

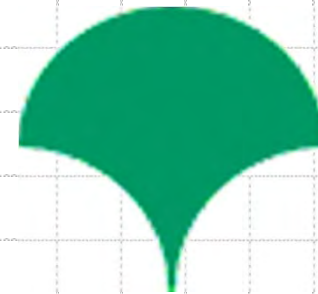
Support with the Formulation of
a Comprehensive Plan for Public Transport

Basic concept of public transport planning
in Tokyo

July 10, 2012

Bureau of Urban development
Tokyo Metropolitan Government

Outline of Tokyo



JAPAN in Far East Asia



Source : 「ANMC21」

Comparison of Taiwan/Taipei, Indonesia/Jakarta and Japan/Tokyo

Country	Taiwan	Indonesia	Thailand	Japan
Land area (km²)	36,000^{*5}	1,860,000^{*5}	5,130,000^{*5}	377,950^{*1}
Population (×10³)	23,024^{*5}	232,516^{*5}	68,100^{*5}	128,057^{*1}
Density (人/km²)	639.9^{*5}	125.0^{*5}	132.8^{*5}	343.4^{*1}
Railway (km)	1,575^{*6}	7,985	4,090	27642.8^{*2}
City	Taipei	Jakarta	Bangkok	Tokyo
Land area (km²)	272	650^{*5}	1,569^{*5}	2,187^{*3}
Population (×10³)	2,600	9,220^{*5}	5,710^{*5}	13,165^{*3}
Density (人/km²)	9,559	14,185^{*5}	3,639^{*5}	6,018^{*3}
Railway (km)	101.9^{*6}	150	85	1,082.2^{*4}

*1 : Ministry of Internal Affairs and Communications
「Statistical Handbook of Japan 2012」

*2 : Ministry of Land, Infrastructure, Transport and Tourism(2011)

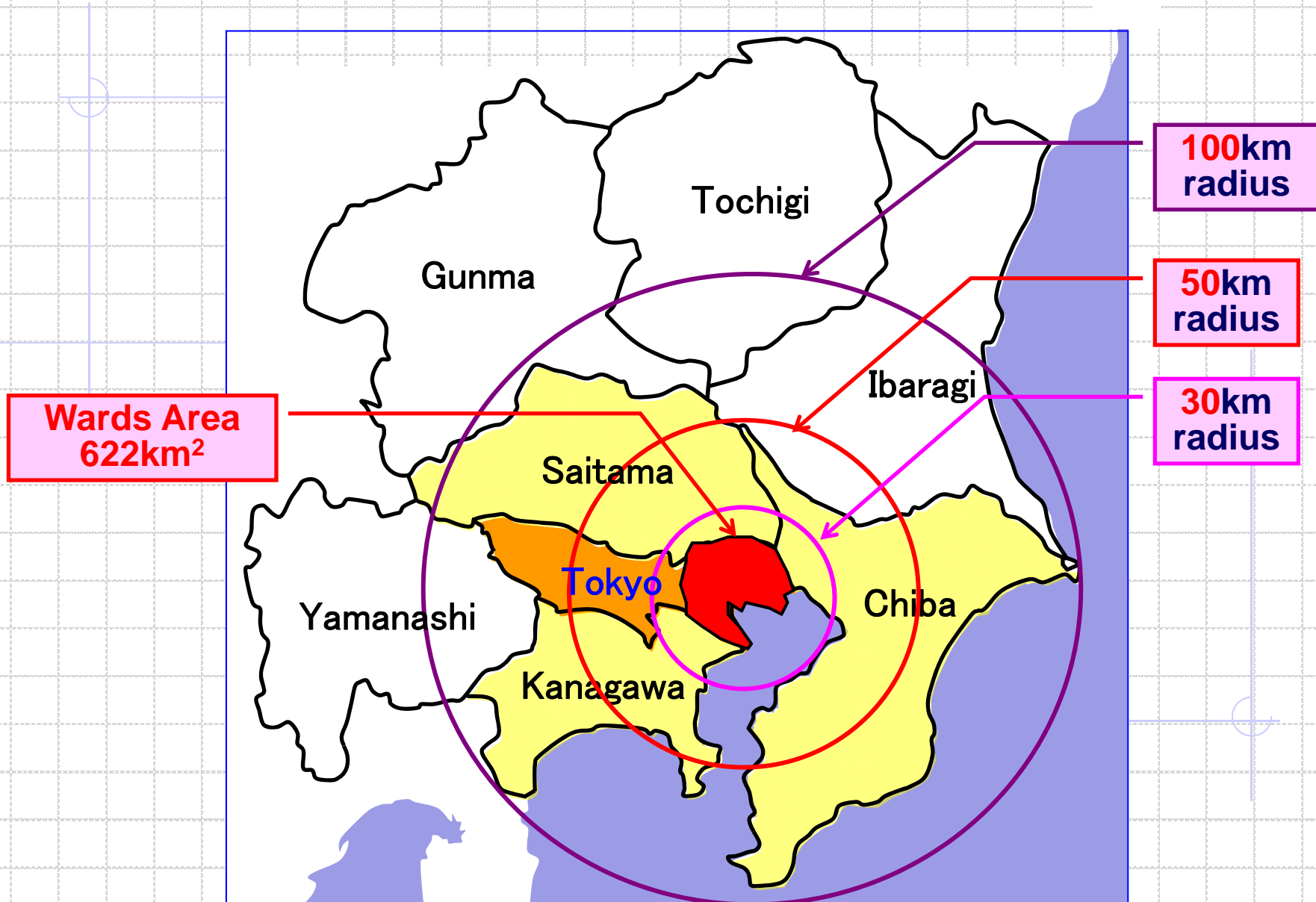
*3 : Tokyo Metropolitan Government(2010)

*4 : Institution For Transport Policy Studies(2009)

*5 : Date Book of The World 2011 published by Ninomiyasyoten

*6 : Data was provided by each member city

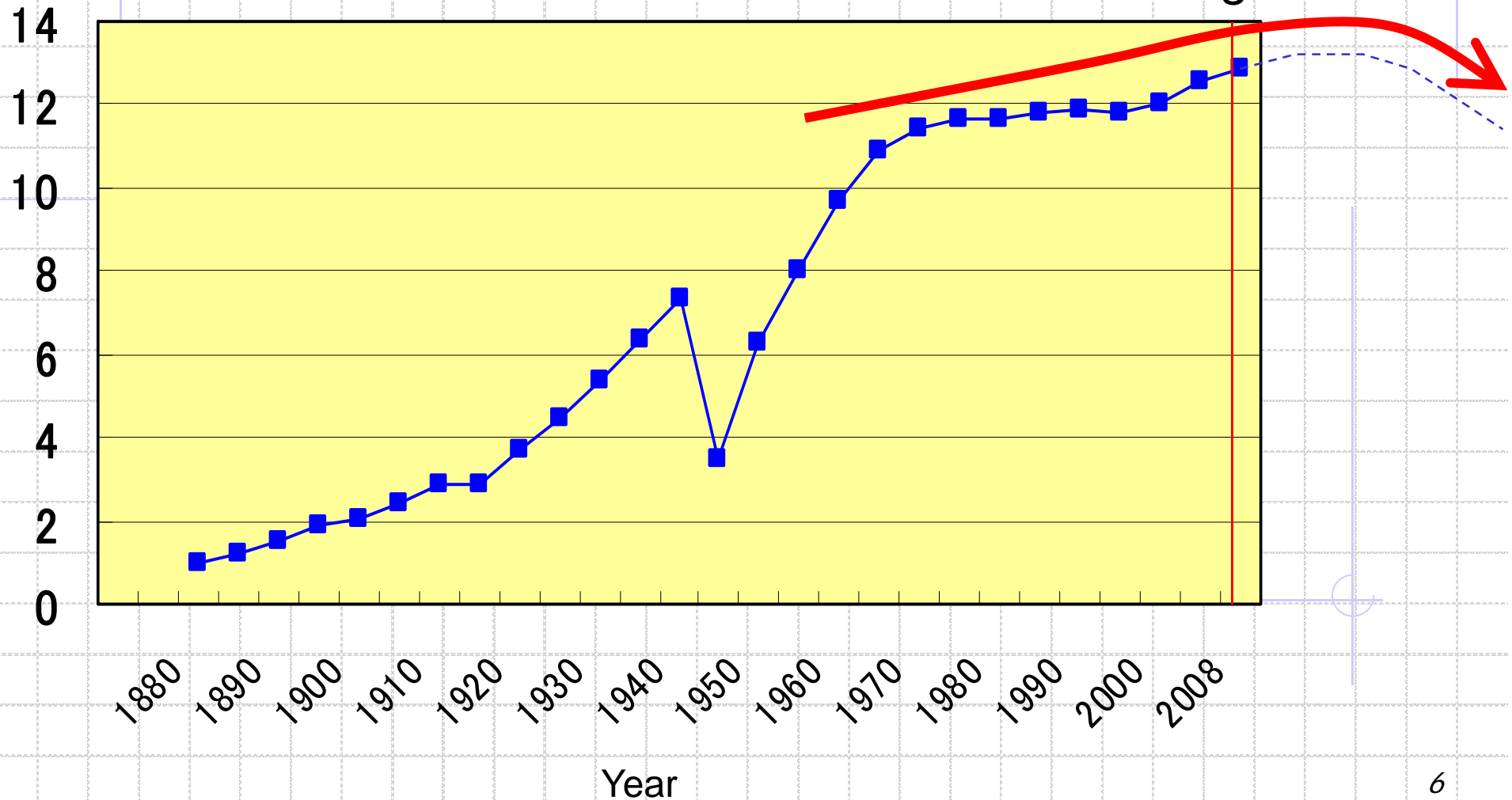
The Tokyo Metropolis



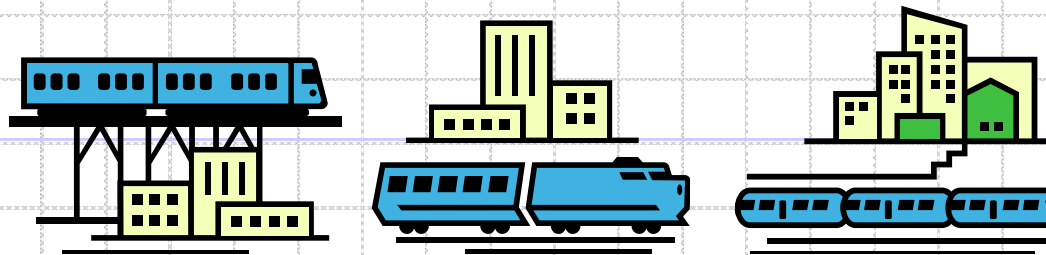
Population Trends of the Tokyo Metropolis

*Gradually increasing ,
But estimated to start decreasing after 2015.*

(Million Persons)



Outline of Railways



Characteristics of Railways in Japan

- Railway networks in Japan are highly developed.
- 'Shinkansen' and many limited expresses link major cities.
- In 3 metropolises (Tokyo, Osaka and Nagoya), railway networks have been developed by various private railways other than national railway companies and municipal subway companies.
- The Japan National Railway was privatized in 1987 and divided into seven 'JR' companies.



JR Tokaido Shinkansen



Linear Chuo Shinkansen

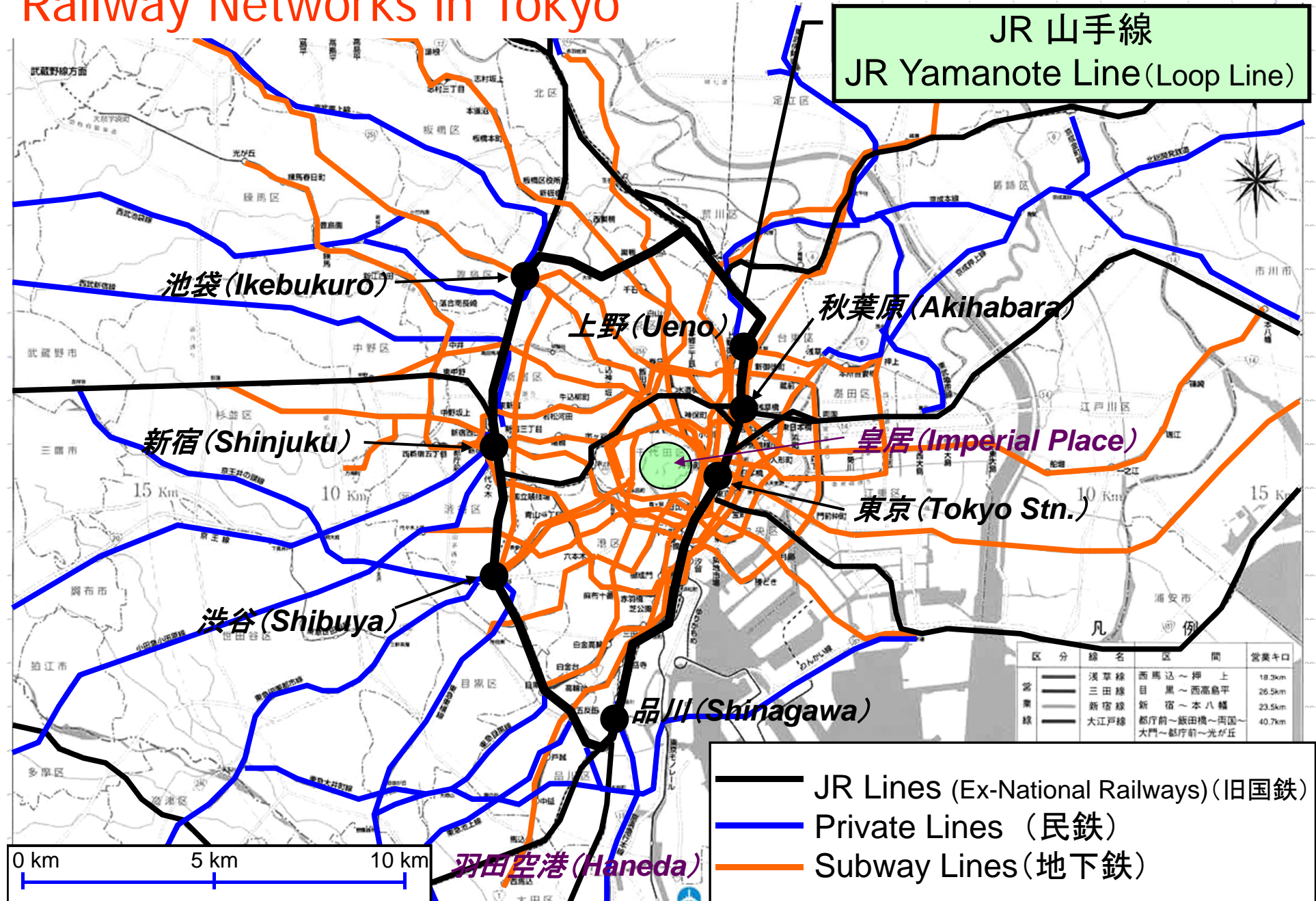


Subway Oedo line



JR Yamanote line

Railway Networks in Tokyo



JR 山手線
JR Yamanote Line (Loop Line)

池袋 (Ikebukuro)

上野 (Ueno)

秋葉原 (Akihabara)

新宿 (Shinjuku)

皇居 (Imperial Place)

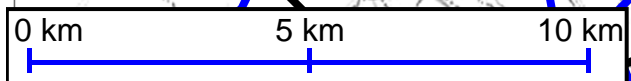
東京 (Tokyo Stn.)

渋谷 (Shibuya)

品川 (Shinagawa)

羽田空港 (Haneda)

- JR Lines (Ex-National Railways) (旧国鉄)
- Private Lines (民鉄)
- Subway Lines (地下鉄)



Characteristics of Railways in Tokyo

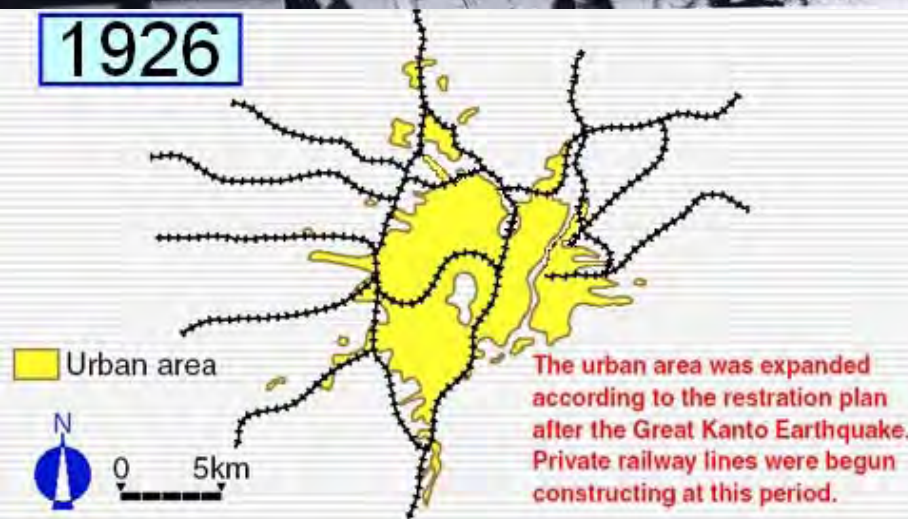
- Railway networks in Tokyo carry 40 million passengers daily.
- Peak-hour railroad operation interval: 1 to 2 min.
- Annual average delay per train: 0.7 min.



Development of Railway Networks In response to the expansion of the Metropolitan Area



1926







1967

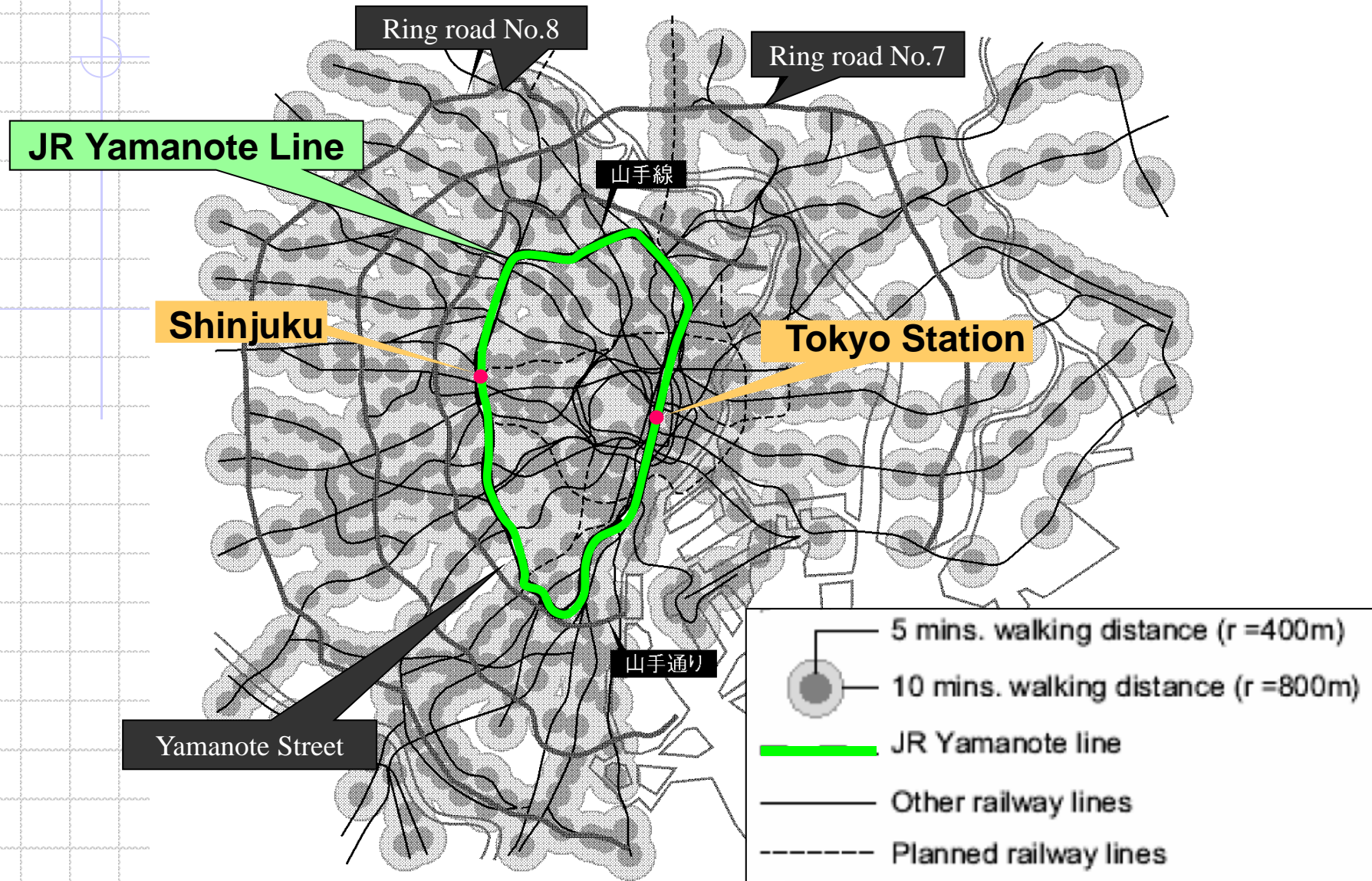


Railway Networks in Tokyo

(Nov. 2010)

	Length	Number of Stations
JR Lines (Ex-National Railways) 	419km	141
Private Railways (7 major companies) 	383km	293
Subways (2 major companies) 	300km	234
Monorail, New Transit and Others 	76km	101
Total	1,178km	769

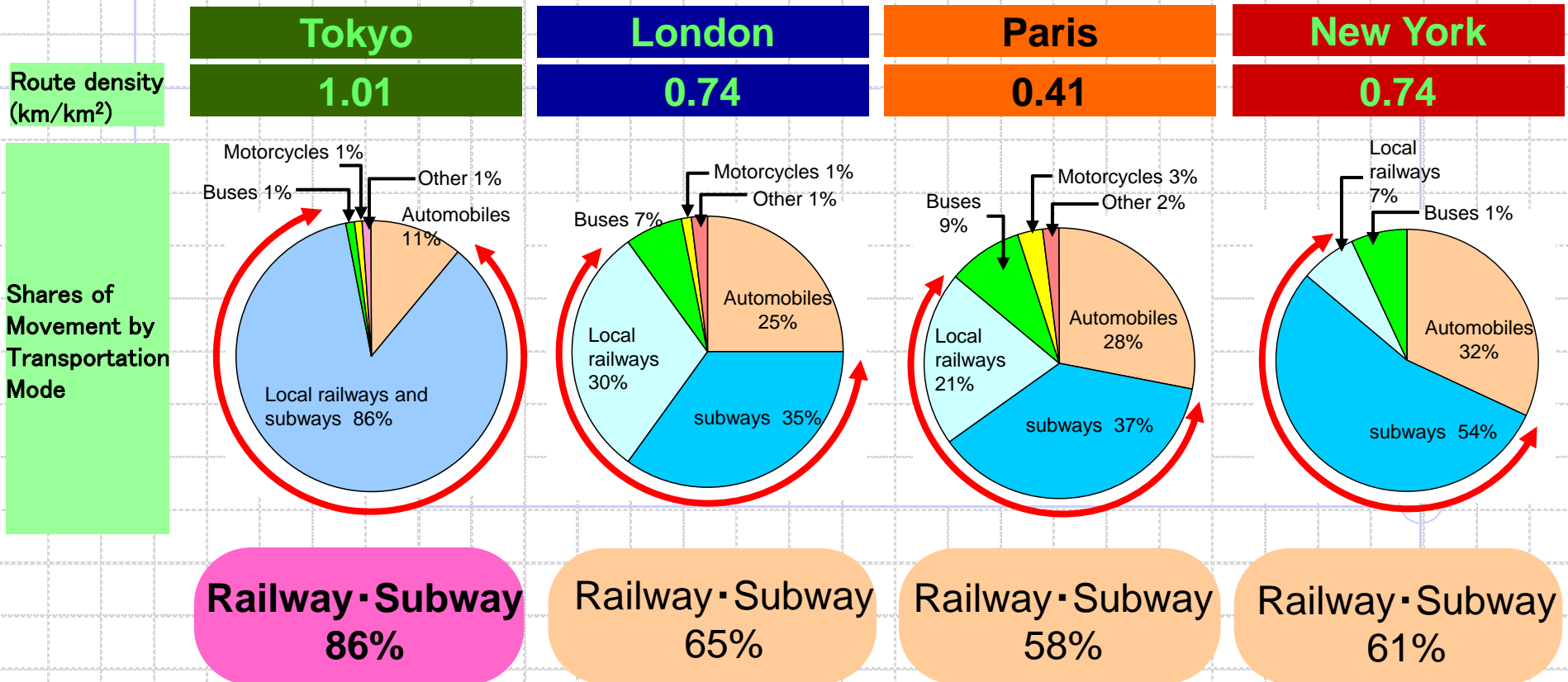
Zones accessible within 5 minutes and 10 minutes walk from station
(23ward)



The Current Conditions of Urban Transportation in Tokyo (23ward)

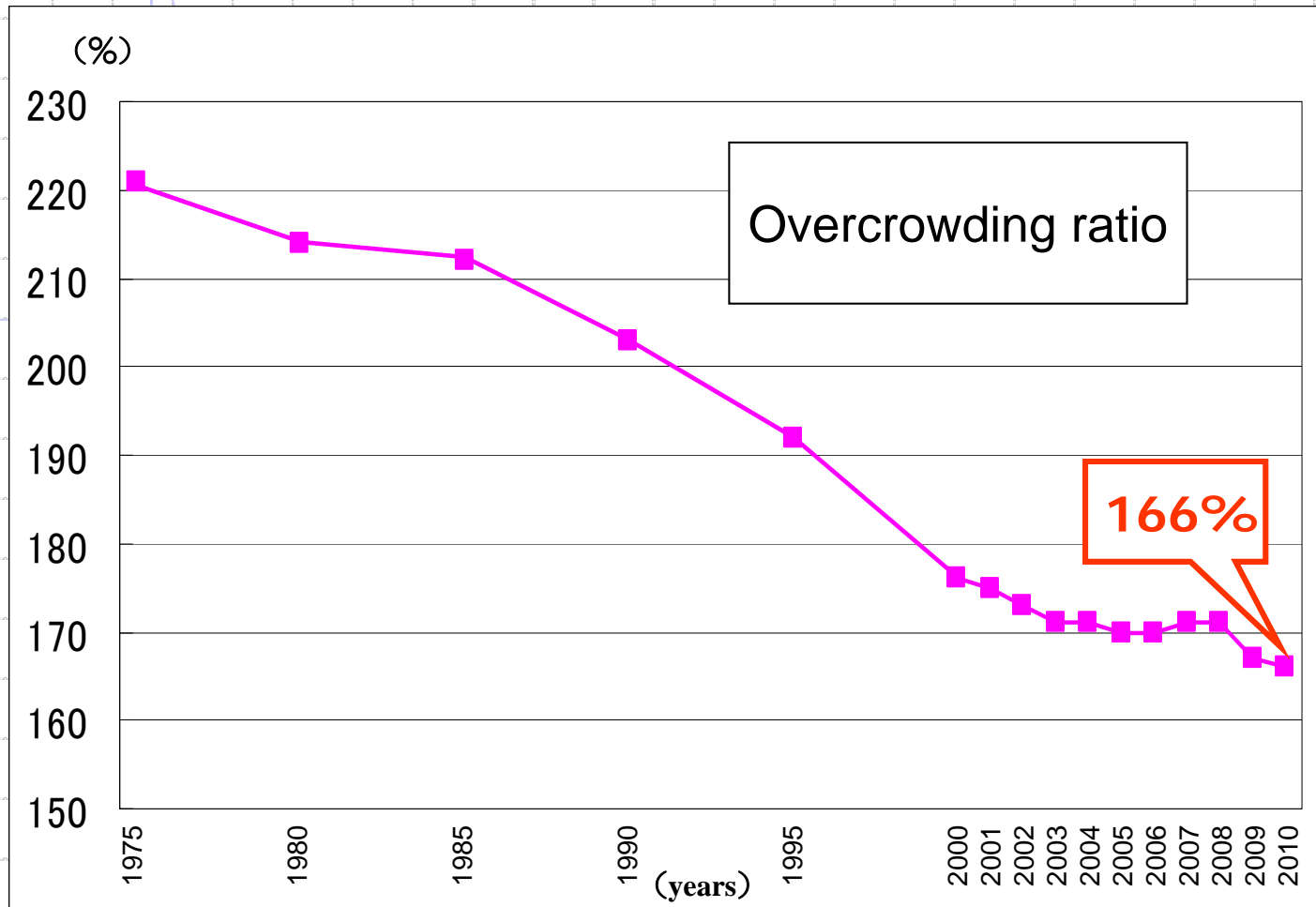
World-Leading Railway Line Development

Comparisons of Route Density and Transportation Modes in Tokyo and Major Overseas Cities

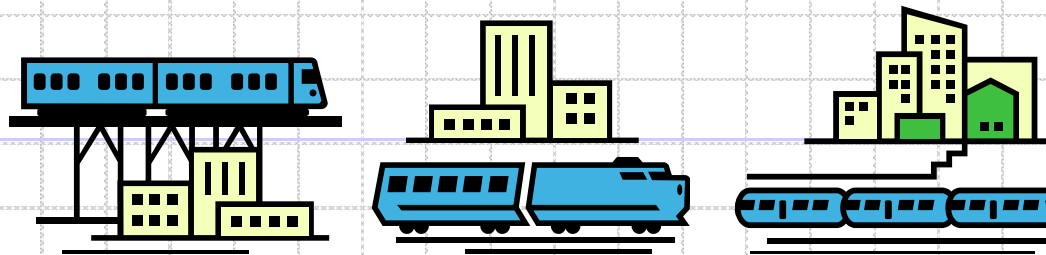


The Current Conditions of Urban Transportation in Tokyo

Railway Crowding



Improvement of Railways



Policy Report of the Council for Transport

◆ A basic plan

Concerning the development of transport links on the rapid-transit railway in Tokyo metropolitan area

◆ History

The policy report of the council for transport revised almost every 10 to 15 years recently.

- 1956 Policy Report of the Council for Urban Transport No.1
- 1962 Policy Report of the Council for Urban Transport No.6
- 1968 Policy Report of the Council for Urban Transport No.10
- 1972 Policy Report of the Council for Urban Transport No.15
- 1985 Policy Report of the Council for Transport No.7
- 2000 Policy Report of the Council for Transport No.18

Policy Report No.18 of the Council for Transport (Issued in January, 2000)

◆ Target year ⇒ 2015

◆ Basic Aspects

- 1) Decrease average ratio of train congestion,
future target: 150% at peak time
- 2) Improve express services
- 3) Ease accesses to airport and Shinkansen
- 4) Make traffic service barrier-free and seamless

Planned Routes categorized in the Policy Report No.18

Planned Route A1

Routes that should be open by 2015

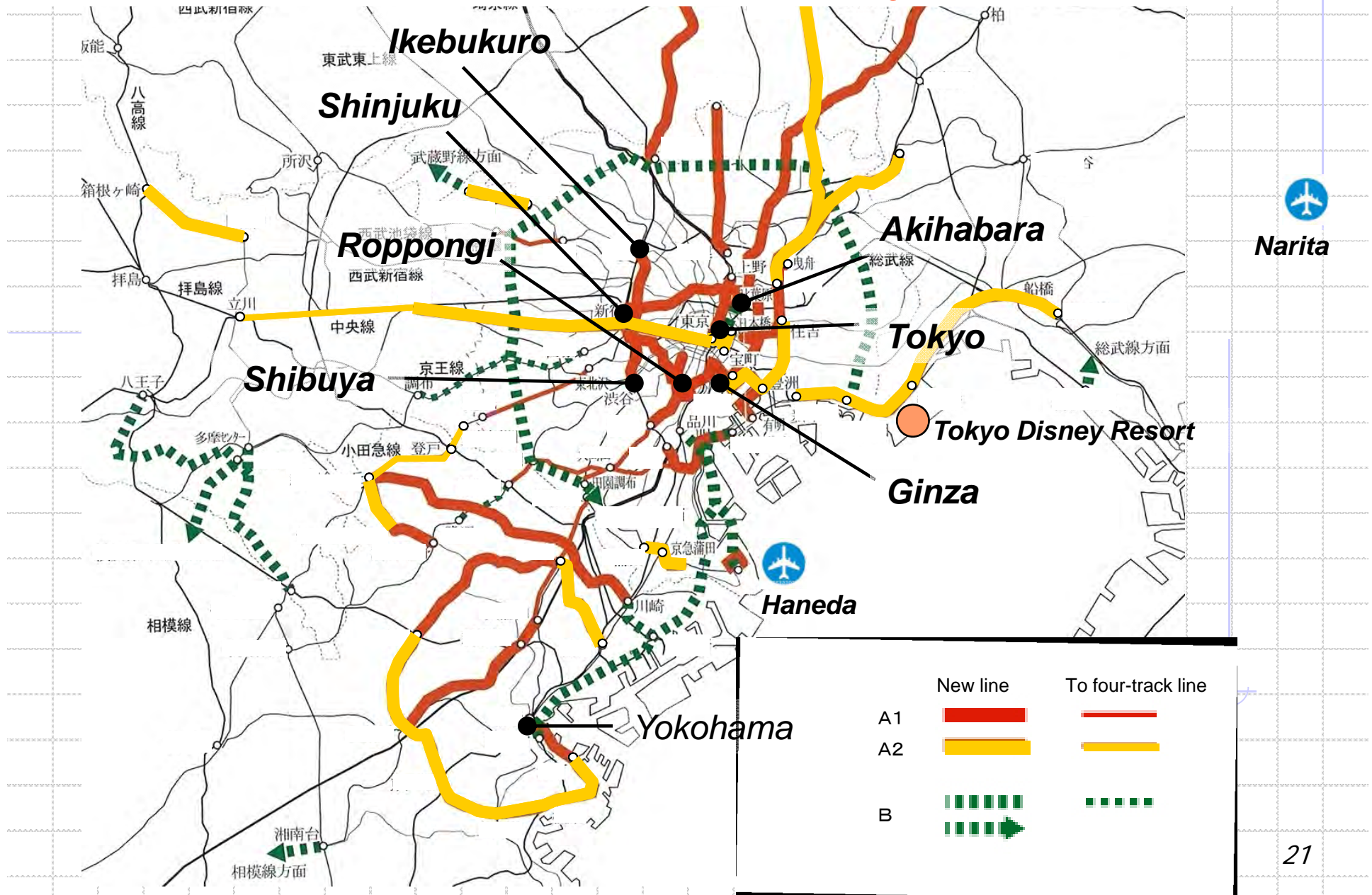
Planned Route A2

Routes that should start building by 2015

Planned Route B

Routes that construction
should be examined in the future

Planned roads mentioned in the Policy Report No.18



Recent Development of Railway in Tokyo

① Oedo Line



② Fukutoshin Line



③ Rinkai Line



④ Nippori-Toneri Liner



⑤ Tokuba Express



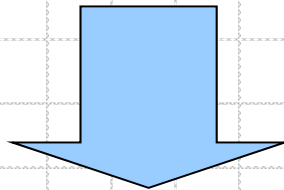
⑥ Yurikamome Line



Current States of A1, A2 and B Routes

- **All A1 Routes** have already been open or under construction
- but, **any A2 and B Routes** are not under construction

Issues

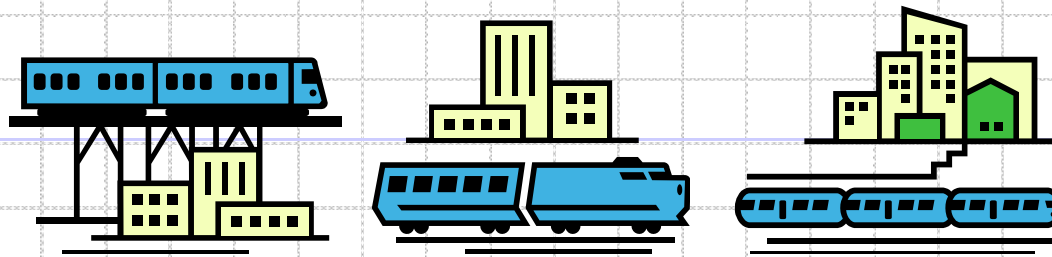


- 1 To find an entity who take care of the project
- 2 To secure funds for the huge project expenses
- 3 To improve profitability of the project

Outline of major subsidy systems related to railway development

System	Subject	Outline	Subsidy rate		Applicable lines
			National	Local	
Subsidy for development of underground rapid speed railways	Public Public-private Metro	Subsidy for construction of new lines and large-scale improvements	35%	35%	Tokyo metropolitan government, Tokyo Metro, Nakanoshima Rapid Railway Nishiosaka Railway
Subsidy for development of airport access railways	Public Public-private	Subsidy for development of new town railways	15%	15%	Yokohama City Sendai Airport Transit Narita Rapid Railway Access * Subsidy rate: 1/3
		Subsidy for development of airport access railways	18%	18%	
Subsidy for improving convenience of urban railways	Public-led such as public-private	Subsidy for development of short lines and mutual direct operation facilities as well as improvement of existing stations	1/3	1/3	Sotetsu-JR through line Sotetsu-Tokyu through line Improvement of Hankyu Sannomiya Station
P-line system	Private railways	<ul style="list-style-type: none"> - System in which the Japan Railway Construction, Transport and Technology Agency undertakes the development, and assigns their properties to the operator by long-term annual installments (25 years). - The national and local governments pay interests exceeding 5% evenly. 			Rinkai Line Tokyo Monorail

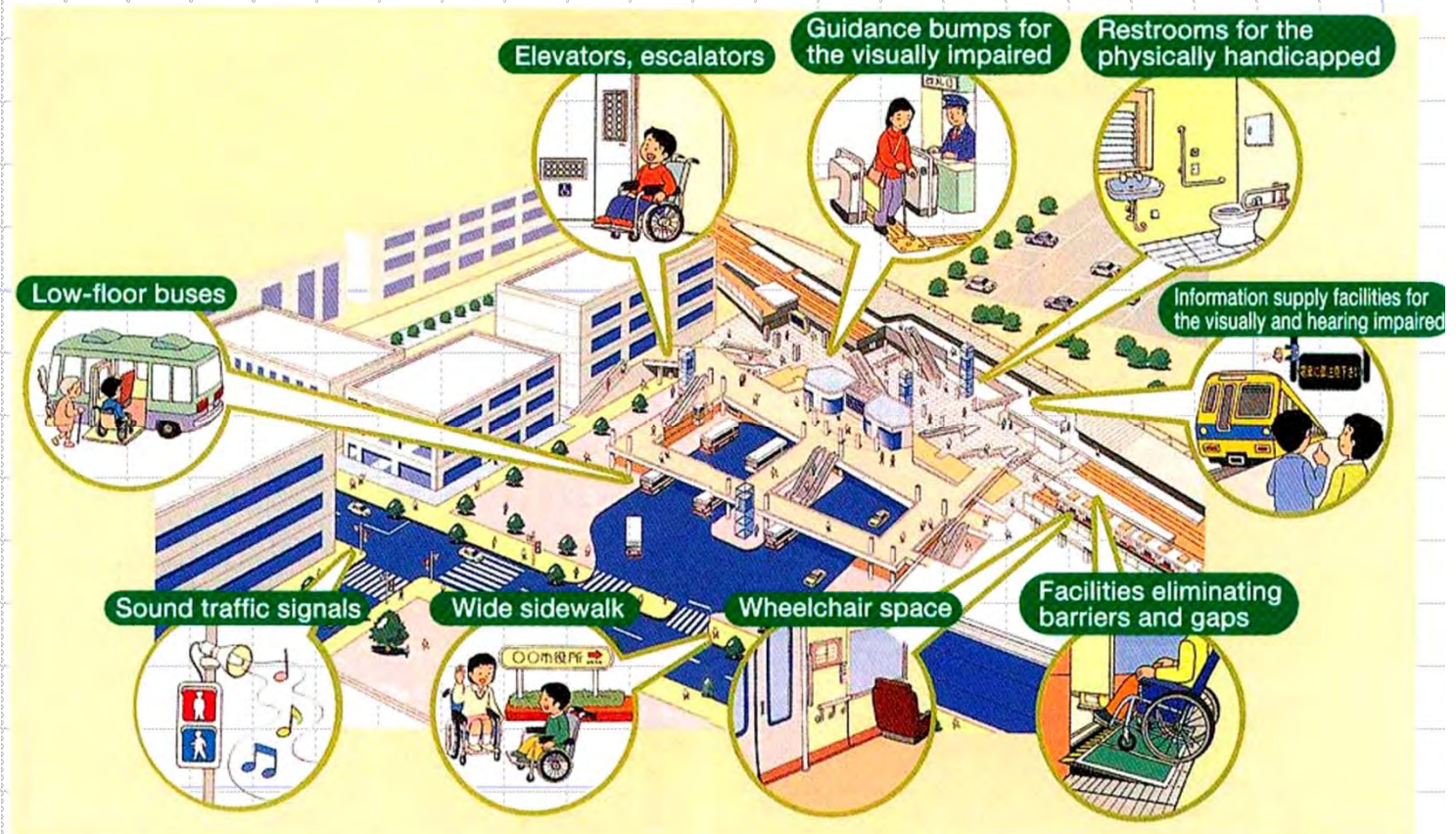
Promoting Barrier-free Facilities



Transportation Friendly to People as well as the Environment

Promoting Barrier-Free Facilities

Under the Accessible and Usable Transportation Law, upon new construction of stations and other passenger facilities, newly introducing buses or other types of vehicles or in other circumstances, compliance with barrier-free standards is required. Likewise, under the guidance of individual municipalities schemes are incorporated to achieve barrier-free facilities in stations, nearby roads, traffic signals and other infrastructure. This leads to advances in barrier-free status in stations, nearby roads and other amenities.

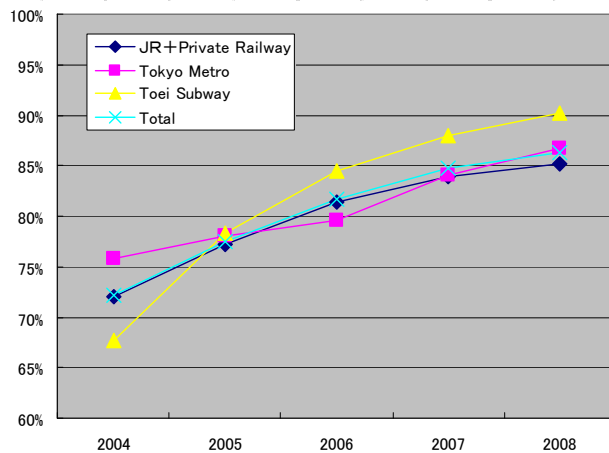


Source : "Land , Infrastructure and Transportation 2001 White Paper"

Current Conditions of Urban Transportation in Tokyo

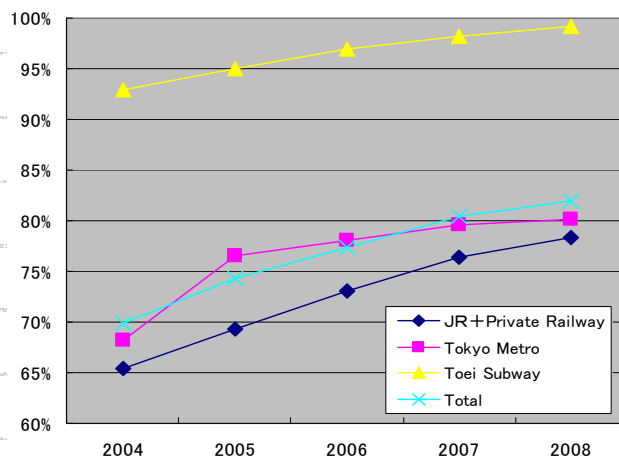
“Barrier-Free” Improvements

Installations of elevators and escalators in the Tokyo railway stations



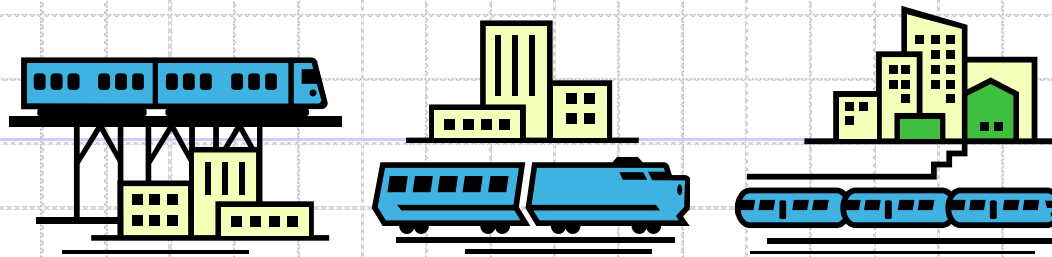
EV・ES	2004	2005	2006	2007	2008
JR+Private Railway	72.0%	77.1%	81.4%	83.9%	85.1%
Tokyo Metro	75.8%	78.0%	79.5%	84.1%	86.8%
Toei Subway	67.7%	78.3%	84.5%	88.0%	90.1%
Total	72.1%	77.5%	81.6%	84.7%	86.3%

Provisions of barrier-free restrooms in the Tokyo railway stations



Stations with barrier-free restrooms	2004	2005	2006	2007	2008
JR+Private Railway	65.4%	69.4%	73.1%	76.5%	78.4%
Tokyo Metro	68.2%	76.5%	78.0%	79.5%	80.1%
Toei Subway	92.9%	94.9%	97.0%	98.2%	99.1%
Total	69.8%	74.3%	77.4%	80.4%	81.9%

Promoting Seamless Transportation

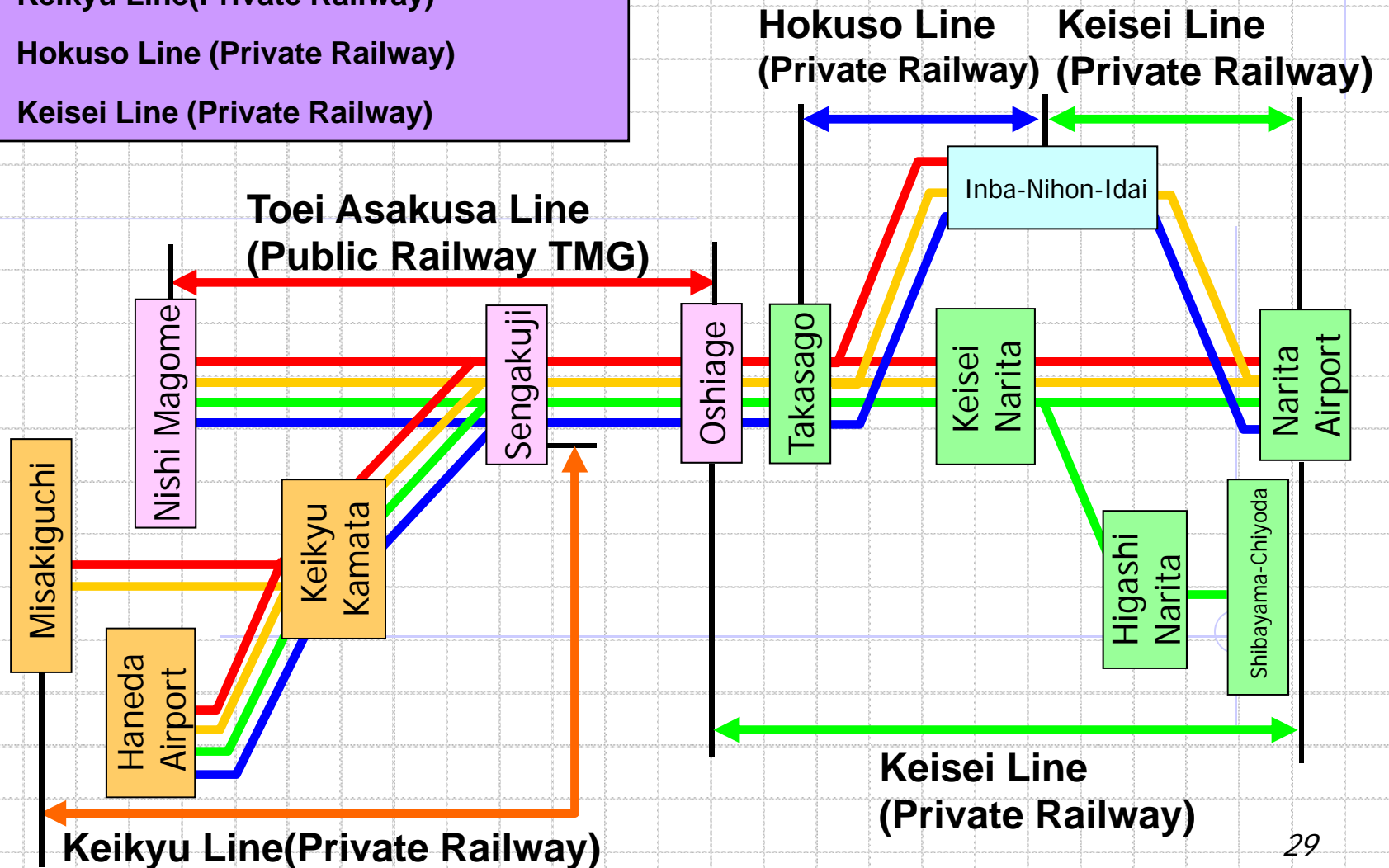


Promoting Seamless Transportation

— System of “through routes” —

- Toei Asakusa Line (Public Railway TMG)
- Keikyu Line (Private Railway)
- Hokuso Line (Private Railway)
- Keisei Line (Private Railway)

4 railways in “Direct-through Service”

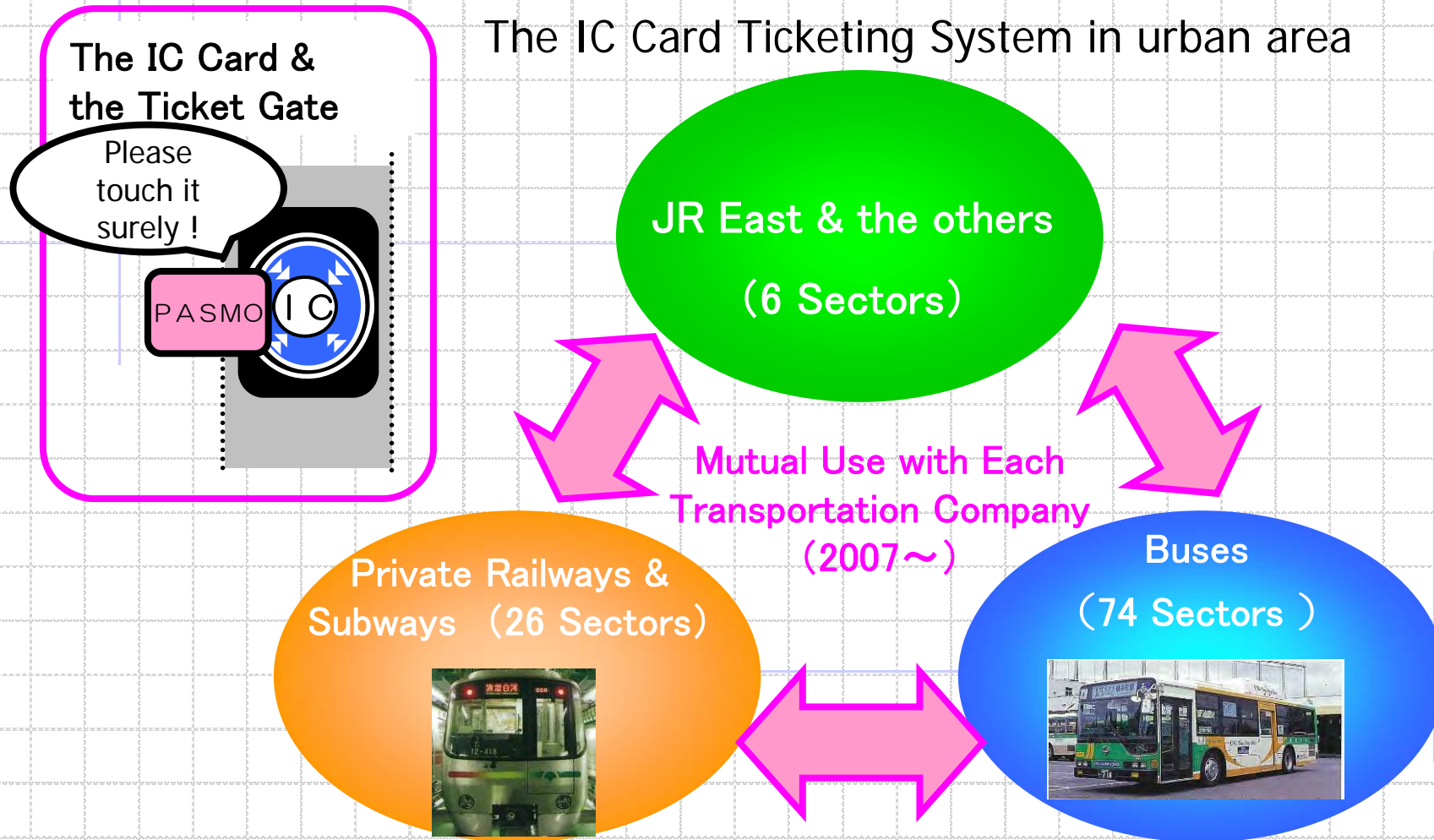


Transportation Friendly to People and the Environment

Promoting Seamless Transportation

— Improved Transport Convenience —

The IC Card Ticketing System in urban area





Tokyo Metropolitan Government

Thank you very much!