950s and still into the 1960s (Hama 1976).

**Table 6.1: Population of Tokyo Prefecture, 1945-1960**

<b>Year</b>	<b>Population</b>	<b>% Increase</b>
1945	3488284	-
1950	6277500	80
1955	8037084	28
1960	9683802	20

Source: (Japanese Statistics Bureau 2006)

Tokyo's population was increasing rapidly at the same time that rising prosperity was beginning to trickle down to the lives of ordinary citizens. Except for a slight dip in GNP growth rates in 1954, the economic trajectory during the decade was steadily upward. Some of this increased wealth made its way through the population, and incomes climbed slowly during the decade. The benefits of growth on the lives of everyday people would have been more noticeable in the early 1950s, had it not been the national economic policy to restrain domestic consumption. Economic policy was geared towards the export sector. To make exporting cheaper, government action suppressed employee movements for higher wages, dedicated public expenditures toward increasing industrial capacity at the expense of social spending, and promoted a public culture of sacrifice and thrift (Johnson 1982, 228-35).<sup>75</sup>

As the economy started to slow with the end of the Korean War, however, MITI planners and national politicians broadened the national economic strategy to increase domestic consumption. Tariffs on a number of imported goods and materials were

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<sup>75</sup> This export-led strategy contrasted with the American model of the same period. In the American case, the economy was oriented towards domestic consumption and rising living standards of the middle and working classes were to be the drivers of growth.

reduced and income taxes were steadily lowered, including a massive ¥100 Billion cut in 1956. In addition, selected taxes on individual goods were steadily removed throughout the 1950s, producing almost instant booms in the purchase of household items like black & white televisions, washing machines, and refrigerators. The decision to nurture the domestic market after concentrating for so long on just exports amounted to a consumer revolution that greatly enhanced the lives of ordinary Japanese (Andrew Gordon 2003, 249-50).

### 6.2.3 *Housing in the 1950s*

Rising incomes and Tokyo's increasing populations created intense pressure on housing. The stunted economy of the late 1940s was not robust enough to satisfying already existing housing demand stemming from Tokyo's destruction, much less keep up with the changes of the 1950s. Early governmental attempts to address the housing shortage were meager and poorly funded. One of the main methods was to reduce oversight over housing location and to uphold building standards only loosely. A tangible result was a rash of wooden apartment buildings that became very popular from the late 1940s through the 1950s. Essentially a more modern version of the *nagaya*, the long wooden tenement buildings of the past, these apartments were geared toward rural migrants and generally featured single rooms with a communal kitchen and toilets (Hanayama 1986, 25).

By the mid-1950s, the policy response to the housing issue had expanded. Japanese policy makers were spurred to address the housing problem because it affected businesses, the export market, and Japan's economic development. Labor supply fell

behind demand, threatening to cause a rise in worker wages, which would have raised costs for producers. Whereas in the late 1950s and early 1950s, rural migrants poured into the cities without inducement, by the mid-1950s, the migration stream had shrunk. In order to ensure larger pools of workers, more and better housing was needed to encourage workers to come from rural areas and stay. Having government step in to organize and pay for housing unit creation was also a move to support business interests and, hence, national economic interests. Housing, like port and harbor development or foreign currency provision, became another element of public infrastructure provision to improve the private sector (Komiya 1991).

The first step was direct government construction of public housing units for the severely indigent. These were often small projects, comprised of a few two or three story buildings, and rented at no cost. According to Sorensen, this post-War housing policy “resembled more an emergency shelter programme for refugees than a careful city planning programme” and showed the government’s longstanding reluctance to intrude upon private property interests (Sorensen 2002, 185). In 1955, however, a new public corporation was formed under the oversight of the Ministry of Construction and mandated to accelerate three types of public housing construction: national, prefectural and municipal. The Japan Housing Corporation pooled existing resources from the Ministry of Construction with large disbursements direct from the general budget for national public housing, or from prefectural and/or municipal funds in the case of prefectural and municipal public housing (Allinson 1979, 101).

Of these three, national public housing was the largest program, had the most units and had the easiest residency requirements. Income limits were targeted for the working class, and there were no requirements that applicants be prior residents of the prefecture or the town where the housing was located. As such, national public housing was directed toward out of area migrants (Andrew Gordon 2003, 262). Prefectural and municipal public housing projects had more exclusive entrance requirements, namely that the applicant be a resident of that prefecture or city. If units were still available, they were made available to the general public by a lottery. Rent for units depended on many factors, including the residents' income, but typically was about ten percent of the market price for a comparable unit (Koshizawa 2001).

The most generous adjective for such public housing would be functional. The buildings were long, concrete rectangles, generally three to five stories high, between six and ten units per floor. Anywhere from a handful to scores of such buildings were grouped together into bunches called *danchi*, or “grouped land.” From a distance, these apartment blocks would have resembled dominoes standing upright on their long side, with a small amount of green space in between buildings.<sup>76</sup> This meager amount still would have been considered a blessing by those lucky enough to move out of the supremely dense urban areas, and even the smallest *danchi* had a small playground for kids. Individual units typically amounted to just several hundred square feet, consisting of two main rooms, occasionally three, with sliding doors between them that allowed

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<sup>76</sup> Very few public housing projects from the 1950s are left in Japan, due to the notoriously poor construction standards of the time. There are some scattered 1960s-era *danchi* still standing, and many more from later years. These are more or less similar to earlier ones in their architecture style and layout, though larger and better built.

residents to open up the space if they wished, in traditional Japanese fashion.<sup>77</sup> Very early public housing units had individual kitchens, though toilets, baths and laundry areas were communal (Katagi, Fujiya, and Kadano 2000; Robertson 1994; Ben-Ari 1991).

The placement of *danchi* in the metropolitan landscape was somewhat contentious. Most projects were built in distant suburbs, often at least an hour's commute from important business districts. In the late 1950s and throughout the 1960s, the housing projects would have seemed terribly out of place, as most often the land beyond the projects consisted of single-family housing and even agricultural fields. For example, a *danchi* with 30 four-story buildings, each with eight units per floor, would have 960 units and roughly four times that many people living clustered together in what had been very low-density areas. New projects often met with strong resistance from local voters who suddenly had many more neighbors, and from local governments forced to share the public burden for the infrastructure for such projects (Ishida 1987, 296). New public housing residents rarely had any significant ties to the local area, leading to a sense of resentment from long-time residents (Robertson 1994).

The location of the projects became a source of complaint for residents, as well. Projects were rarely built within walking distance of train lines, and residents typically had to take a bus to reach the train station, from which point they could begin their arduous commute downtown. Homemakers found themselves isolated in such projects,

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<sup>77</sup> There has been little research on *danchi* from an architectural or a sociological point of view but one interesting English language work is Ann Waswo's *Housing in Postwar Japan*. One of Waswo's most interesting points is that the layout of public housing units had a significant impact on Japanese household social structure. Traditionally, many generations of a family lived under one roof, a trend maintained urban and rural dwellers alike. Public housing units were so small, however, that co-habitation beyond the nuclear family became near impossible (Waswo 2002).

disconnected from places of social interaction, shopping, or cultural activities.<sup>78</sup> *Danchi* were worlds unto themselves and were notorious for engendering a sense of isolation, especially among women (Waswo 2002). The principal reason for locating large housing projects in the distant suburbs is rather predictable, however. The JHC's mandate was to provide as much affordable housing as it could, and land was most inexpensive in distant suburbs and far from train lines (Sorensen 2002, 187).

Outside of the JHC, the government encouraged housing construction in other ways. The JHC provided incentives to companies to build company dormitories, or *shataku*. Companies were offered tax breaks to provide housing, and receiving free or steeply discounted housing became a common part of a worker's individual salary package (Koshizawa 2001). The Japanese government also encouraged housing construction in the same way the American government did: through subsidies and other forms of encouraging individual homebuyers. The JHC underwrote private loans, and offered security to private banks to make loans. The JHC did not make loans directly to people, however, as the United States did with various quasi-public housing lenders. Subsidized mortgages in Japan were more limited as well, targeted to the middle and upper-middle classes instead of more widely available, as in the US. This may have resulted from Japan's more expanded public housing program that targeted more working class and poorer people. Prospective homeowners could also count on partial tax deductions for land purchased for housing, while other changes in tax law made offering

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<sup>78</sup> According to Allinson, residents of the large *danchi* would have walked home "among fields lined with tea bushes and choked with melon patches" (Allinson 1979, 104).

units for rent more profitable (Andrew Gordon 2003, 262). Finally, lax building codes and rudimentary zoning codes also indirectly helped encourage new homes by reducing bureaucratic obstacles to construction.

#### *6.2.4 Further Diversification of Private Railway Companies*

Companies like Seibu, Tōbu, and, of course, Tōkyū, were again significant players in the 1950s housing industry, as they had been before. As part of the SCAP-era reforms, however, private railway companies were forced to separate their real estate businesses from their railway ones. For the most part, spinning off the real estate development companies was a distinction without a difference, as private companies could still form umbrella corporations that kept the various parts of the financial empires connected. In Tōkyū's case, a larger consortium, called Tōkyū Group, was formed in 1953, and the real estate branch of the railway business became a "separate" entity, the Tōkyū Land Corporation (henceforth, TLC) within the conglomerate. All of Tōkyū Railways' land-based commercial interests, including real estate sales, the construction business, and recreational facilities development, were transferred over to TLC (Tōkyū Land Corporation 2009c). Other branches of the Tōkyū commercial empire were spun-off into other more narrowly focused enterprises that kept separate accounts, though Keita Gotō remained the CEO of every company within Tōkyū Group (Tōkyū Dentetsu Kaisha 2009).

After the war, real estate spinoffs from private railway companies, such as TLC or the National Land Agency (Seibu's real estate development company), pursued the same suburban land development strategy as they had before the war: develop land along or at

least near their lines and stations to reap profits from housing sales and passenger fares. If there is one difference between the two periods, it is that the best areas for implementing this two-part strategy on existing lines had long since been developed. Railway companies therefore had to go farther out, developing properties perhaps a few kilometers from the nearest station. In order to service these sites, as well as the large public housing projects also being constructed a fair distance from the commuter train lines, private railway companies expanded their bus services. Time schedules were designed to get people from the bus to the train as quickly as possible, and companies began offering monthly passes that combined bus fare from their home stop to a station plus the train fare. Convenience to the bus stop then acted as a scaled-down version of the benefits of proximity to a train station. It helped make those properties more valuable, and enhanced passenger fares (Takechi 1986, 103-8).

Another feature of private railway real estate investment in this era was the degree to which the different companies formed monopolies within certain suburban sectors. In the pre-War period there had been a great deal of local competition for customers of both land and rail service, but after the war, private companies defined particular zones over which they ruled supreme. In the 1920s, for example, private railway companies worried whether their local investments might be wasted if another company built its line too close, thereby capturing existing passengers and lowering the expected land value along the original line. Due to expansion and densification of the suburbs, as well as the maturation of the private railway business by the 1950s, this was a lesser concern. Private companies retreated to their own spheres and worked to squeeze every ounce of profit

they could in these. There were, of course, some carry-overs from previous development, but generally speaking, Seibu dominated the northwestern suburbs of Tokyo, Tōbu the northern, and Keisei the eastern ones. The southwestern sector of Tokyo's suburbs was more crowded, but there were still delineations between the different sections. If one were to picture the geography of Tokyo as the face of a clock, Keihin occupied the sector around 6 o'clock, Tōkyū from about 6:30 until 7:30, Odakyū from 7:30 until 8 o'clock and finally Keio from 8:00 to 9 o'clock (Takashima 2002; Makoto Aoki 2002a; Terada 2001). The real estate development arms of those railway companies concentrated their development efforts in those sectors, and competition for customers at the very local level declined (Wakuda 1981).

Private railway companies pursued complete exploitation of areas they already held partly because there were few opportunities for new train lines in the 1950s. Installing new train lines through the core of downtown was nearly impossible, given the density of land use and its price. Meanwhile, the suburban areas developed in the 1920s and 1930s, such as Setagaya, were so developed by the 1950s that additional lines would have been prohibitively expensive. It was possible, however, to extend existing lines even farther out. Setagaya and the suburbs that developed along with it occupied a band between 15 to 25 kilometers around the city; the frontier of post-War suburban development occurred in a band between 25 and 45 kilometers outside the city. Keio, Seibu, Tōbu, and Odakyū added extensions to existing lines, each one inspiring a new round of suburban development on and along the extension (Eiichi Aoki et al. 2000, 212).

Tōkyū made significant extensions on three of its lines during the 1950s, one of which was to be the transportation backbone of a large suburban development project that would dwarf what it or any other private railway company had previously attempted. In 1956, Keita Gotō, back as CEO after being de-purged in 1951, applied for permission to extend the Tamagawa line past the station at Futako Tamagawa across the Tama River and into Miyamae Ward of Kawasaki City. The new line, to be called the Shin Tamagawa (New Tamagawa), was to continue south-southwest into Yokohama, thereby creating another commuter link with Tokyo. In the mid 1950s, the land through which the new line would pass was among the least developed areas of the Kantō Plain and still consisted mainly of rice paddies and vegetable fields (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 46).

Gotō saw great potential in this area as a large residential suburb. Tōkyū's real estate office drew up plans for a 5,000 hectare planned community called Tama Denentoshi (Tama Garden City), to be built along the train line. Gotō envisioned a larger, more modern version of the original Denenchōfu project that had been so successful in the 1920s. Tōkyū bought several hundred hectares of land outright, especially the parcels of land targeted for the rail corridor. Then, just as the Denenchōfu Company had done with landowners in that area, Tōkyū formed land cooperatives with landowners in the Tama area to share the costs and profits of development. Landowners handed over on average 45% percent of their landholdings in exchange for Tōkyū's construction of the railroad plus full service provision (electricity, water, sewers, gas, roads) for the roughly 55% that the landowners kept. Essentially, this amounted to a private version of the land

readjustment system that Tōkyū had been using to great success over the past few decades. Over the decade it took to plan the project, Tōkyū formed fifty-three land cooperatives and consolidated 4,900 hectares (Cervero 1998, 196-202).<sup>79</sup>

Tōkyū real estate developers drew up the Master Plan in 1956, and the Ministry of Transportation approved the line's extension the following year. The first developed plots were sold in 1959<sup>80</sup> and the whole line's extension was finished by 1966 (Tōkyū Dentetsu Kaisha 2009). The Master Plan included intense development around the stations, especially at Tama Puraza (Tama Plaza), planned as the main commercial area for Tama Denentoshi. While landowning cooperatives were used extensively for developing land for resale as residential properties, Tōkyū took a more independent strategy for developing station areas, buying 80% of Tama Puraza's 118 hectares outright (Cervero 1998, 202). The Tōkyū Corporation made untold millions from the Tama Denentoshi project over the past fifty years. The population of the area now stands at just over half a million people, thousands of whom rely on the train line to get to and from work each day (Tōkyū Dentetsu Kaisha 2007).

While Tama Denentoshi was the main preoccupation for Tōkyū planners and developers during the 1950s, it was not the only project that Tōkyū had in the works. During the decade, Tōkyū diversified its business interests even more than in the 1920s

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<sup>79</sup> Despite this being such a large project, there were few problems of "free riders" in this development. First, it was such a large area that the real improvements in the tract were surrounded by enough Tōkyū owned land that the periphery would have been located far from the train lines and commercial areas. Second, the use of LR as the main tool to assemble the land for the project in the first place meant that all landholders within the project had to sacrifice a large part of their holdings to Tōkyū before the improvements began. Undoubtedly, there were some landholders just outside the project boundaries that may have benefited undeservingly, but LR makes this problem much less prominent.

<sup>80</sup> This was also the year of Gotō's death, at age 77. His son, Noboru, took over as CEO until his death in 1988.

and 1930s. In 1954, Tōkyū bought out Nihon Kōgyō, a multi-faceted corporation with insurance, warehousing, and industrial supply branches. In 1956, Tōkyū launched Tōkyū Travel Agency, and then reorganized its various retailing interests: department stores, grocery stores, and discount retail stores, into Tōkyū Stores. A separate construction company began in 1959, followed by an advertising agency (the Tōkyū Agency) in 1961, and the construction of numerous hotels and ski resorts in the 1960s and beyond (Tōkyū Dentetsu Kaisha 2009).

#### *6.2.5 Tokyo Transit in the 1950s*

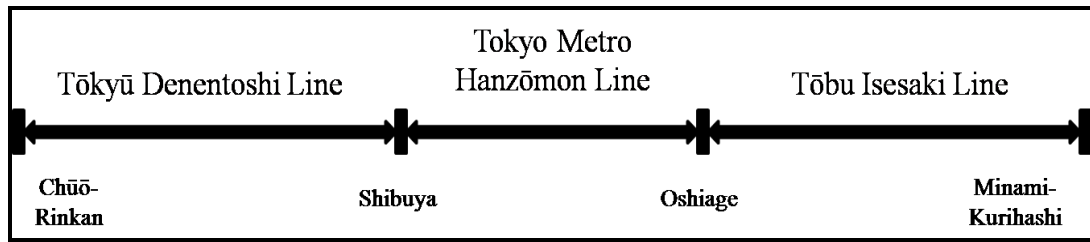
As for the transportation side of the businesses, the 1950s were relatively uneventful. As noted, construction of new lines in the metropolis was extremely difficult now that urban densities and land values had climbed. Very few railway lines have been built above ground since the end of World War II, and none in the central city area. A number of underground lines have been built, including a handful of new subway lines in the 1950s and 1960s, as well as a few suburban private lines (Terada 2001, 51). True, space and expense limitations could have been overcome if new construction had been a governmental priority, but subsidies for new lines ended with the post-War reforms. Private railways also faced limitations on how much capital they could raise for new construction. Given that sudden fare increases could lead to political unrest (as in the 1910s), the Ministry of Transportation set up an oversight board of private railways with the power to regulate fares. Private railway companies were allowed to raise fares occasionally to keep up with inflation, but could not raise fares ahead of service upgrades. Incidentally, this caused private railways to focus on real estate development as

their main source of profit, and perversely discouraged private railways from strong action to make commuter trains less crowded. Since fares were fixed, train companies were motivated to cram as many passengers on one train as they could (Eiichi Aoki et al. 2000, 160-1).

Without new lines, congestion became a serious problem in 1950s Tokyo. The mix of transit modes also created street-level congestion, as trams and trains jostled with pedestrians and cars as they travelled their routes. Drivers and passengers sat at urban railroad crossings for long periods, especially at rush hour when trains passed by every few minutes. With the possibility of new lines foreclosed, transportation planners and government officials looked to varied measures to increase capacity on existing train lines. Japan National Railways (JNR) took the lead in several areas by upgrading the train cars to larger (or longer) versions and, correspondingly, increasing platform sizes to handle the larger number of passengers on each train. Where possible, track corridors were enlarged, especially by adding one or two middle express tracks that afforded railway schedulers a great deal of planning flexibility. Another capacity expansion measure was to elevate train lines, where possible. This allowed trains to run through downtown areas at higher speeds, increased safety, and solved the problem of long waits for drivers and pedestrians at crossings. The Ministry of Construction used public road construction funding to elevate tracks of both JNR and private lines (Makoto Aoki 2002a, 56).

The capacity expansion measure that eventually had the most impact in Tokyo was the government mandated and organized integration of various rail lines. Prior to the

1950s, the subway system, JNR, and the private lines were separate, with distinct boundaries for service operation. This caused multiple service inefficiencies: masses of people all leaving one line to board another, crowded stations, slower commutes, and greater expenses for passengers and companies alike. In 1953, the National Capital Construction Committee, a long-term planning advisory board with members from the Tokyo Metropolitan Government and the Ministry of Construction, proposed connections to link private suburban railways to subway lines. This was a common type of commute. Private railways developed urban terminals that linked together via the Yamanote Loop Line but did not traverse the loop line into the city center. Meanwhile, the subway system was designed to pick up where the private lines left off. Subway lines crisscrossed the city center, but never went outside of the Loop Line. The Committee agreed to underwrite the costs of connecting the two types of lines; this was not a trivial matter as it involved construction at the already busy connecting points. Finally, the Committee had to create a system for distributing railway fares in proportion to specific line segments that people rode. Coordinating all of this was a long process, and though the plan was first announced in 1953, it was not until 1963 that a private railway and a subway became linked. Tōkyū's Shin Tamagawa Line started through service with the Hanzōmon Line of the subway system in 1969 (Makoto Aoki 2002b, 46-7; Tōkyū Dentetsu Kaisha 2007). In the early 1990s, through service connecting the northeastern end of the Hanzōmon Line with Tōbu Railways' Isesaki Line was established.



**Figure 6.4: Schematic diagram showing through service**

### 6.2.6 *Post-War Suburban Growth*

Various factors worked together to create a suburban population surge in the 1950s. The emergence of the Tokyo/Yokohama region as an incredible population magnet was the most significant underlying factor. The region’s economic growth, spurred on by conscious efforts of economic and industrial planners to create efficient industrial centers, instigated and then benefitted from increased population. The era of “high-speed growth” resulted in rising standards of living, which led many people living in temporary post-War housing to seek new housing. By and large this meant the outward expansion of the region’s population to the suburbs. Suburbs that had been settled thirty years prior, such as Setagaya, grew denser, and new areas even farther from the city center experienced their first wave of settlement.

Population figures from the 1950s show the rate of suburban population growth. The table below compares population at five scales: Tokyo Prefecture as a whole, the eight urban wards that define the “central city,” the eight peripheral wards that define the prime areas for suburban growth in the 1920s and 1930s, the peripheral cities, meaning

municipalities outside of the 23 wards of Tokyo and representing the second ring of suburbanization, and Setagaya.<sup>81</sup>

**Table 6.2: Indexed Population Growth at Five Scales, 1950-1960**

	<b>1950</b>	<b>1950/ 1950</b>	<b>1955</b>	<b>1955/ 1950</b>	<b>1960</b>	<b>1960/ 1950</b>
Tokyo Prefecture	62775	1.00	80370	1.28	96838	1.54
8 Urban Wards	16064	1.00	20279	1.26	22201	1.38
8 Peripheral Wards	20722	1.00	26589	1.28	33793	1.63
Peripheral Cities	81099	1.00	98793	1.22	12955	1.60
Setagaya	40822	1.00	52363	1.28	65321	1.60
Source: (Tokyo Prefectural Statistics Bureau 2006)						

Several important conclusions can be drawn from this population data. First, population growth was strong at all five scales during the decade. In the first five-year stretch, population increase at each scale ranged from 22 to 28 percent. While there is some differentiation between the geographical scales between 1955 and 1960, this reflects different degrees of strong growth rather than one area growing at another's expense. The eight peripheral wards achieved 163% of their 1950 population by 1960, and the peripheral cities reached 160%, but population in the downtown wards was still quite robust. This contrasts with the suburban demographic pattern of the 1920s and 1930s where suburban population rose while urban population fell or remained stagnant.

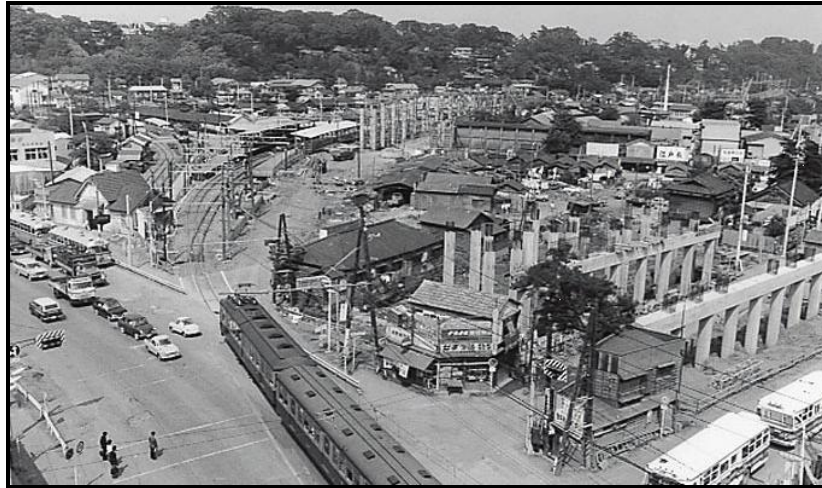
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<sup>81</sup> Four of these five scales were used in the diagram from section 5.4.3 on suburban growth in the 1920s.

Second, the 1950s patterns of Tokyo's suburbanization do not quite follow the familiar "first ring," "second ring," etc. pattern so often used to describe American suburbanization. If the same pattern were to hold in Japan, one would expect to see strong growth rates for the eight peripheral wards (the would-be "first ring") in the 1920s and 1930s, and then just modest increases in the 1950s, while growth rates for the peripheral cities (the would-be "second ring") would be minimal in the 1920s and 1930s and then pick up in the 1950s. Instead, in Japan, growth rates for both scales were strong in the 1950s, and in fact, the growth rates for the "first ring" outpaced those of the "second ring" by a few percentage points.

Third, the data show the degree to which Setagaya had become urbanized. With over 650,000 residents by 1960, it is clear that Setagaya was no longer a semi-rural hamlet outside the city. Recall that it was essentially agricultural as late as the mid-1910s and that its population was a mere 40,000 in 1920. It had grown sixteen fold over four decades and had become very much part of Tokyo. The official history of Setagaya uses imagery of urban Tokyo "swallowing" Setagaya by the 1950s, as most of the remaining farms were plowed under, and many small single-family homes were torn down to build more profitable apartment buildings (Setagaya Ward Historical Committee 1993). The commercial core along Tamagawa Dori was fully built out by the mid-1950s, with stores lining both sides of the street throughout the ward. The Futako Tamagawa station area also expanded during this time, while the station itself underwent redevelopment in 1959 prior to the opening of the Shin Tamagawa extension beyond Futako Tamagawa station.

Land Readjustment powers were used during the redevelopment process to enlarge the station and improve infrastructure around it (Setagaya Kuritsu Kyōdo Shiryōkan 1989).



**Figure 6.5: Futako Tamagawa Station area prior to redevelopment, ca. late 1950s  
(Tōkyū Corporation 2009b)**

## **6.3 1960s**

### *6.3.1 Income Doubling and Infrastructure Development*

The era of high-speed economic growth, which began in the early 1950s, truly arrived in the 1960s. After posting an economic growth rate of 14.4% in 1961, the Japanese economy slowed in 1962 with “only” 7% growth, but quickly rebounded in 1963 and 1964 with expansion rates of 10.4 and 13.2%, respectively (Johnson 1982, 237). GNP declined more sharply in 1965, to 5.1%, but was quickly followed by the Izanami Boom of 1966 to 1971 in which annual economic growth averaged approximately twelve percent for the five-year span (Schaefer 2000, 77; Andrew Gordon 2003, 247). The high-speed growth era ended in 1971 when President Nixon surprisingly

announced that the US would no longer follow the gold standard, allowing the dollar to float against other currencies. This sent the value of the yen quickly upward, significantly damaging the export sector. The oil crisis of 1973 was another serious blow to the economy, sending Japan into its first prolonged recession since the late 1940s. Still, these troubles came after a period of economic growth that has since only been matched by the recent economic success of China. Between 1950 and 1970, Japan had caught up to and passed major European economies such as France, Great Britain, and West Germany almost as if those countries had been standing still (Andrew Gordon 2003, 247-8).

Several factors motivated the spectacular growth in the 1960s. The Prime Minister's "Income-Doubling Plan" of 1960 was one. Ikeda's five-year plan contained numerous provisions committing the government to improving Japanese citizens' quality of life, after focusing almost exclusively on the fortunes of businesses, especially exporters, for so long (Johnson 1982, 252). Income tax cuts also helped stimulate the domestic economy, improving standards of living and creating even more jobs at the same time (Nakamura 1981). Even greater investment in the country's roads, rails, ports, and other infrastructure was another economic catalyst. Direct spending contributed to thousands of jobs in the construction industry, raised wages for many in the working class, and contributed to increased industrial capacity and lower costs. Major investment in the nation's highway system brought roads throughout the country up to international standards, and made intra-national transport much easier and cheaper. Another focus was coastline "improvement," i.e. land reclamation and harbor development. While these measures helped raise incomes, however, comparatively little was spent on civic

infrastructure, such as water and sewer systems that would have more directly promoted the Plan's stated goal of improving the quality of life for ordinary Japanese (Yamamura 1992, 40-54).

The 1964 Tokyo Summer Olympics complemented the national economic growth goals and the push to improve the country's infrastructure. Determined to show that Japan had recovered and reformed since the 1930s and 1940s, the Government focused on two major projects. Just a few weeks before the Games began, Tokyo's elevated highway system in the downtown area was finished. This significantly alleviated traffic on surface streets and was a notable engineering marvel: transportation planners had managed to create a network of modern highways through the city without destroying it.<sup>82</sup> Then, just nine days before the opening ceremony, the first *Shinkansen* (or, New Trunk Line, but also known in English as the Bullet Train) opened. The train carried passengers from Tokyo to Osaka in three hours, less than half the time of the previous express train, proving popular with Olympic tourists and Japanese citizens alike (Eiichi Aoki et al. 2000, 140). Other improvements built in advance of the Games in the Tokyo region included constructing eight new subway lines, plus a wide array of gymnasias, stadia, and parks (Andrew Gordon 2003, 265-6).

The construction of Tokyo's elevated highway system was part of a broader trend of increased automobile usage countrywide, though to be clear, car usage complemented train usage and did not supplant it. Infrastructure improvements such as the elevated highway and rural highways, combined with widening affluence and a burgeoning

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<sup>82</sup> This is not to say that the elevated highway system is unobtrusive, as it did create shade canyons under the highway and brought a great deal of noise to the downtown.

domestic auto industry, produced a significant increase in the number of cars owned in Japan. Car ownership climbed from just 8 million in 1965 to 23 million by 1970 and then to 48 million by 1975 (Eiichi Aoki et al. 2000, 149). Almost all cars were domestic models and usually very small. Still, owning a car became a widespread symbol of middle-class membership in Japan (Ivy 1993; Havens 1994, 200). Subaru, Honda, Toyota, and Nissan produced affordable but reliable cars with administrative guidance from various government organizations, especially the Ministry of International Trade and Industry. In the early 1960s, the Japanese government saw the automotive industry as one in which Japanese companies could compete on an international stage, and promoted the companies in varied ways: generous loan terms, technology sharing, and agreements to limit competition in certain sectors (Johnson 1982).

### *6.3.2 Continued Housing Pressure*

As in the 1950s, continued rapid expansion of the nation's economy in the 1960s powerfully impacted the nation's urban areas. Most of Japanese industrial capacity was still intentionally concentrated in its major urban areas, to take advantage of integrated networks of suppliers, solid infrastructure, and large labor pools. Commercial employment was similarly clustered in Japan's largest cities, and the years of great economic success sparked a wave of city center commercial redevelopment. Downtown Tokyo neighborhoods such as Ginza, Nihonbashi, Kasumigaseki, and, above all, Shinjuku, experienced a facelift as corporate offices expanded. Since by then few parts of the central city were open for new development, companies could only build up, instigating a skyscraper boom. Retail enterprises expanded operations in downtown areas,

as well. The most successful retail enterprise during the 1960s was the Parco Corporation, formed by Seiji Tsutsumi, the eldest son of the Seibu Railway founder. Using land inherited from his father, the younger Tsutsumi built several boutique department stores in Tokyo's most fashionable districts, as well as in suburban commuter terminal areas. The Ikebukuro area, the terminal for an important Seibu commuter line in northwest Tokyo, and Shibuya, Tōkyū's home base and the terminal for two of its suburban commuter lines, both blossomed into major shopping areas and centers of employment (Havens 1994, 175-87).

All this economic activity meant a continuation of urban Japan's magnetic pull on the non-urban population. This was especially strong in the Tokyo region, which received significant net immigration in the 1960s, mainly from secondary cities and rural areas. By 1965, more than 63% of Japan's total population lived in cities of over 30,000, while a third of the non-urban municipalities were losing population (Yokohari et al. 1999, 211). Of the total population living in urban areas, approximately a third lived in greater Tokyo (Japanese Statistics Bureau 2006). The 1960s rate of influx, however, was smaller than typical years in the 1950s, and continued to decline over the course of the 1960s.

**Table 6.3: Population of Tokyo Prefecture, 1960-1970**

	Total Population	Net Increase	Percentage Increase
1960	9683802	-	-
1962	10180203	496401	5.1%
1964	10639361	459158	4.5%
1966	10973070	333709	3.1%

1968	11251775	278705	2.5%
1970	11408071	156296	1.4%
Source: (Tokyo Prefectural Statistics Bureau 2006)			

The spatial distribution of 1960s population growth differed from previous patterns. In the late 1940s and early 1950s, both central city districts and suburban districts grew at a fast pace. From the mid-1950s through the beginning of the 1960s, both suburbs and urban areas continued to grow, though the rate of increase for suburbs gradually began to exceed that of central city districts. By the mid-1960s, the growth rate for downtown areas had practically stopped, and the population growth of the prefecture as a whole was almost entirely attributable to suburban cities outside the 23 ward area. In 1967, the population of the 23 ward area declined for the first time in modern history, exempting the years of the earthquake and the war (Allinson 1979, 147). Population in the eight most central wards dropped from 2.2 million in 1960 to 2.1 million in 1965 and then to 1.9 million by 1970, all while the prefecture as a whole added approximately 1.8 million people (Japanese Statistics Bureau 2006).

In all, the 1960s marked a shift in residential patterns: downtown areas became more intensively used for office buildings and retail uses and were less and less used for residences, causing even greater housing pressure in the suburbs. There were various ways to deal with the housing crunch. First, suburban landowners and speculators aggressively sought to transform empty or agricultural lots into housing. Until 1968, landowners had an unfettered right to convert their property from one type of land use to another, and fairly lax building standards were the only public oversight for the entire

process.<sup>83</sup> By and large, these conversions were from agricultural land to residential use, and a popular trend was for farmers to develop a little bit of their land at regular intervals into apartment buildings with anywhere from a few to a dozen or so units (Hanayama 1986).

The second method for satisfying strong suburban housing demands was upgrading the existing housing stock. Recall that two major stimuli for housing construction in the Tokyo region were the 1923 earthquake and aerial bombing during World War II. Housing put up immediately after these events was generally cheap and shabby. Originally intended to be a temporary solution, such emergency housing lasted far longer. In the 1960s, people who owned such places were starting to tear down and build anew. In many cases, landowners did not significantly expand their own housing space in the process. Instead, it was quite common to transform single-family homes into multi-unit structures, even if only for a main home with an adjoining unit, or a second floor apartment with a separate entrance (Mori 1998). As with landowners converting agricultural land to residential use, there were practically no restrictions on landowners who wished to upgrade their existing housing stock, save for building standards and fire codes (Koshizawa 2001).

The third avenue for increasing housing inventory in the 1960s was renewed governmental efforts to provide public housing. The Japan Housing Corporation, along with prefectural and municipal housing agencies, increased the scale and number of

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<sup>83</sup> The New City Planning Law of 1968 is the topic of section 6.3.4. In terms of landowner rights, the 1968 Law introduced public control over land use conversions, but made an important exemption for all transformations less than 1,000 square meters. This is still a large area so the 1968 Law was hardly a major constraint on small landowners.

housing developments (Sorensen 2002, 185-7). The JHC's efforts were aided by the passage of the Suburban Redevelopment Law of 1965, which lowered the threshold for existing resident agreement needed to launch Land Readjustment projects. The exact number depended on specific conditions, but generally, projects after 1965 needed only half of landowners in a given area to agree, not two-thirds. This lowered the cost of land acquisition for public housing authorities and accelerated the development process. The new Law also attracted a great deal of controversy, as it weakened local landowners' and local governments' abilities to resist a proposed project (Hanayama 1986, 29).

The JHC increased the number of projects it pursued and started to follow a new strategy in their design and implementation. Early 1950s projects were minimalist, featuring little recreational space on the sites and making very little room for other non-residential uses. At the same time, there was little energy devoted to integrating housing sites with the surrounding community. Planners and government officials began addressing these issues in the early 1960s, culminating in the passage of the New Residential Area Development Act of 1963. This is typically called the New Towns Act, as it was partially inspired by the 1950s British New Towns. The Japanese version directed the JHC and other builders of public housing to focus on providing more green space and allowing more non-residential uses (Sorensen 2002, 186).

As for the locations, JHC officials looked for the cheapest, largest parcels they could find that were still close to train lines. That is, New Towns were generally sited beyond the "frontier" of contemporary suburban development, often at the ends of suburban train lines, even beyond the sites of the early 1950s housing projects (*danchi*).

Second generation projects were generally much larger than the first, consisting of hundreds of individual apartment buildings, rather than a few score. To provide a sense of community within these large projects, planners clustered a smaller number of buildings around central features such as parks, playgrounds and courtyards, and separated individual clusters through green features such as tree-lined roads and walking paths (Yokohari, Amemiya, and Amati 2006, 208). The New Towns also contained a wider variety of businesses and facilities for residents' use within the project grounds, such as grocery stores, daycare facilities, dry cleaners, and noodle shops. While the 1950s housing developments were extremely bare-bones, with little consideration for what residents would like nearby, the New Towns were better built and had more amenities (Hein 2003, 343). The Japanese New Towns, though, fell far short of the integrated model practiced in the United Kingdom, having no allowance for jobs within or even close to the housing areas. Japanese New Towns were well-rounded, publicly built suburban bedroom communities rather than the independent, diverse suburbs that the British New Towns hoped to be (Alexander 2009).

Although the New Towns represented an improvement from earlier Japanese public housing, there were still many problems with them. Location was the most common criticism, since being beyond the farthest reaches of development forced residents to make extremely long job commutes, exacerbated problems of sprawl and unplanned development, and forced hitherto rural municipalities to provide infrastructure for thousands of new residents who seemed to appear practically overnight (Ishida 1987, 292-9). Though these same critiques had been levied against public housing projects from

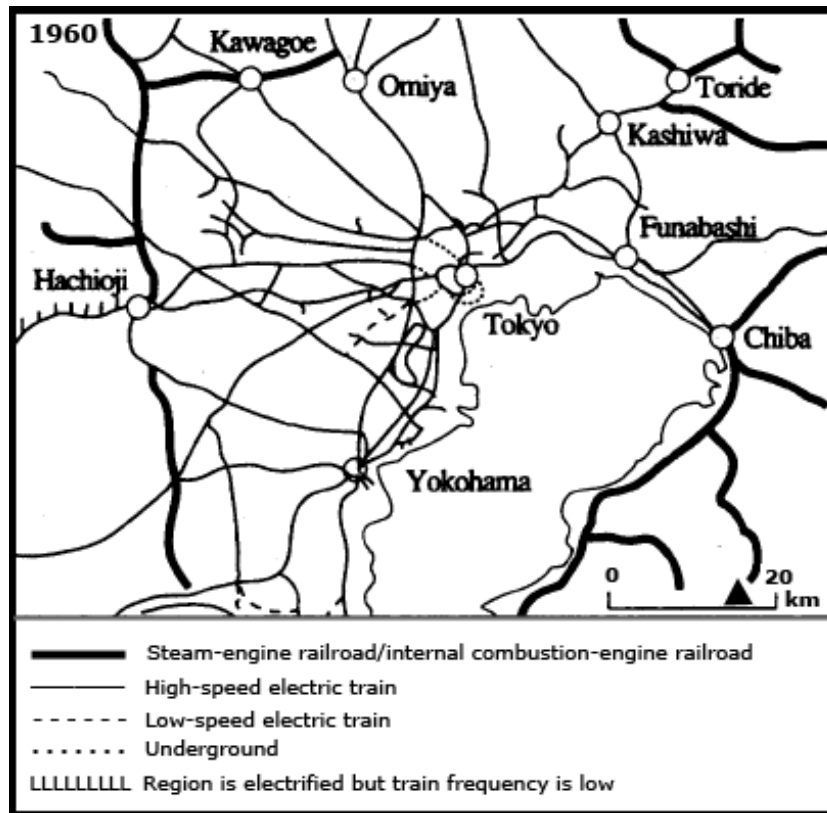
the start, the New Towns were even more controversial, as they were bigger and more peripheral than previous projects. Mimicking their response to earlier critiques, JHC officials pointed out that the distant locations made the price of land much cheaper, allowing for more housing. To compensate for this, planners looked for places that were convenient to existing suburban commuter lines (Sorensen 2002, 188).

The fourth method for providing ever-increasing numbers of 1960s suburban housing units came from the private sector, following the lead of the New Towns. Recognizing the great demand, large land development companies, including ones affiliated with railway companies such as Seibu and Tōkyū, as well as those affiliated with the large family conglomerates (*zaibatsu*), began to expand their operations. For companies affiliated with private railway companies, this meant larger projects that resembled New Towns in the increased provision of greenspace and non-residential uses within the confines of the projects.<sup>84</sup> For example, Keio Railway's Hachiōji development, finished in 1967, totaled almost a million square meters and featured Keio owned stores (supermarkets, clothing stores, and various small shops) between the station (on its Takao Line) and the residential areas. Other projects by the Seibu Corporation in northwest Tokyo and by Tōkyū in the southwest followed (Makoto Aoki 2002a, 56).

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<sup>84</sup> These communities became known as *ensen* towns, meaning “along the line.”

### 6.3.3 Slowing Railway Growth



**Figure 6.6: Railways in Tokyo, 1960 (adapted from Yamamoto 1993)**

While the land development branches of private railways companies were busy expanding their real estate portfolios, the railway portions of the larger conglomerates found that expanding railway networks was becoming increasingly difficult. Construction of new suburban railways slowed to almost nothing by the 1960s. The chief obstacle was the unavailability of land in the central city, or rather, the prohibitive cost for purchasing what little land there was. While new suburbs were developing on the periphery, there was little room left in the center to make a connection to them. This is not to say that railway construction stopped. Suburb-to-suburb lines were possible, with land prices still low, but they yielded little profit. The only one built in the period, the Musashino Line,

was a project of the Japan National Railways, not a private carrier.<sup>85</sup> Subways in the central city, owned and operated by the Tokyo Metropolitan Government with support from the national government, expanded aggressively, independent as they were from the price of land above ground (Kato 1996). Lastly, many private railway companies built extensions to existing lands and/or built branch lines off main lines. The train line serving Keio's aforementioned Hachioji development was built as an extension of another Keio line. Tōkyū's Tamadenentoshi line, started in 1966 to serve Tōkyū's ambitious Garden City project, was another important extension. Even this line, however, was not strictly private. Tōkyū received \$80 million in below market rate loans from the Japan Development Bank, a public infrastructure investment bank designed to assist private enterprises (Eiichi Aoki et al. 2000, 160-1).

Since opportunities for new construction were curtailed, private railway companies, JNR, metropolitan planners, and national government officials doubled their efforts to improve capacity of existing lines. Although congestion was a major problem in the 1950s, Tokyo's regional railway system was on its way to total paralysis by the 1960s. On the Chūō Line, the average rush-hour density had reached 240% of the legal capacity, meaning that passengers were packed so tightly that they were not able to move their hands (Eiichi Aoki et al. 2000, 144-52; Wakuda 1997b, 47). Congestion was also a problem on roads used by both trains and autos. As trains increased service intervals, the conflict between cars and trains became more acute. Since most Tokyo trains operated on surface streets, their passage caused delays to cars, bicyclists, and pedestrians at crossing

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<sup>85</sup> The Musashino Line is an outer loop line in the Tokyo region originally intended to be a freight line that would allow JNR to avoid the central city (Eiichi Aoki et al. 2000, 150).

points. Accidents, delays and gridlock worked against efforts to maintain a tight, reliable train schedule, frustrating efforts to increase service. In addition, many suburban railway lines, including the portion of the Tōkyū Denentoshi Line inherited from the Tamagawa Line (*Tamaden*), operated in the middle of large boulevards, reducing space for other modes of transportation (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 46).<sup>86</sup>

Increasing railway passenger capacity was a multi-faceted effort, involving a continuation of 1950s methods, as well as new ones. Many companies upgraded their fleets, from streetcars powered by overhead lines to faster electric multiple unit (EMU) trains. In addition, railway companies worked even more aggressively to widen rail corridors and construct express lines on their routes (Yamamoto 1993, 233; Wakuda 1981). These upgrades were initiated and funded by the private railway companies, with help from the government coming in only a few cases, such as with the Denentoshi Line.<sup>87</sup> Two other types of improvements, line elevations and commuter line-subway connections, however, were managed and financed by the public sector. In the case of the first, the Japanese government authorized the Ministry of Construction, overseer of the nation's road system, to direct and underwrite efforts to raise overhead the central city train lines – owned by both JNR and the private companies. Train lines such as the Yamanote (the loop line of central Tokyo), the Chūō, the Keio, and the Seibu Ikebukuro were lifted up above the street traffic, and train stations reconfigured. What was

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<sup>86</sup> Incidentally, Tamaden thus acquired the nickname “Jamaden” from the word for troublesome or annoying.

<sup>87</sup> Since 1985, however, all types of service improvements became eligible for indirect state support through tax breaks. Beginning in that year, private companies gained the ability to charge a special surcharge for future service increases and keep that money in a tax-free account until construction (Makoto Aoki 2002a, 56).

important here is that it was paid for entirely through general budget road funds. In the case of private railway companies, this functioned as an important indirect subsidy to ensure that train travel within the central city would continue to be supported as Tokyo grew (Eiichi Aoki et al. 2000, 162).

Even more ambitious than the plan to raise central city train tracks was the increased effort to connect suburban commuter lines with existing subway lines (Makoto Aoki 2002b, 46). In 1964, the Ministry of Transportation launched a new public corporation,<sup>88</sup> the Japan Railway Construction Corporation, to manage the integration scheme begun in the 1950s (Eiichi Aoki et al. 2000, 162). The JRCC was also charged with providing support to other forms of railway expansion, and became the virtual public underwriter for the ostensibly private railway industry. Establishment of the JRCC marked a new governmental strategy of support for railways, one that provided low interest rate loans instead of more direct subsidies, tax breaks, or land grants, as in earlier years of rail in Japan. The level of assistance provided by the JRCC was enormous: it funded the entire cost of establishing through service between commuter lines and municipal subway lines (Yamamoto 1993, 239). For private railways, the JRCC's efforts represented a major windfall for the private railways who received a vastly expanded and more efficient network at no cost (Eiichi Aoki et al. 2000, 153-6).

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<sup>88</sup> This meant that it was nominally a private corporation but one in which the government was the principal shareholder. They were managed by a board of directors and were required to turn a profit, but were also tasked with making loans according to broad ministerial guidelines and received all of their original capital from public sources. Japan National Railways and Nippon Telegraph and Telephone were other examples.

### 6.3.4 The End of the Second Suburban Boom

By the end of the 1960s, Japan's second suburban boom was ending. Largely a product of the expanding Japanese economy of the 1950s and early 1960s, the pace of suburban growth roughly tracked the economy's slowing growth as a whole. Both economic growth and suburban growth continued, but the pace for each had decelerated. The following two figures track the Tokyo's population growth at different geographical scales. Again, wards included in the urban and peripheral categories are the same. In addition, these figures include statistics for Higashi Kurume city, located thirty-five kilometers northwest of the 23-ward area, as an exemplary peripheral city.

**Table 6.4: Population Growth at Six Scales, 1955-1970, indexed from 1955**

	1955	1955/ 1955	1960	1960/ 1955	1965	1965/ 1955	1970	1970/ 1955
Tokyo Prefecture	803708 4	1.00	968380 2	1.20	108692 44	1.35	114080 71	1.42
8 Urban Wards	202791 8	1.00	222012 5	1.09	209381 4	1.03	190483 7	.94
8 Peripheral Wards	265895 1	1.00	337934 1	1.27	400937 9	1.51	425278 4	1.60
Setagaya	523630	1.00	653210	1.25	742880	1.42	787338	1.50
Peripheral Cities	987934	1.00	129552 0	1.31	189852 9	1.92	249057 1	2.52
Higashi Kurume	10319	1.00	19637	1.90	47251	4.58	78075	7.57
Source: (Tokyo Prefectural Statistics Bureau 2006)								

The data present a few significant points. The first is the degree to which the residential population of Tokyo's central core had declined. For Tokyo's first four centuries of existence, the core was a mixed-use area where people lived, worked, and shopped. In 1965, however, population growth declined for the first time, part of a decade-long 14% drop. This occurred while the prefecture's population grew by 18%. Next, the peripheral areas of the 23-ward "city" of Tokyo continued growing, but at rates just barely higher than the prefecture as a whole. From 1965 to 1970, for example, the peripheral wards as a whole, and Setagaya specifically, exceeded total prefectural growth by just over one percent. Meanwhile, the population of peripheral cities, those located outside of the 23-ward area but still within Tokyo Prefecture, boomed. These cities were by and large the preferred locations for public housing projects, including the 1960s New Towns. Their population growth was rapid during this period: 47% growth for peripheral cities from 1960 to 1965, preceded and followed by 31% growth rates in the five years before and after that period. Higashi Kurume city, home to three 1960s public housing projects, experienced even more dramatic growth. With just 8,000 residents in 1950, the New Towns and the Seibu Ikebukuro Line rapidly transformed the agricultural area into a bedroom community ten times larger within twenty years (Japanese Statistics Bureau 2006).

The extent and particular patterns of 1960s suburban growth came with a few problems. Crowding was for decades an inescapable fact of life in Japan's metropolitan areas, Tokyo perhaps most of all. While very high densities, traffic congestion, and noise in the downtown area were severe but at least somewhat expected, rapid and extended

suburbanization brought densities (and attendant issues) to high levels throughout the metropolis. Rapid growth meant the abrupt introduction of urban problems into places not yet equipped to handle them; local roads, sewers, power grids, and other community systems struggled to keep up with rapid growth. High densities at the end of train lines, for example, meant that trains were often full as soon as they started their morning journeys inward, with little room for more passengers along the way ((Japanese Statistics Bureau 2009b; Hanayama 1986, 33).

Public sentiment began to turn against the consequences of suburban expansion, and by extension, the country's rapid economic growth as a whole. Strong, localized environmental consciousness began to take root in Japan, especially in its large cities. People became concerned about the loss of agricultural land, the ubiquitous use of concrete to shape and tame local rivers and creeks, enormous earth moving projects to knock down hills and flatten the ground for development, and many other forms of landscape "improvements" in the development process (Sorensen 2002, 253-4; Ishida 1987). The most common type of citizen resistance was over exposure to sunlight. Dubbed the "sunshine battles" in the press, average citizens, especially women, organized against the construction of large buildings and unrestrained development rights that resulted in loss of sun exposure for pre-existing structures – important for drying clothes at a time when clothes dryers were extremely rare, as well as for freshening rooms (McKean 1981, 113). Local residents and politicians were also strong critics of extremely centralized planning powers, since they had no voice in the planning process yet had to pay for and deal with most of the problems due to rapid growth. A few members of a

given community could hope to get rich if they could cash in on the land price boom, but most would have found themselves initially poorer, through higher tax burdens, and a lower quality local environment (Hanayama 1986, 30). These battles and others, such as against the loss of open space or crowded trains, were a surprising development in a country under complete military control thirty years prior, then occupied, and then almost universally obsessed with economic recovery and growth over the past twenty years. Surely, the country's sense of dissatisfaction in the mid and late 1960s went far beyond protests against rapid suburban growth, but development projects proved a common specific target for larger grievances (Johnson 1982, 283-4; Sorensen 2002, 200-4).

### *6.3.5 The Planning System of 1968*

The Diet passed three interrelated late 1960s' laws to address growing dissatisfaction over land use issues: the New City Planning Law of 1968, the Urban Redevelopment Law of 1969 and the Building Standards Law of 1970. Of the three, the first was the centerpiece, the others served as complements to the 1968 law. Together, they form what Andre Sorensen calls the "1968 Planning System," the first significant update to Japanese urban planning law since 1919 (Sorensen 2002, 213-24). The overall objective was to address the problems of essentially unchecked urban development by re-orienting Japanese planning from a reactive approach to a prescriptive one. It resulted from the simmering citizen anger over a degraded urban environment, and started to lay foundations for future economic growth that did not sacrifice urban quality of life (Ishida 1987, 294-7).

The 1968 New City Planning Law contained five main parts. First, it empowered prefectural and municipal governments with urban planning powers, at the expense of the Ministry of Construction's centralized control over planning, in place since the development of the 1919 planning system. While it may seem odd that the central government, typically loath to allocate any type of decision making power to lower scales of government, would willingly devolve planning powers, part of the reason may have been to turn municipal and prefectural governments into the lightning rods for public dissatisfaction (Sorensen 2002, 214). Anyway, the devolution of planning powers was perhaps more notable for the powers that the Ministry kept, most significantly the power over funding for urban planning projects. Without the power to raise funds for local projects, local planning boards still depended on the Ministry for approval.

Second, the 1968 Law instituted the *senbiki* system, or literally "line drawing," which allowed planners to designate metropolitan areas as one of two basic types: an Urbanization Promotion Area where development would be encouraged through various means, and an Urbanization Control Area, where it would be discouraged. The Ministry of Construction instructed planning boards to identify and designate the extent of the already urbanized areas of the major metropolises, with (in theory) promotion areas on the inside of the line and control areas outside (ibid. 216-7). The *senbiki* provision is similar in intent to Portland, Oregon's Urban Growth Boundary or greenbelts in the UK, but would prove far less effective than either for various reasons. In Japan, the difference in allowable development between the two zones was not that stark, and it was still possible to build apartment buildings and even small commercial districts in areas

theoretically prevented from further development. Control areas in Japan allowed a far greater degree of development than is possible outside of the Portland UGB, for example. In addition, control areas came under review whenever an adjacent promotion area became fully developed. This changed a control area's status to a promotion area. This differed greatly from the British scheme in which designated greenbelts were to remain so in perpetuity. The actual "line drawing" process itself was highly susceptible to pressure from interest groups, mostly farmers and the land development industry. The result was a strong tendency for over-designation of promotion areas beyond what could actually be developed in the near future (Dawson 1985, 59-60; Hanayama 1986, 101-4).

The third element of the 1968 system was the introduction of a development permission requirement. This was the most significant element of the 1968 system, and represented a major shift in Japanese planning. Prior to 1968, there was no way for any level of government to prevent development or make demands on developers before the fact; landowners had full development rights by right of ownership. After 1968, developers had to apply for permission from local or prefectural planning boards, which could be withheld if the development did not meet certain conditions, such as sewer connections and compatibility with traffic patterns. The specific conditions for development were up to the planning board, and were connected to the area's designation as a promotion or control area. In theory, a strong system of development permissions could have significantly improved the Japanese urban environment, as it would have allowed planners to establish rules for growth beforehand (Hebbert and Nakai 1988).

The development permission system ultimately fell far short of its promise for greater regulation of urban development. The main problem was an abundance of exemptions to the rules, leading to the death of the provision's intent by a thousand cuts. For one, projects initiated by public authorities, such as Japan Housing and Urban Development Corporation<sup>89</sup> or the national government, were exempted from oversight, irrespective of the area's status as control or promotion area. Second, within promotion areas, large development projects over 20 hectares were exempted as were smaller projects less than .1 hectare (1,000 square meters). This minimum threshold is quite high given the small sizes of typical Japanese houses and land plots. Assuming an individual house sits on a 100 square meter plot, and generously factoring in 200 square meters for road space, this exemption would allow construction of about eight houses without any preemptive oversight. Since complying with development standards (such as a sewer connection) required developers to spend money regardless of project size, there was little incentive for a development to comply, unless higher volume could compensate for higher costs. Thus, people wishing to convert land from agricultural to residential use, or to sub-divide land, habitually got projects in just under the threshold one year, and then would launch a second phase the next year, a third the next, and potentially *ad infinitum*. In the end, the development permission system applied only to a narrow band of developments as farmers and developers effectively gamed the system (Hebbert 1994, 83; Mori 1998).

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<sup>89</sup> This is the successor to the Japan Housing Corporation.

The fourth part of the 1968 planning system was an expansion of the zoning system from four basic zones (industrial, light industrial, commercial and residential) to eight. The details for each zone are perhaps best referenced elsewhere (Sorensen 2002, 221), but most importantly, the changes established much tighter residential zoning by splitting the previous zone into three. Two of these were known as exclusive residential zones, and prohibited a far greater number of building types than the previous residential zone. In addition, the three new industrial zones were more specific than the previous two zones, spelling out in detail where various types of factories could be placed. Although the 1968 system represented a more stringent code, it still essentially only spelled out what could not be placed in a zone, rather than what the zone was restricted to, as is sometimes the case with American zoning (Shun-ichi Watanabe 1984, 272-6).<sup>90</sup> Furthermore, designated zones could be quite small in geographic extent, allowing for great variety when considering a larger scale. Moreover, since the zoning system only applied to post-1971 construction, existing land uses were “grandfathered” in as

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<sup>90</sup> The original description of this difference between American and Japanese zoning types is explained earlier, in Chapter Five, section 1.3. As a reviewer pointed out, industrial zones in the United States do not necessarily prohibit residential use. However, by assigning a “highest and best use”, i.e. industrial, and limiting the space given over to industrial uses, a premium is created for industrial uses, indirectly but nevertheless effectively discouraging residential use in that area. In Japan, all but the largest factories are permitted in many residential zones, creating a scenario in which owners of small factories can locate just about anywhere. This means price premium differentials (that is, what an industrial user is willing to pay versus a residential user) will not be so great for different land uses within a given zone. The difference between the two zoning types is even more pronounced when considering American residential zones, which typically bar any type of other use. In America, this even includes prohibitions against installing a second kitchen sink in one’s home, lest it be a stepping zone to turning a single-family housing area into a multi-unit housing area. In Japan, land owners have considerably more latitude to build different types of structures for a variety of purposes.

exceptions.<sup>91</sup> In sum, the 1968 zoning system still maintained many characteristics (both good and bad) of the 1919 version (Japan Ministry of Construction 1975).

The final part of the 1968 New City Planning Law called for “public participation” in the planning process. The law did not specify exactly what this was; the only actionable demand on planning authorities was to inform the public of planning decisions. Local and prefectural governments were required to display notices and detailed plans of upcoming projects, and to provide forums for citizens to comment. There were no provisions that citizen opinion had to be taken into account during the planning process, nor ways for strong citizen opposition to halt or modify a plan. As such, the “public participation” clause had very few teeth and amounted to little more than public disclosure (Ishida 1987, 303).

Flaws in individual components of the legislation doomed the legislative sequence as a whole. The delineation between Urbanization Promotion and Urbanization Control Areas had little immediate impact, and suburban development and land use planning in the 1970s would follow more or less the pattern laid out over the previous few decades. To judge the legislation by the results, the *senbiki* system made little apparent difference in controlling or even influencing suburban development. A much stronger development permission system would have helped, but as written, the range of projects needing permission was so constrained that it was more common to be exempt. Nor did the efforts assure local citizens that mistakes of past development practices would be avoided or that

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<sup>91</sup> “Grandfather” exceptions are not unique to Japan, as they have a long history in the United States as well. However, the late date at which even these modestly restrictive zoning regulations were put in place (1971) means that Japanese cities and suburbs were able to maintain the mixed-use pattern that had characterized them for decades, sometimes centuries.

they would have a voice at the table. Citizen protests and “sunshine battles” were still common in the years after the new legislation.

## **6.4 1970s**

### *6.4.1 A New Planning Era*

The 1968 planning system fell short of its own stated goals, but was an important turning point in Japanese planning history. It marked the first real attempt to assert a significant level of public control over urban development, primarily through the *senbiki* process and the permission development system. That it failed due to excessive exceptions and weak language is significant, of course, but the intentions should not be overlooked. Combined with a slowdown in suburban population growth that would continue in the 1970s and beyond, I argue that the goals of the 1968 planning system marks the end of one era of Japanese planning and the beginning of another, in short from one of basically unchecked property rights to one with at least some limits.

The 1970s represented a new phase for Japan in several other areas as well. A series of “shocks” derailed the era of high-speed economic growth and even led to a few years of economic contraction. The first was a currency shock, when the value of the yen climbed quickly after President Nixon’s announcement in late 1971 that the United States was going off the gold standard, and that the dollar’s value would be allowed to float relative to other currencies. The stronger yen threatened to undermine Japan’s central economic strategy of aggressive exports. These economic blows were then followed by the 1973 “oil shocks.” OPEC’s decision to constrict supply caused prices to skyrocket in

Japan to an even greater degree than in the United States, as Japan was more dependent on Mideast oil than the U.S. (Downer 1994, 245). Together, these shocks led to economic contraction in 1973 and 1974, and then only modest growth for several years afterward (Nakamura 1981, 35; Kuroda 2002).

Environmental issues also came to the fore during this period. The late 1960s' citizen protests became louder and more frequent, especially regarding industrial pollution. These citizen movements began to have an effect on Japanese policy; in 1970 the Diet passed a series of fourteen new laws designed to curb pollution (Johnson 1982, 284). The Japanese environmental movement simultaneously became a key element in the rise of progressive local politics in Japan. While the Liberal Democratic Party, the establishment party of the center-right that had dominated Japanese politics since 1945, still held on to national power and was unassailable in rural areas, urban areas increasingly supported Leftist and even Far-Leftist parties. By 1975, progressive or socialist politicians governed almost every urban area in Japan. The rise of these parties in urban areas largely stemmed from their support for better living conditions in Japanese cities, a focus on environmental health instead of just economic growth, and a more inclusive, democratic approach to governance (Sorensen 2002, 224).

Planning in the 1970s responded to these concerns, albeit slowly. At the national level, a new effort for comprehensive land planning resulted in the passage of the National Land Use Planning Law (NLUPL), as well as the foundation of the National Land Agency to oversee it. Similar to the 1968 urban planning effort, this process was full of loopholes and inconsistencies, mostly stemming from the inability of various

governmental agencies participating in the process to get along (Dawson 1985).<sup>92</sup> One very effective element of the NLUPL, however, was designating “price controlled areas.” This allowed public agencies to dedicate an area for development in the short-term, and then freeze the price of this land at the time of declaration. Though not a complete price freeze, as the price was allowed to rise with general inflation and with relevant land price indices, it was an important measure that prevented holdouts from driving up the price of land unreasonably (Hanayama 1986, 41).

#### 6.4.2 *Maturation of the Transit System*

Tokyo’s transit network experienced few changes in the 1970s, as private railway investment in new lines continued to be minimal, and where it occurred, only did so through the generous public sector support and encouragement. The Japanese Railway Construction Corporation lobbied the private railway companies in the early and mid 1970s to build new lines to serve both crowded suburbs and new growth on the periphery. But due to high land costs, and already saturated capacity in the city center, few private railways could be tempted to build entirely new lines (Yamamoto 1993). Only the Seibu Railway participated in the JRCC’s cost-sharing plan, and then only at very generous terms. In 1974, the JRCC constructed the Yūrakuchō subway line, which included new tunnels plus connections to existing lines. It then turned the line over to Seibu for less

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<sup>92</sup> The NLUPL divided Japan into five planned areas: City Planned Areas (as established in 1968), Agricultural Promotion Areas, Forest Areas, Nature Park Areas and Nature Conservation Areas, each of which was to be spearheaded and managed by a separate agency with the National Land Agency. In the end, the different agencies put forth different proposals and despite efforts to coordinate the different designations, total planned area amounted to 154% of Japan’s actual land area. For a given piece of land to be governed by two sets of conflicting land use guidelines was not uncommon, and some parcels were even governed by four overlapping regulations (Dawson 1985, 57).

than cost (\$252 Million), payable by Seibu over 25 years at a variable interest rate capped at 5%, with a discount offered if ridership was lower than projected. The JRCC also paid for overhead express tracks that allowed Seibu to integrate this line with its other lines. Seibu was only required to supply the rolling stock and personnel (Havens 1994, 86). Beyond this, the JRCC extended below market-rate loans to private railway companies for expansion and upgrades. A few companies did take advantage of these subsidies, including Tōkyū which relied on JRCC financing to build the New Tamagawa Line. The older, street-level line, the *Tamaden*, originally built in 1905, made its last run in 1969; the new *Tamaden*,<sup>93</sup> which operated underground from Shibuya to Futako Tamagawa in Setagaya Ward, opened in 1977. Bus service for that section was used in the interim while the tunnel, paid for by the JRCC, was being built (Setagaya Kuritsu Kyōdo Shiryōkan 1989, 46; Setagaya Ward 2005, T1).

The JRCC's greatest involvement was funding expansions of Tokyo's subway system. In the first part of the decade, the JRCC subsidized 70% of subway capital costs (Makoto Aoki 2002b, 46). In 1978, the JRCC increased its efforts to expand the railway network. The Underground Rail Construction Program of that year authorized subsidies of 60% for new lines and of 30% for any improvements. In part, this was really just a shift in types of public financing as the JRCC (national) supplemented the funding provided by Tokyo Prefecture for subway operations. JRCC's intervention lowered costs and improved service indirectly for private company lines operating through- service with the subways. Also in that year, the JRCC arranged to build two more lines to be

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<sup>93</sup> In Japanese, this is the *Shin Tamagawa*, or New Tamaden.

handed over to private companies: the Keio Sagami-hara and Odakyū Tama lines, both of which were needed to serve Tama New Town, Japan's largest (Cervero 1998, 203-8).

JRCC funding also helped upgrade train stations, especially by adding extra tracks. JRCC funding for construction and technical upgrades was supplemented by policy-based assistance for redeveloping train stations. The 1969 Urban Redevelopment Law, the second of the three laws comprising the 1968 planning system, made it easier to use Land Readjustment in urban areas by allowing LR to be used for very small parcels (Sorensen 2002, 124). In addition, the "price controlled area" provision of the 1974 National Land Use and Planning Law lowered the effective price the JRCC needed to pay to buy land for train station or train line redevelopment. The price freeze was used quite extensively in places where the JRCC hoped to encourage railway expansion. If no project could be initiated, the price freeze was lifted. JRCC money plus these two interventions were often implemented together to redevelop the stations themselves as well as the land immediately surrounding them, such as with Tōkyū's Futako Tamagawa station in the late 1970s and early 1980s (Setagaya Kuritsu Kyōdo Shiryōkan 1989).

## **6.5 The Era of Suburban Maturation**

### *6.5.1 Slowdown of Suburban Growth*

The 1970s were a period of slow growth and even decline in many local suburban areas. Tokyo Prefecture barely grew, up just 2% from 1970 to 1980, for several reasons: a slowing economy, demographic shifts that came with an end to the post-War baby boom, and a plan from the mid-1970s to devote more resources to rural areas and to non-

Tōkaidō cities.<sup>94</sup> Population in the urban wards, meanwhile, dropped as downtown area transformation continued. The 1980 urban population was just 87.4% of what it was in 1970. The population of the peripheral wards, meanwhile, stabilized. Growth over the course of the decade did not even reach 2%. The only geographical scale to grow substantially was the peripheral cities, the locations of the New Towns, both public and private. Population at this scale climbed from 2.5 million in 1970 to 3.2 million in 1980, a gain of 28%. Growth patterns at this scale were highly variable depending on the location, and usually the product of public housing construction and/or major private sector housing projects (Hanayama 1986, 111-6).

**Table 6.5: Population Growth at Six Scales, 1955-1970, indexed from 1955**

	1955	1955/ 1955	1960	1960/ 1955	1965	1965/ 1955	1970	1970/ 1955
Tokyo Prefecture	803708 4	1.00	968380 2	1.20	108692 44	1.35	114080 71	1.42
8 Urban Wards	202791 8	1.00	222012 5	1.09	209381 4	1.03	190483 7	.94
8 Peripheral Wards	265895 1	1.00	337934 1	1.27	400937 9	1.51	425278 4	1.60
Setagaya	523630	1.00	653210	1.25	742880	1.42	787338	1.50
Peripheral Cities	987934	1.00	129552 0	1.31	189852 9	1.92	249057 1	2.52
Higashi Kurume	10319	1.00	19637	1.90	47251	4.58	78075	7.57
Source: (Tokyo Prefectural Statistics Bureau 2006)								

<sup>94</sup> This means those not along the Tōkaidō corridor such as Tokyo, Nagoya and Osaka. The plan was dubbed the “Building a New Japan” plan and was spearheaded by then Prime Minister Kakuei Tanaka. Tanaka proposed an expanded network of Shinkansen lines throughout the country plus major public spending on new roads, dams, power plants, etc. in mostly rural areas (Johnson 1982, 293).

Judging from thirty years of suburban growth from 1950 to 1980, it is clear that the earlier second main phase of suburban growth had given way to a steady and unspectacular growth rate for most suburbs. The indexed chart above shows that the huge spikes that defined earlier growth eras had ended, and that even where there was growth, such as in the peripheral cities, growth rates were less vigorous than in earlier decades. For example, while the peripheral cities doubled the prefecture's solid growth rate as a whole over three decades, they fell short of the earlier five-fold and seven-fold growth rates of Setagaya and other peripheral wards.

Flattening population curves were one indicator that suburbia had matured; the absence of major built landscape changes were another indication. The slowdown of new railway construction ensured that Tokyo's basic framework of 1950s and 1960s' intra-metropolitan transit network would continue. In addition, absent major changes to the country's system of planning regulations meant a continuation of the development patterns established decades before. The immediate post-War period offered one last chance to remake the geography of the metropolitan landscape. But in the end, Tokyo was rebuilt according to its pre-War pattern and not remade. To be sure, there were redevelopment projects occurring throughout the metropolis in the 1970s, but by and large, the land use and transportation patterns were then well established.

#### *6.5.2 Institutional Support in the Post-War Period*

In the 1920s and 1930s, transportation and land use policy played determinative roles in creating the particular form of Japanese transit-oriented suburbia. The series of legislative acts regarding railways enabled and promoted the growth of private railway

companies, while the 1919 planning laws solidified the permissive zoning system and encouraged mixed land use. In the post-War period, transportation and land use policy worked to maintain and strengthen the established pattern.

In the realm of transportation policy, efforts to solve the severe congestion problem, on the trains, and on streets where trains shared space with other transportation modes, created a stronger intra-metropolitan railway network. Instead of looking for modal alternatives when the rail system seemed at capacity, transportation planners looked to rescue the system rather than replace it. In 1953, the National Capital Reconstruction Committee began underwriting the difficult process of linking and synchronizing the area's various types of train lines, while the Ministry of Construction began funding capacity improvements for private railways. In the mid-1960s, the Japanese Railway Construction Corporation took one step further. The JRCC offered extremely generous subsidies and other inducements to support integration and new construction. For private suburban railways, these efforts were most welcomed. The public sector provided the capital investment; the private sector enjoyed enhanced operational capacity and attendant profits.

Turning to land use planning, the major 1968 update to the 1919 system granted local agencies more control over planning of peripheral development and made room for more public participation. It also contained a more precise zoning system, tighter building standards, and even gave municipal planning boards their first powers to prescribe development patterns in advance of actual construction. Although these were significant changes for Japanese land use planning as a whole, they did not seriously disrupt the

basic land use pattern first solidified in 1919. Even after the 1968 reforms, mixed use is the rule rather than the exception, and there remain far fewer bureaucratic obstacles to private land development efforts.

Interestingly enough, the general pattern of Japanese transit-oriented development was almost discarded. The Tokyo Reconstruction Plan proposed in 1946 could have significantly departed from the historical trend. Planners looking to rebuild the city after the wartime damage envisioned a city that was essentially automobile-dependent, with a complicated highway network that would have supplanted trains, trams and subways. The attendant planning system was for more distinct suburbs, with strict population limits, increased amounts of land used as green-space, and much less freedom for real estate developers. In a nutshell, the Plan would have meant a much greater role for government planners in determining the shape of the metropolis. That is, the plan would have meant a less market-based approach to transportation and land use in Tokyo and other cities. Yet the plan did not gain traction, and the *status quo* persisted.

## Chapter Seven: Conclusion

### 7.1 Market or State?

#### 7.1.1 *Entrepreneurialism*

The evolution of Japanese transit-oriented development (t.o.d.) has been a long-term process, dependent on a multitude of policy decisions in various fields: transportation, urban planning and housing, as well as national economic strategy. At the same time, it is clear from a reading of Japanese t.o.d.'s implementation over time that it has involved a wide number of independent actions made outside of the political realm: the corporate strategies of private railway companies, real estate development decisions, and the choices of individual consumers such as where they would like to live and how they would like to commute. The end result of this long history is a landscape that confounds what I have argued are the “common sense” notions of TOD in the United States.<sup>95</sup> Namely, the approximately one hundred years under consideration here have resulted in a thriving, private industry led mass transit system accompanied by mixed land uses concentrated around transit nodes. This is the very landscape that many American observers seem to think is unlikely without explicit governmental directives. This section weighs the evidence regarding the activities of both the public and private sectors in producing this “unexpected” landscape.

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<sup>95</sup> As I do earlier in the paper, I use the acronyms t.o.d. and TOD to refer to two related but separate senses of transit-oriented development. T.o.d. refers to the generic practice of mixed-use, dense development oriented around transit systems, as is practiced in Japan. TOD refers to the specific planning movement in the United States as defined by Peter Calthorpe and others.

Entrepreneurialism, exemplified by the business decisions of Keita Gotō and others at Tōkyū, has been an indispensable factor in building the Japanese version of transit-oriented development. The specific decisions have been chronicled in previous chapters, but in general terms, we can identify three particular facets of entrepreneurialism that lay at the heart of these successes: diversification, recognition of opportunities, and long-term thinking. Even from their earliest days, private railway companies have had diversified business operations that have allowed them to take advantage of capital investments in a variety of ways. At their start, railways were in fact a secondary business to companies whose primary profit-seeking objective was power generation. As the railways evolved, the companies expanded operations to real estate development, shuttling people to and from homes, office buildings, shopping centers and recreational facilities. Even in the present day, transportation profits are just one part of larger conglomerates whose primary business is essentially real estate companies. Although the transportation sectors attract a great deal of attention, the real money is made in land development. Tōkyū, along with Seibu, and Hankyū, have been the leaders of this strategy and each conglomerate boasts an array of profitable businesses that complement and reinforce each other.

Second, the private railway companies profiled here have impressively recognized business opportunities and acted on them. There is an obvious selection bias as one looks back in hindsight: the companies that did not profit in real estate development are no longer around to profile. Tōkyū and the other leading private railways in Japan have maximized profits with their real estate ventures. For example, the forerunners of the

Tōkyū Railway Company, the Denentoshi Company and its subsidiary, the Meguro-Kamata Railway, recognized the need for suburban housing in the 1920s, and also recognized the crucial role that electric-powered trains and trams would play in serving those suburbs. The Denentoshi housing development became a premiere destination almost as soon as it was built, and credit goes to early directors of the company who managed to deliver precisely what was in such demand. Interestingly, the Denentoshi Company imported a foreign concept, Ebenezer Howard's Garden City,<sup>96</sup> which essentially created a demand that had not yet been precisely articulated. The timing of the Kantō earthquake and fire proved to be an added force behind Denentoshi's success, along with other suburbs, but even before the earthquake the Denentoshi project was already a success. Several decades later, officials at the Tōkyū Group put together another model transit-oriented suburb at Tama New Town, which was similarly successful. This project was also well suited to its context, and fulfilled market demand for pleasant and affordable modern suburbs. Private railway companies also maximized opportunities in commercial real estate, such as with the transformation of Umeda (in Osaka) and Shibuya (in Tokyo) into major shopping hubs by expanding and diversifying existing investments at train stations. This type of opportunistic development has been possible due by the relative freedom given to private landowners to build what they wish.

Third, the entrepreneurs described here have valued long-term profitability above short-term gains. The railway and real estate empires could not have come about had they been run by the speculative railway owners of the 1890s and 1900s who sought to

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<sup>96</sup> Although, as I have argued, they actually imported the image of the Garden City idea, and not much of its substance.

maximize profits on a given line and thought little of the broader opportunities. Barons such as Hankyū's Kobayashi, Seibu's Tsutsumi and above all, Tōkyū's Gotō, pursued strategies that cost them short-term profits but were returned many fold as time went on. These business leaders chose to keep railway fares low, even to operate at a loss, in order to encourage ridership and greater patronage of other businesses located along the train lines. These conglomerates bought land in advance of high demand when it was still affordable and then turned the land into premier destinations such as Setagaya. One successful strategy was to initially rent commercial development around a train station at affordable rates and then raise rates when those areas had become popular. Thus, the initial rush of development helped to create its own self-sustaining demand, as the customer base for one business worked to attract customers to other nearby businesses. Tōkyū profited on the long-term success of the area and earned back its initial losses many times over.

### *7.1.2 State Support*

The ability of the railway conglomerates to pursue a diversified business model with railways, real estate development and, other related enterprises was made possible in part by the degree and nature of governmental support for railway growth. The state's interest in developing and protecting the private railway sector goes back to the very beginning of the railways in Japan. In the 1870s, the new Japanese government supplied private railways with free land and generous financing to spur growth. This produced railway booms in the early 1880s and then mid-1890s as private investors responded to the incentives. The boom periods increased track length, but also led to bust periods when

investors pulled back. In order to rationalize and moderate the industry, the government pursued nationalization right after the turn of the century. Contrary to what the word usually connotes, nationalization in Japan amounted to a bailout of struggling private railways that left many of their owners better off. Payments to nationalized private railway investors were generous in the extreme, and by exchanging secure governmental bonds for private company shares, provided them with even greater abilities to invest in sectors of the railway industry that would remain outside of the national railway's network, i.e. intra-urban transit.

The most significant means of support for the private railway industry came in a series of laws in the early 20<sup>th</sup> century that were designed to encourage investment in metropolitan regions. The Light Railway and Light Railway Subsidy laws of 1910/1911, followed by the Local Railway and Local Railway Subsidy laws of 1921 continued established forms of support, such as land grants, below market rate loans, and the use of eminent domain powers to assemble land. These laws also introduced a new and significant type of assistance: a guarantee of profitability of new private railways for ten years to fifteen years. The promise to provide at least 5% of return on investment for a long period stands out as the most important factor in establishing private suburban railways as the backbone of Japanese t.o.d. patterns. Not only were the terms generous, and thus important in the amount of support that the private railways received, but the profit guarantee also strongly influenced strategic business decisions to diversify the companies. Because investors in private railroads that qualified for these laws could rely upon a 5% dividend no matter what, private railway companies were encouraged to do

two things: 1) to build as much as they possibly could, since they would profit no matter what and still own the railways after the guarantee period finished, and 2) to channel operating revenues into expansion of non-transportation businesses, especially real estate investment as any non-railway profit would not be counted as profits against the 5% guarantee. Private railway companies could afford to gamble with the construction of department stores, sports stadia, or tourist facilities and the mode of travel to get to them was a guaranteed source of profit. Private railways could aggressively expand service and keep fares low. In short, the state-guaranteed profit worked to expand the transportation network in physical terms and to broaden the business strategies of those companies. Had it not been for the guarantee, fewer kilometers of track would have been built and companies would have been reluctant to risk substantial assets in speculative real estate.

In the realm of urban planning policy, governmental decisions once again helped provide the conditions for private business success. In Tokyo specifically, the Tokyo City Improvement Ordinance of 1888 helped to prepare the city for intra-urban rail transit by straightening and widening roads and by buying key properties that were then set aside for railway use. Eminent domain powers were also a key element in the TCIO's efforts. Seizure of private land for railroad construction was quite common in the Tokyo area as well as across the country, especially in the early decades of the railroad. The Eminent Domain Law of 1900 gave national, prefectural, and municipal governments the powers to designate private land as necessary for public use. The Law also stated that landowners were entitled to compensation, although, in practice, these amounts were usually very low.

Eminent domain powers were curtailed with the 1919 changes in urban planning laws, but the major provision that took its place, Land Readjustment (LR), was able to accomplish many of the same objectives. In LR projects, landowners could be compelled to surrender a portion of their land when a certain percentage of landowners in a given area agreed to participate in land improvement schemes. Compared to eminent domain, LR was considerably less controversial and actually welcomed by many landowners. It allowed all properties within the designated LR area to be upgraded and resulted in higher prices on lands not surrendered. LR was used frequently in the pre-World War II period and was crucial in building the network of suburban electric train lines still in use today. For the most part, the use of both eminent domain and LR to build train lines was much reduced in the post-War period. The need for such powers on behalf of real estate development schemes did not decrease, however, and LR was an especially handy tool for effecting redevelopment of and around train stations

The most intriguing aspect of LR in terms of its importance in building the Japanese transit-oriented landscape was that LR could be launched not just by governments on behalf of the “public interest,” but by private parties as well. For example, if 70% of landowners in a given area wished to declare the area ready for readjustment, they could petition government to carry out the project. Since LR was fiscally neutral – portions of the project were sold to pay for land improvement costs such as building water pipes, paving streets, or widening thoroughfares for rail traffic – governments welcomed these petitions. Once the LR area was declared, state powers were used to compel the other 30% to go along, with no explicit appeal to “public

interest” needed. It was instrumental in allowing Tōkyū to build train lines where it wanted and also to maximize real estate profits along those lines. Tōkyū Railway Company used this technique so often that it became known as the “Tōkyū Method.”

The more direct types of state assistance to the private sector and the development of Japan’s transit-oriented landscape emerged before the War, as the railway network was being established. The public sector still played a crucial role in maintaining the transit-oriented metropolis by helping private railways companies adapt over time. Land purchases and profit guarantees gave way to more indirect means of support. In the transportation sector, the use of public funds to raise tracks helped to make above ground train travel viable as the “center” of Tokyo expanded and became more densely populated. Similarly, public financing supported the connection of private suburban railway lines to subway lines in the center of Tokyo. In the end, private railways benefitted by having greater train connections and faster service, all at public expense. Public housing policy, meanwhile, reinforced the transit-oriented landscape by placing large *danchi* and then New Towns in distant locations only accessible by trains. This gave private railway companies new sets of captive riders and delivered new customers to other businesses along the lines.

### 7.1.3 *The Framed Market*

Japanese t.o.d. has thrived because of both private market entrepreneurialism and state-led support, to the point that determining which is more responsible is impractical. Private sector business strategies depended crucially on rules and conditions set by the public sector, and it is difficult to separate the private sphere from the public sphere that

shaped its development. The research question introduced in the first chapter asked “How did private industry-led, t.o.d. come about in Japanese suburbs, given that the U.S. debate holds that TOD is inherently an anti-market phenomenon?” The answer put forth here is that private industry-led t.o.d. resulted from entrepreneurial exploitation of conditions *and* government support. While the public sector never explicitly mandated it, a web of connected, though unintentional and non-deterministic, public policies provided incentives and opportunities that allowed private railway companies to flourish.

To put it simple terms, I argue that governmental policy “framed” the growth of Japanese t.o.d. By “framed,” I mean that public policy choices set the boundaries of private enterprise and provided the necessary backdrop for market participants, in the same way that a painting is made on a particular surface (i.e., canvas) within a given shape (the picture frame). Admittedly, this is an imperfect metaphor: framed pictures are static, whereas markets are incredibly dynamic; the boundaries of a painting are clear, whereas market boundaries are hazy, even undecipherable. The metaphor does, however, draw attention to the crucial and analytically separate role that public context has played in how private interests, in this case railway companies and their real estate development affiliates, operate. Simultaneously, the emphasis on framing acknowledges that a different context would have enabled different types of entrepreneurial activities, in the same sense that taut canvas lends itself well to particular types of paints, while sides of subway cars lend themselves to others. A different set of rules, in which profit guarantees had not been promised or public money had been spent on highways and roads instead of supporting transit, would have produced a different outcome. We do not have the benefit

of alternative histories that would allow use to see how a different frame could have produced different business decisions. In this particular case, however, it is clear that the many decisions made in the realms of transportation and land use policy worked together over a long period of time to produce the mixed-use, transit-oriented landscape so common in Japan today.

To be clear, however, this is not an argument that the “frame” intentionally or even that the decision makers responsible for parts of the institutional framework knowingly determined the result. In the case of Japanese t.o.d., the framing was certainly not deterministic. The establishment of Japanese t.o.d. has its roots in the 1870s and is present throughout various eras of modern Japanese history, including the early days of the nation-state, military fascism, American occupation, and post-War democracy. In addition to its historical longevity, there was no one group or cabal responsible for crafting the outcome. In fact, several unrelated groups within various levels of government each had hands in creating the frame: bureaucrats at the Ministry of Transportation in the 1870s who established early forms of state subsidies to private railroads, urban planners for the city and prefecture of Tokyo who passed the TCIO in 1888, national politicians who passed the Light and Local Railway Laws of the 1910s and 1920s, and housing authorities at the Japan Housing Corporation who made decisions about where to place public housing projects after World War II. The sources of the decisions are too varied to attribute determinative powers to any one group, nor was there any type of government directive for these diverse decision makers to work in concert with each other. Decisions were made based on immediate needs and not with any grand

plan in mind. For example, the decision to fund private railways came about because the treasury was bankrupt. The laws that guaranteed profits came about to encourage private investors to take risks and fund a developing network that the state alone could not have afforded. All of these decisions contributed to produce the landscape so common today, but it was still essentially unplanned. This is in keeping with Japanese planning as a whole, which has been remarkable for the absence of prescriptive powers and the persistence of a very passive role for government as a shaper of the metropolitan landscape.

I have used the analogy of the “frame” because it provides a convenient image for describing the position of market actions within a context of institutional support. This is the basic outlook of institutionalism, as I have described in chapter two, and this discussion of framing is indebted to theorists of institutionalism, such as Karl Polanyi, and appliers of institutionalism in the realm of urban planning, such as Jonathan Levine. Institutionalism’s virtue in this case is in enabling a more nuanced view of market/state interaction than is possible from the standard theories used to analyze transit-oriented development in the United States, i.e. liberalism and Keynesianism. I have shown that the patterns of Japanese transportation and land use arose without explicit direction from government, and were in fact built by the private sector. An institutional perspective acknowledges these important facts, but asks the deeper question of how the private sector was able to succeed in this way.

## **7.2 Learning from Japanese Transit-Oriented Development**

### *7.2.1 Research Lessons*

Beyond an explanation of the reasons behind the development of Japan's transportation and land use patterns, this thesis began with the goal of applying knowledge of that case to more general issues of states and markets, as well as how metropolitan landscapes are formed. Given what is now known about Japanese transit-oriented development's historical outcomes, what might be applied elsewhere?

For one, this case underscores the importance of looking beyond the surface when considering the role of the private sector in the metropolitan landscape. In the case of Japan, the influence of corporations such as Tōkyū is obvious. The trains are everywhere, and ridden by tens of thousands of people every day. Their eponymous retail investments, such as Tōkyū Hotels and Tōkyū Hands (a do-it-yourself store), are well-known, and with but a little bit of research, one can easily find out what other chain stores are within the Tōkyū conglomerate. There are travel agencies, office buildings, amusement parks, and other types of enterprises that further grow Tōkyū's corporate profile. The institutional history behind the scenes is barely known, however. There is little knowledge, much less concern, regarding the types of subsidies offered to Tōkyū and other railway companies ninety years ago. Yet, as I have described here, those early forms of support were indispensable to Tōkyū's growth and cast doubt on the extent to which the railways were truly "private."

Second, this research illustrates the importance of path dependency as a factor in how and why metropolitan regions evolve. One could look at private railway companies

now, see that there is no direct subsidization, and argue that, whatever the support for private railways that existed before, they are independent and profitable now. However, private railways would not be independent and profitable currently without the state support in the past that established them as key pieces of the metropolitan landscape. Once they were built, their presence locked in certain outcomes and eliminated certain choices. This is not a merely hypothetical situation. In the immediate post-War period there was widespread support for transforming Tokyo into an automobile based metropolis. The Reconstruction Plan submitted in 1946 contained proposals for more highways, more segregated uses, and a declining role for suburban railways. Yet the expense, extent of governmental powers, and the time needed to accomplish such a plan made it unfeasible. The entrenched network of private railways remained.

Related to these two points is a third: one must take a historical, multi-disciplinary approach if one is to understand the evolution of Japanese t.o.d. The four standard urban policy theories employed in Altshuler and Luberoff, as described in the appendix (Altshuler and Luberoff 2003), would have been inadequate to understand the century long process conveyed here. Those are all types of episodic inquiry, suited to understanding particular instances of longer trends, and not as concerned with a diachronic understanding of the trends as a whole. The emphasis on multi-disciplinarily contrasts with treatments of Japanese suburbia or private railway development that are typical of Japanese scholarship (Katagi, Fujiya, and Kadano 2000; Eiichi Aoki et al. 2000; Wakuda 1981; Shun-ichi Watanabe 1984). In those works, the analyses of transportation policy are generally kept separate from analyses of suburban real estate

development, and vice versa, inhibiting an understanding of how the two histories have interacted. This is not meant to be a criticism of those works, *per se*: they have their own objectives and succeed in meeting them. It is to point out, rather, that a historical perspective is indispensable for answering questions of how Japan's transportation and land use patterns developed.

### 7.2.2 *Comparative Lessons*

This thesis is the first known work to analyze Japanese t.o.d. It is also one of a very small handful of works to focus on Japanese suburbia and for that matter, Japanese metropolitan morphology. Furthermore, it has brought together a varied set of literatures on transportation policy and urban policy in order to understand t.o.d.'s success, and to the best of my knowledge, is the first application of institutional theory to explain patterns of transportation and land use in Japan. An additional value is that it forms a useful comparison with standard transportation and land use planning in the United States, especially regarding t.o.d. To paraphrase the research question, the inspiration behind this project was to explain the "free market paradox" presented by Japanese t.o.d. What accounts for the apparent success of the private sector in building transit-oriented development in Japan when it is so commonly assumed in the United States that it can only be implemented through government-led planning? What can an analysis of Japanese experience contribute towards a greater understanding of American TOD?

One possible conclusion to draw from this research would be a counter-argument from a liberal, pro-market perspective: that the hidden history of state support for private railways reveals that mass transit is inherently impossible in the "free market." After all,

proponents of neoclassical liberalism might argue, the fact that the earliest private railways relied on state subsidies, public help in land assembly, and profit guarantees could indicate that private railways aren't really private at all, and that really just form a different type of public intervention in the market. Such a criticism would be superficially correct as the private railways certainly did not succeed independently. This observation, however, misses out on a more profound argument: no modern transportation system can ever be a product of a "free market," since all modern transportation networks need some form of state framing in order to function.

The Japanese example is in many respects analogous to the transportation and land use pattern that has developed in the United States, not in terms of how it looks but in terms of how it was produced. Although the outcomes are divergent, the processes by which Japanese t.o.d. and American automobile-based suburbia developed have a great deal in common. In the Japanese case, the state provided the necessary conditions for private railways to form in their early years and then ensured their continued success as the decades went on. In the United States, the government similarly framed the success of private automobile transportation and segregated-use, low-density suburban living. The National Interstate and Defense Highways Act of 1956, the creation of the highway trust fund,<sup>97</sup> and the widespread use of eminent domain to carve out room for highways in metropolitan areas are similar in extent to support given to railways in Japan (McNichol 2005; Gutfreund 2004). Public sector decisions to construct these transportation systems came prior to proven market demand in both cases, and these transportation investments

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<sup>97</sup> The highway trust fund receives funding from users in the forms of federal and state gas taxes, as well as disbursements from the general budget.

created subsequent demand. There are analogies between housing policies in both contexts. In the United States, government subsidies encouraged home ownership in distant suburbs that were accessible by car; in Japan, government subsidies provided large housing projects in distant suburbs accessible by train. While the United States and Japan differ in the patterns of transportation and land use available in each place, they share the experience of government framing the existing choices.

### *7.2.3 The Conceptual Impasse*

Current American debates on TOD are locked in an unproductive debate on the issue of governmental intervention in the private market. Earlier I call this the tug of war argument that sees government action as a loss for private interests, or sees private entrepreneurialism as working against the public interest. As this explanation of Japanese t.o.d. has shown, the supposedly oppositional nature of states and markets need not be the case. The state clearly made the conditions for private market growth possible. The example of Japanese t.o.d. suggests that a more productive way to think of states and markets might be that states frame market decisions, and that the private sector is embedded in systems of state driven rules, decisions, constraints, and supports that allow them to function.

In a practical sense, the explanation of the Japanese case suggests that instead of “planning vs. markets,” a more productive discussion may be one of “planning vs. planning.” Instead of remaining mired in the argument that planning is needed to counteract market forces, the Japanese case could serve as a counterexample showing that state planning can give rise to mixed-use, dense, transit-oriented metropolitan

landscapes just as it can give rise to segregated-use, less dense, automobile-oriented ones. Neither case deserves the status as a market default which represents merely the natural forces of supply and demand, since both are brought into being by governmental framing.

Advocates for TOD, then, could focus on recasting their positions not as advocates for government intervention, but for a different version of government framing that would allow TOD an equal playing field with other types of transportation and land use models.<sup>98</sup> Instead of treating the *status quo* as the natural products of the market, TOD advocates could begin by questioning the various types of state-support that make the standard transportation and land use patterns possible. Attacking “Bridge to Nowhere” plans in federal highway bills, as well as disproportionate spending on highways in rural areas more generally, would be two places to start. Another tack might be to criticize public subsidization of parking spaces (Shoup 2005). By focusing on the funding needed to build mass transit, TOD supporters give existing arrangements too much of a free pass regarding the funding needed to make the current patterns continue.

A second area for advocates could be to make more sustained critiques of zoning in downtown and suburban areas. As Jonathan Levine and Asaam Inam argue in their insightful paper, “The Market for Transportation-Land Use Integration: Do Developers Want Smarter Growth Than Regulations Allow?,” the main factor inhibiting alternative

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<sup>98</sup> To be clear, I am not necessarily a critic of automobile-dependent, low-density American suburbia. I find such landscapes very appealing, and respect the choices of the millions of Americans who love living in such places. I do, however, have reservations about the long-term environmental sustainability of such landscapes and affiliated lifestyles, which prompts me to question its seemingly unassailable position as a natural market outcome. Likewise, in the sense that I respect the rights of people to choose automobile-dependent, low-density living if that is what suits them, I promote that people desiring alternatives have an equal playing field for achievement of their versions of the “American Dream.”

development forms<sup>99</sup> is not lack of market demand but regulatory barriers (Levine and Inam 2004). Levine and Inam carried out a survey of 693 property developers and found that more than 60% of them “implicated local regulation as the most significant obstacle to alternative development,” in contrast to just 15% who said that lack of market interest was the main obstacle (129). Interestingly, the combination of high perceived market demand limited by strong regulatory restrictions was most pronounced in suburban areas, the very places which purportedly demonstrate the results of unconstrained consumer choice. Developers in suburban settings reported the greatest frustrations with onerous regulatory burdens which prevented them from satisfying market demand (131).

The Japanese case shows that the power of regulation to prevent mixed-use or other alternative transportation and land use forms in the United States is not merely hypothetical. In Japan, weak zoning regulations have been a key component of t.o.d.’s popularity. Landowners in Japan have much greater latitude over what they can build and where, and are thus able to take advantage of market demand for housing, retail, or office space, as demands change. TOD advocates should refrain from trying to impose planning requirements, such as high-density minimums or mandates for mixed-use, and from arguing that TOD planning codes should replace traditional codes. A more successful, long term strategy to building a more diverse and TOD-inspired landscape would be to advocate the repeal of selective zoning requirements that make TOD impossible. Rhetorically, the emphasis should be on “freeing” TOD from excessive regulation that prevents it, rather than promoting an alternative set of planning codes to guarantee it.

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<sup>99</sup> Levine and Inam define these as Smart Growth, transit villages, Green design and other non-standard forms.

Third, I would recommend that American TOD advocates propose more entrepreneurial transit systems. The Japanese model of t.o.d., led by private railway companies, is not a very realistic model for the United States. The path dependent nature of publicly managed transit systems is likely too difficult to overturn; the present system has been built with public money and selling it off to the highest bidder would not likely recoup what has already been invested. There are other measures, however, which could result in making publicly owned and managed transit systems more profitable. The key would be to diversify operation so that affiliated businesses could contribute to some of the fixed costs faced by transit systems.

American transit stations, whether for trains, light rail or even Bus Rapid Transit, should be more aggressive in attracting businesses not just around them, but *at* them. Japanese train stations have cafes, bakeries, delis, bookstores and hundreds of other businesses right there, and some even have offices and residential units built right above them. The Futako Tamagawa redevelopment project is a perfect example and could serve as an inspiration for transforming American stations into more lively and profitable places. It would be unrealistic for Metro Transit in the Twin Cities or San Francisco Municipal Transportation Agency to suddenly become savvy property developers in the mold of Tōkyū. They do not have the experience or the expertise. A landlord model in which American transit agencies rented out space in ticket lobbies, platforms, and even above stations would be realistic and would deliver supplementary funds to transit operations. Transit agencies could pursue profit-sharing models that would encourage private developers to not just invest around stations, but in and top of them. This would

produce some of the mutually reinforcing patterns of transit ridership and real estate development that Tōkyū, Seibu, and other Japanese private railway companies have exploited to the fullest.

Leveling the playing field of governmental support for transportation, relaxing zoning regulations that would allow market demand for TOD or other alternative land use forms to be met, and taking a more entrepreneurial approach to transit would be three immediate steps that would help expand and transform TOD in the United States. Of course, the larger goal is not just to implement TOD for its own sake, but to create a more diverse and flexible metropolitan landscape that contains both TOD and conventional transportation and land use patterns, and that allows people to live and travel as they see fit. There must be, however, relative equity in terms of “framing.” State support for these different modes should be relatively equal, so that actual consumer preferences are neither restrained by excessive barriers nor artificially promoted by overly generous subsidies.

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## **Appendix A: Alternative Theories of Urban Policy**

This thesis represents just one of many possible approaches to the subject of the Japanese transit-oriented development. The central concern is not to explain all of Japanese suburbia, the aesthetics of one Japanese suburb, the environmental footprint of Japanese transit-oriented development or the shifting signs and connotations of Japanese suburban family life. All of these are worthy projects, but what has motivated this research from the beginning is the particular issue that I identify as the “free market” paradox of Japanese transit-oriented development. To restate it: how did private industry led, transit-oriented development come about in Japanese suburbs, given that the U.S. debate holds that transit-oriented development is inherently an anti-market phenomenon? To answer this question, I have used the theoretical lens of institutionalism since that particular theory helps clarify and explain the way in which private market forces are embedded in public sector rules, supports and prohibitions. As the literature review in chapter two hopefully makes clear, the two main perspectives on the distinct roles of state and market: liberalism and Keynesianism, are counter-productive to answering this question. Since both view market and state as oppositional forces, they are ill-suited to address a case where they would seem to be symbiotic, or at least, not mutually exclusive. Institutionalism allows an appropriate path out of this particular conceptual impasse.

There are other popular theories in urban studies, political science and geography which might have been used, but were not. In order to explain my choice to use institutionalism, this appendix reviews four such theories: elite-reputational, pluralist,

public choice and elite-structural theories. My discussion of these is adapted from Alan Altshuler and David Luberoff's book, Mega-Projects: The Changing Politics of Urban Public Investment, which examines the political implementation of various large-scale public works projects, especially highways, airports and rail transit over the past five decades (Altshuler and Luberoff 2003). Actually, Altshuler and Luberoff examine five major theories, the last of which is historical-institutionalism and differs just slightly from my own use of the term. A brief description of the five theories is below, based on Altshuler and Luberoff's discussion on pages 49 through 75. The review is followed by commentary on how these theories could apply to my research topic, as well as an explanation of the major contextual differences between Altshuler and Luberoff's study and my own.

#### *Elite-Reputational*

In a nutshell, the elite-reputational theory of American politics holds that a small group of corporate elites dominate local political decision-making. Altshuler and Luberoff identify sociologist Floyd Hunter's book, Community Power Structure, as the seminal volume of this approach (Hunter 1953). In it, Hunter used a snowball sampling technique of elected officials and local business leaders in Atlanta that asked who in the city had status and the power to shape policy. Instead of focusing on the titular holders of power in the city, Hunter wanted to understand the actual holders of power and set out to create a kind of a status map of stakeholders in Atlanta's political scene. Hunter concluded that there was a very small group of leading businessmen at the top, with local officials, even the mayor, a step below. According to Altshuler and Luberoff, the main

thrust of Hunter's work was to show that "the capitalists were in charge, and local government was their servant."

Hunter's work on power structures in American cities had clear connections with "elite theory," a broader theory of social and political power also popular at the time. C. Wright Mills' 1956 book, The Power Elite, argued that America was essentially ruled by elites in three fields: politics, economics and the military, and that major decisions for the country as a whole reflected decisions made by these three groups. A decade or so later, G. William Domhoff's book, Who Rules America?, argued that corporate elites are the true holders of political power in the United States, in contrast to the stated ideal that America is a democracy fundamentally governed by the people (Domhoff 1967). In terms of urban politics and planning policy, the elite-reputational school would be useful to identify the particular people who motivated policy making behind the scenes. Evidence supporting this perspective would include cases where an airport, for example, managed to be expanded or built from scratch with just a few key players leading the process, and moreover, where the key players were not the ones with the official responsibilities to do so.

### *Pluralist*

In direct contrast to the elite-reputational perspective, the pluralist view holds that political power is shared widely. Pluralists argued that the elite-reputational theory overstated the abilities of a small group of elites to control urban politics. Instead, they argued, there were many groups which had power to varying degrees, and that there was a great deal of give and take in decision-making between these groups, none of whom

could determine policy alone and deserve the moniker “elite.” For instance, for some decisions, one group of politicians might be powerful, but for other things, other groups might be powerful. Altshuler and Luberoff cite Robert Dahl’s Who Governs? as the chief work in the pluralist school (Dahl 1961). In it, Dahl examined political power in New Haven, Connecticut in three arenas: urban redevelopment, education and political nominations. Dahl found that while in each sector some people had more power than others and some people might have held positions of considerable influence, there was little cross-over between the sectors: the small group that determined educational policy might have absolutely no influence over the location of a new redevelopment scheme, and vice versa. Dahl argued as well that positions of power were often ephemeral, there was no enduring elite and widely acknowledge elite across all areas of urban governance, as Hunter had argued.

In addition, whereas the elite-reputational theory had attributed very little political power to citizens, Dahl argued that citizens had a great deal of latent power that was simply not being put into action. When aroused, voters could wipe away previous power relationships quite quickly; their apathy other times did not constitute powerlessness but rather passive satisfaction. In terms of the development of Japanese transit-oriented development, a pluralist perspective would emphasize the shared decision-making process of a variety of stakeholders. As such, the primary goal of the study would be to study the political process involved in decision-making, rather than the tangible effects of the decisions themselves.

*Public Choice*

One prominent critique of pluralism was that while it did describe power relationships in a given context, it did little to explain them. Questions such as why certain groups of people became more involved in issues than others, what motivated a given group, or what constraints different groups faced were not present in Dahl's study or other pluralist studies. The public choice view emerged as an answer to these questions and held that individuals were fairly narrowly motivated by self-interest and made rational decisions in pursuit of those interests. Political decisions, therefore, reflect the interplay of different groups each pursuing their own objective. The key work in this field is Mancur Olson's The Logic of Collective Action which looked at why and how people join together to pursue common goals (Olson 1965). Olson argued that certain groups mobilized because constituents shared specific interests in a given issue and stood to either gain or suffer disproportionately compared to the general population. For example, a public choice explanation behind the construction of a brand new football stadium would focus on how particular groups that had a great deal to gain such as construction companies, bar and restaurant owners near the proposed site, the team's fans, came together to advocate for construction against certain groups who stood to lose: residential neighbors of the proposed stadium and anti-tax groups. The public choice perspective would see the stadium's successful construction as a test of those competing interests, and would seek to describe and explain the motivation for each faction.

I discussed the public choice perspective in section 2.3.3. It comes out of the New Institutional perspective in economics which sought to apply decision making processes modeled in classical liberalism to other fields, especially politics. Whereas

classical liberalism focused on how people got what they want in the economic realm, public choice did the same for the political realm. The self-interested consumer or producer became the self-interested voter or politician. Undoubtedly, the public choice perspective is appealing in its simplicity. According to this theory, people are motivated by what they want and form Group A, but they are balanced by other people trying to achieve their own goals, who form Group B, and maybe another set of people with an entirely different set of goals, who form Group C. Sometimes Group A wins, sometimes it loses. Politics as a whole can be understood as the push and pull of these different groups, and all at times, one should pay primary attention to the different interests each group has and how they mobilize to achieve them. The problem is that it fails to consider to any great the deal the context for those choices. As I explain in chapter two, this approach neglects important factors of why people choose things since it doesn't explain what people have to choose from.

### *Elite-Structural*

The public choice was one attempt to answer the question of how positions of power and influence were achieved. The elite-structural perspective, which in many senses came out of a Marxist understanding of social relationships, was another. In this perspective, certain individuals mobilized for action because they were members of a particular social class that had unique class interests. While the elite-reputational perspective simply said that small groups of elites are all-powerful in local decision-making, the elite-structural view was that elite individuals had this power as local representatives of the capitalist class. The early work of Manuel Castells is exemplary in

this school of thought (Castells 1977; Castells 1978). As Altshuler and Luberoff explain, the elite-structural view held that “the most fundamental thing to understand about local government in capitalist cities is that it expresses the needs of the dominant (capitalist) (*sic*) class—for expansion, for social control over the masses, for collective services, and for the reproduction of social and economic arrangements in each generation.” (63). Like the public choice perspective, the simplicity of this rationale is appealing: people want and then do what their class situations compel them to do. But if public choice was weakened by its over-reliance on individual motivation and choice, the Marxist version of the elite-structural view was weak for the opposite reason: there really was no choice, since class structure determined everything. Altshuler and Luberoff conclude that this perspective eventually became rather formulaic, as well, since the same answer (i.e. that capitalists exploit and oppress workers) can be applied more or less the same way for any case (64).

Regime theory, an offshoot of the elite-structural perspective that did not utilize Marxist terminology, appeared in the 1980s. The seminal work was an essay by Norman and Susan Fainstein “Regime Strategies, Communal Resistance, and Economic Forces” (Susan S. Fainstein and Norman I. Fainstein 1983) which argued that regimes, defined as a circle of powerful elected officials and top administrators, are the primary locus of power in urban governments. The local regime is a mediator between two broad sources of power: local business leaders, on whom the regime is dependent for money, and local citizens, on whom the regime is dependent for votes. Regimes mediate between the two groups, though in case of conflict, the regime primarily defends the interests and

perspective of capital. In some ways, regime theory was a re-packaging of neo-Marxist perspectives in a different language, though it did offer a much more nuanced look at the actual process of urban governance.

A second off-shoot of elite-structural theory in the field of urban politics has been the growth regime theory as articulated first by John Logan and Harvey Molotch in their book, Urban Fortunes (Logan and Molotch 1987). They argue that public policy in American cities is essentially plutocratic, made up of local “place entrepreneurs” who primarily profit from real estate development. These “place entrepreneurs” are not in the public sector, but make crucial links with elected officials, in order to further their own interests. To accomplish their goals, place entrepreneurs lead “growth coalitions,” or changing alliances of people who benefit in some way by the growth of the city. These coalitions help to smooth out differences among different groups in the city by asserting that everybody benefits by growth; the factory owner and the manual laborer are both on the same side when it comes to the federal government and the underwriting of a new highway to the town, for example.

### *Historical-Institutional*

This last major theory of urban politics described by Altshuler and Luberoff argues that collective decision-making in cities or regions are “strongly influenced by institutional arrangements, which in turn largely reflect long-past decisions” and that “analyses of policy based on current interest configurations and incentives are, in general, very incomplete” (49-50). Historical-Institutional theory is the only one of the five to take a long-term approach to understanding political decision making. In the other four, the

way to understand power relationships is to take a close look at all the current stakeholders and decision makers and to figure out how and why power is distributed. The elite theorists identify a small, self-perpetuating cadre of difference makers; the pluralists conclude that power is dispersed; public choice theorists declare that the political realm is a type of battlefield for different types of self-interest; and Marxist-influenced structuralists agree that the political realm is again a battlefield, but of class interests. Historical institutionalism, to the contrary, looks for earlier established patterns and legacies from prior decisions. “A deep understanding of politics, “Altshuler and Luberoff write, “must proceed from an understanding of institutional arrangements and historical pathways that cannot be observed currently” (73).

My own understanding of this theory has come from economics (Polanyi 2001), sociology (Fligstein 2002; Fligstein 2005; Granovetter and Swedberg 2001), and especially, work in urban studies, urban history and planning (Nivola 1999; Gutfreund 2004; Levine 2006) that employs an institutionalist perspective. Save for the work of Steven Vogel (Steven Kent Vogel 1998) and now this work from Altshuler and Luberoff, I have not been as influenced by institutionalist work in political science. Yet, the basic concerns of Altshuler and Luberoff’s historical institutionalism as explained here are much the same as the institutional approach I sketch in chapter two. If there is a difference, it is that the use of the term in the urban politics literature is still fundamentally concerned with power and the decision-making process, whereas my own concerns have more to do with impacts of such decisions over a long period of time. To put it simply, institutionalism in political science is fundamentally concerned with

“process,” whereas my own interests have been motivated by a desire to understand “product,” i.e. the effects of market/state interaction on the metropolitan landscape.

*Applicability of these theories to the current research project*

In their review, Altshuler and Luberoff establish these four theories, along with historical institutionalism, as the five main theories used in the study of urban politics. They then look at various urban mega-projects, that is, large-scale public works projects in selected American cities, keeping these theories in mind to guide their discussions. Four main eras of mega-projects are identified. First, is the pre-1950s era in which local governments received little federal aid, had few resources of their own, were reactive in their capital investment strategies, and did not generally impose major disruptions when building anything. Second is the “Great Mega-Project Era” from the end of World War II until the mid-1960s in which the federal government bankrolled massive public works projects in states and cities. Next is the “Era of Transition,” from the mid-1960s until the early 1970s, when citizen protests caused curtailment of large public works projects. Finally, they define an “Era of Do No Harm” since the mid-1970s in which the federal government supports a limited number of mega-projects, and then only after lengthy discussions and consensus building at the local level (8). The book concludes with an assessment of how useful each theory is in shedding light on how and why urban mega-projects have been built over these four periods. The authors find that historical institutionalism is the most useful theory for describing mega-projects in the fourth, most recent era, owing to the institutional legacy inherited from before the mid-1970s. As for the second and third eras, Altshuler and Luberoff find that while each theory can explain

and illuminate parts of each case study they choose, no one theory is preeminent. That is, each theory can offer different and useful insight, depending on the question.

It is Altshuler and Luberoff's description of the usefulness of these theories in the pre-1950s era of mega-projects that has the most relevance to the current study, however. They write: "Few of the theorists under review say much about urban policy during the first half of the twentieth century" and when they do, they "invariably portray it as minimalist" and "characterized by parsimony, great deference to property owners, and a nearly exclusive focus on urban service provision" (249). The urban policy theories that the authors review are oriented towards explaining "active government efforts to stimulate economic or social change" (ibid.) and have little to say about urban politics in an era when government does very little. Interestingly enough, the description of pre-1950s urban policy could apply to Japan from 1870 to 1970, the timeframe of the current study. As is demonstrated in greater detail in chapters four, five, and six, the context and practice of governmental action in Japan is quite different than in the United States, rendering many of the concerns and findings of these contemporary theories of American urban politics ill-suited for application to Japan.

Much of the literature that Altshuler and Luberoff draw on seems to focus primarily on understanding the real workings of power and decision-making in American cities, beneath the façade of democracy. That is, while according to formal political models, power is held by voters who elect representatives, the theories of urban politics here are concerned with drawing back the curtain and asking, to paraphrase Dahl, "Who *Really* Governs?" Thus, from the elite-reputational perspective we can try to pinpoint the

small cadre of elites, or else from the public choice perspective look at the relative mobilization strengths and influence powers of different groups behind the scenes. In Japan, and especially in the time period in question, the issue of “Who Really Governs?” is not relevant in exactly the same way. From 1870 until the 1930s, Japan was an imperial democracy technically, but voting rights were so restricted that there really was no pretense of democratic control. Imperial decree could overturn popular expression if needed, and decision making powers were held by the *genrō*, literally “principal elders,” a plutocratic oligarchy that decided on most of the major issues facing the country and then submitted policy to the Diet for ratification and implementation. This was not a secret cabal of elites operating behind the scenes, though. The role of the *genrō* in governing the country, by advising the Emperor, heading governmental policies and nominating Prime Ministers, was widely understood and visible (Jansen 2000; Andrew Gordon 2003). From the early 1930s until 1945, Japan was a fascist dictatorship, with very little question over the distribution of power in society, while from 1945 until 1951, Japan was occupied by the American military. From 1951 up until 2009, the Liberal Democratic Party ruled Japan almost without interruption, save for two years (1994 and 1995) in which it shared power with other right-wing parties to form the government. Throughout this post-War period, Japanese politics has been remarkably stable, and for many years, the LDP ran virtually unopposed for most seats (Stockwin 2008).

It is inaccurate to say that this was a period of monolithic power for the LDP during this time, or that the formal understanding of political power during this era matched exactly with the “real” power behind the scenes. Yet the question of who

actually governs in Japan is much less controversial and salient than it is the United States. In the post-War period, Japanese public policy was primarily formulated by powerful government ministries such as the Ministry of Finance, which set monetary policy and approved financial disbursements to lower levels of government, the Ministry of Construction, which determined where to build highways and airports, or the Ministry of International Trade and Industry, which decided on national economic strategy. Unlike the American case, where these powers are assigned to Congress, the governmental ministries in Japan are able to carry out policy decisions while insulated from popular vote. This is especially true for decisions of land use and transportation policy which lie at the heart of this research project. In Japan, those are national decisions over which voters have no say, other than by extremely indirect means of voting in different representatives who would first change the structure of government and then assert parliamentary control over the ministries' decisions. This makes translating the approaches and findings of these theories of urban politics from the US to Japan difficult.

Just as importantly, the essential questions that Altshuler and Luberoff are trying to answer, and for which they employ theories from urban politics, are fundamentally different from my own. As the title of the book makes clear, the authors are concerned with discrete, large-scale public works projects. They look at airports, highways, stadia, festival malls, and rail transit systems in particular places, each of which has a history with a beginning, middle and end. The authors and the theorists they draw from are greatly concerned with particular people involved in implementing these projects, as all of their case studies involve narratives of people, either elites or non-elites, elected

politicians as well as business and community leaders, and their varying fortunes in achieving their goals. This approach draws attention to the decision-making process itself, but pays relatively little attention to the consequences (either good or bad) of the projects.

My research, however, is not focused on a particular project in a particular place, nor is it *primarily* concerned with the people responsible for motivating project implementation. My focus is on the broader and more prevalent mode of transportation and land use planning which occurs all over Japan, and which goes far beyond any one project. In addition, while I am concerned with particular personalities that have played prominent roles in the development of Japan's transit-oriented development patterns, such as Keita Gotō, the founder of the Tōkyū Corporation, I am more concerned with the legacy of his decisions rather than his roles in the political process. Given my interests in understanding the long-term development of Japanese transit-oriented development, only the fifth of Altshuler and Luberoff's theories, historical institutionalism, would seem to apply directly to my research questions, and that is precisely the theoretical lens I have employed.