



# Mechanism of Area Development along Railway in Japan

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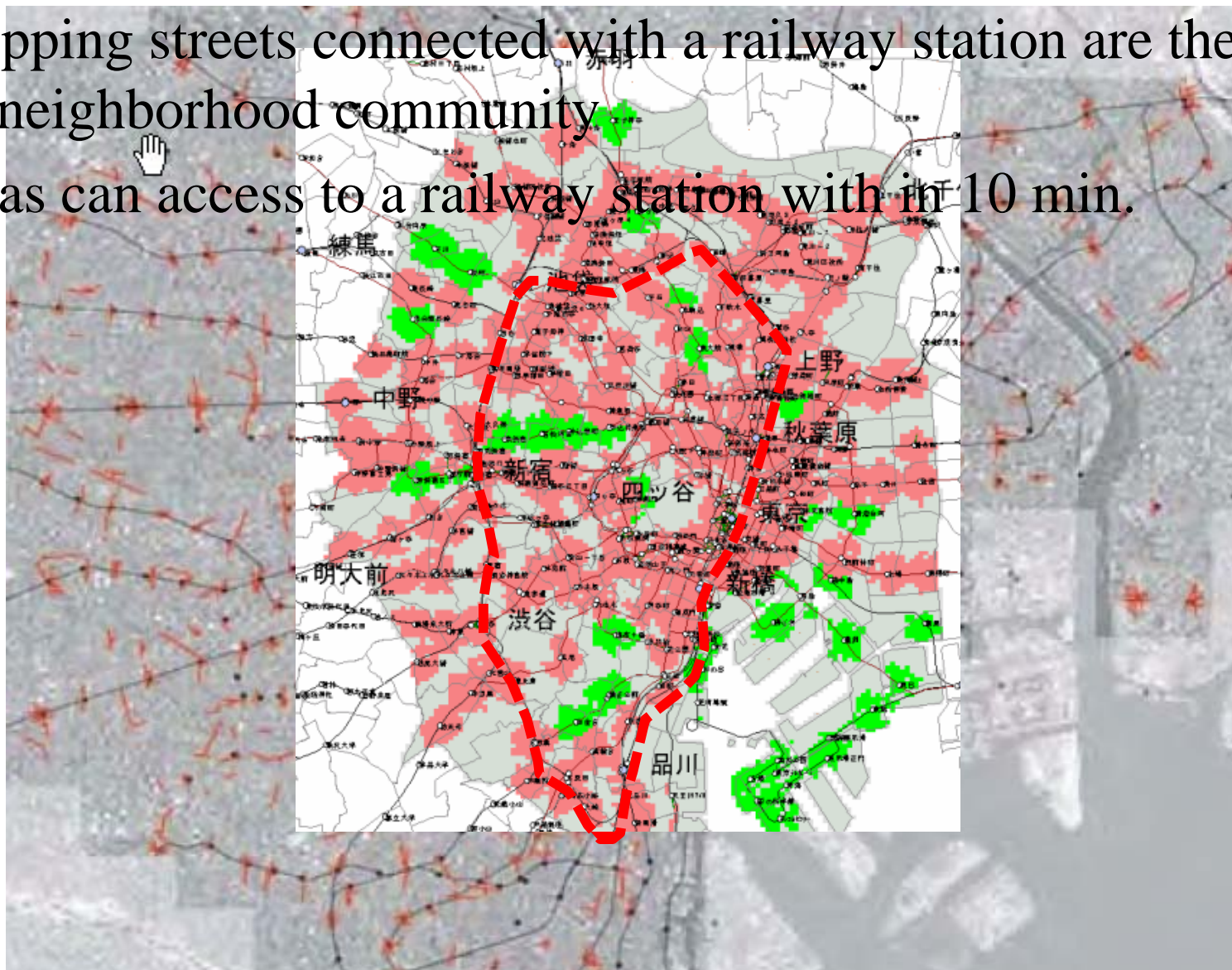
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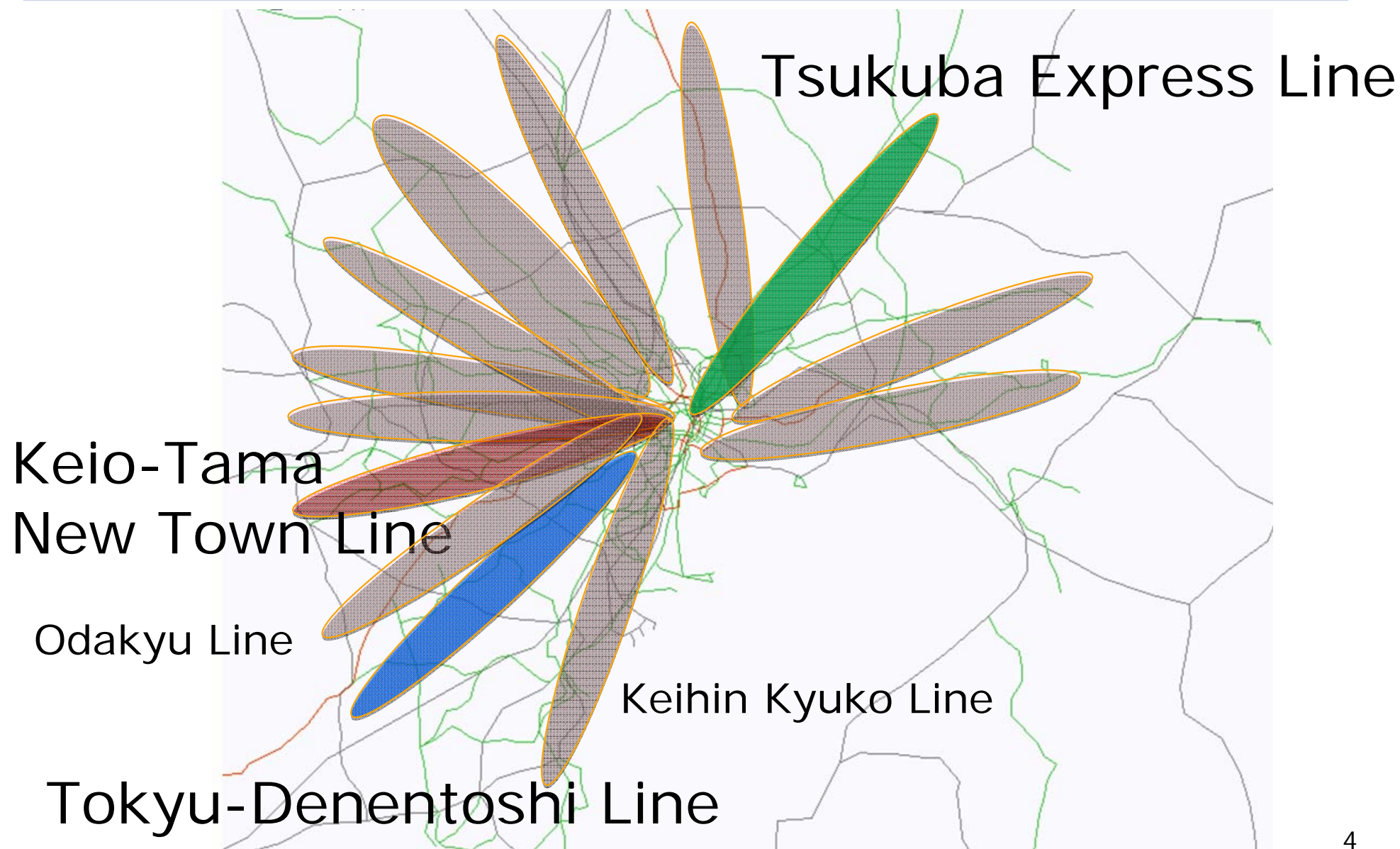
# Urban Activities based on Railways and Stations in Tokyo

- ❑ Shopping streets connected with a railway station are the core of the neighborhood community
- ❑ Areas can access to a railway station within 10 min.



# Urban Growth and Railway Network at Mega City in Japan

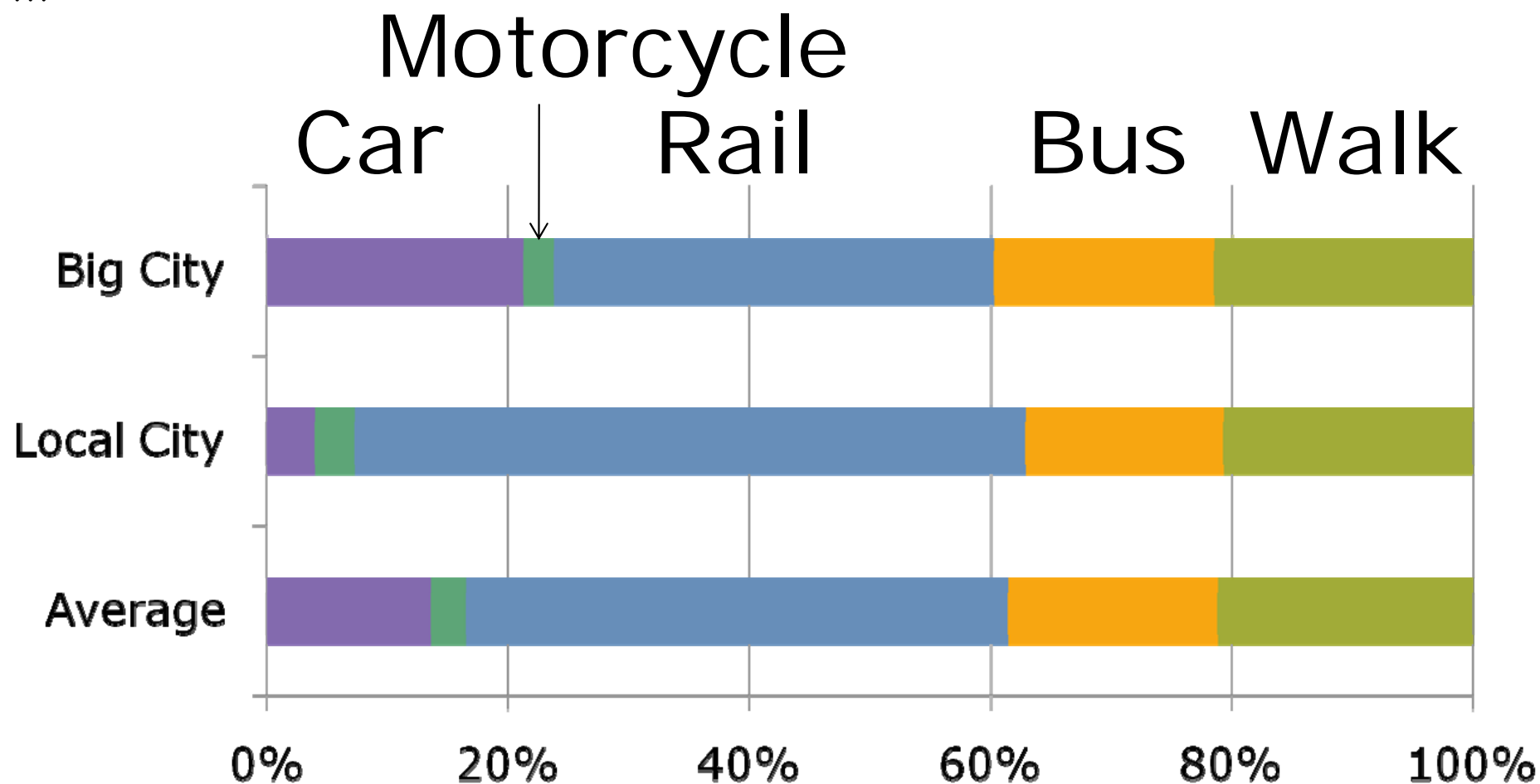
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# Is Japan really railway oriented society?

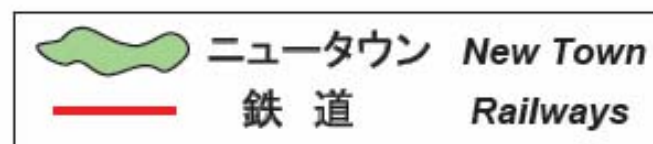
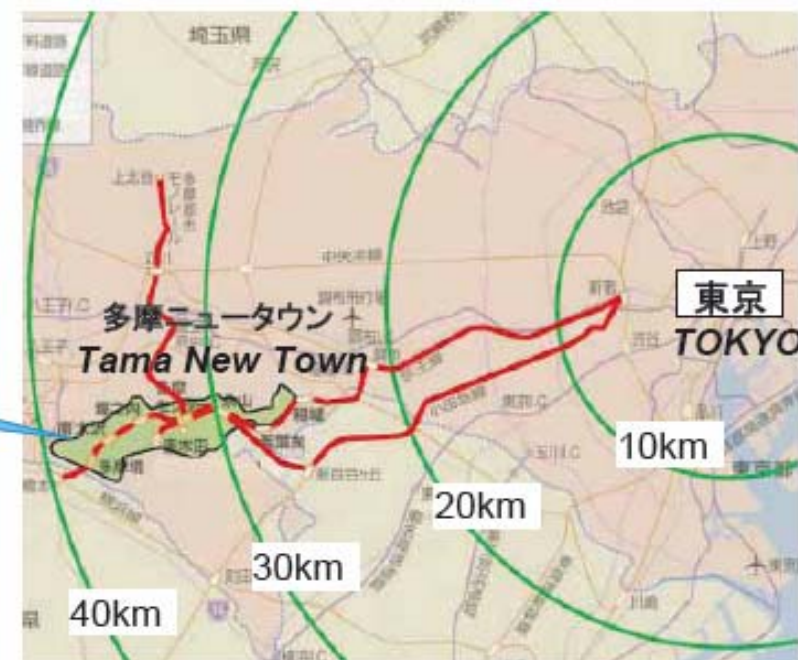
Even 66% of people stays the area along HSR in Japan 66%,

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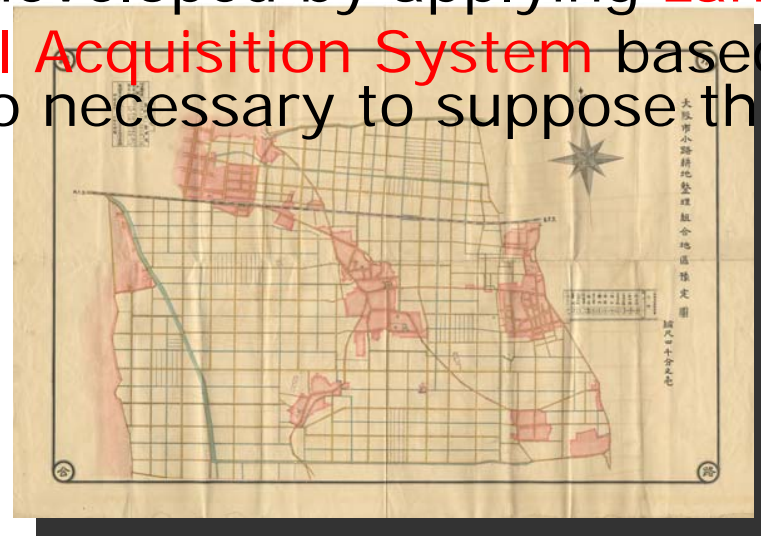
# Area development at New Town in Tokyo

## Ribbon Development



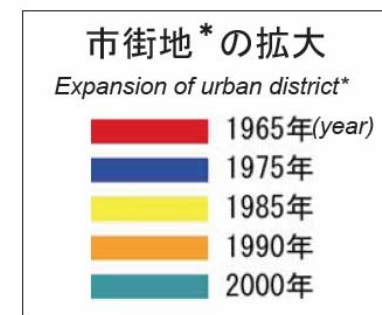
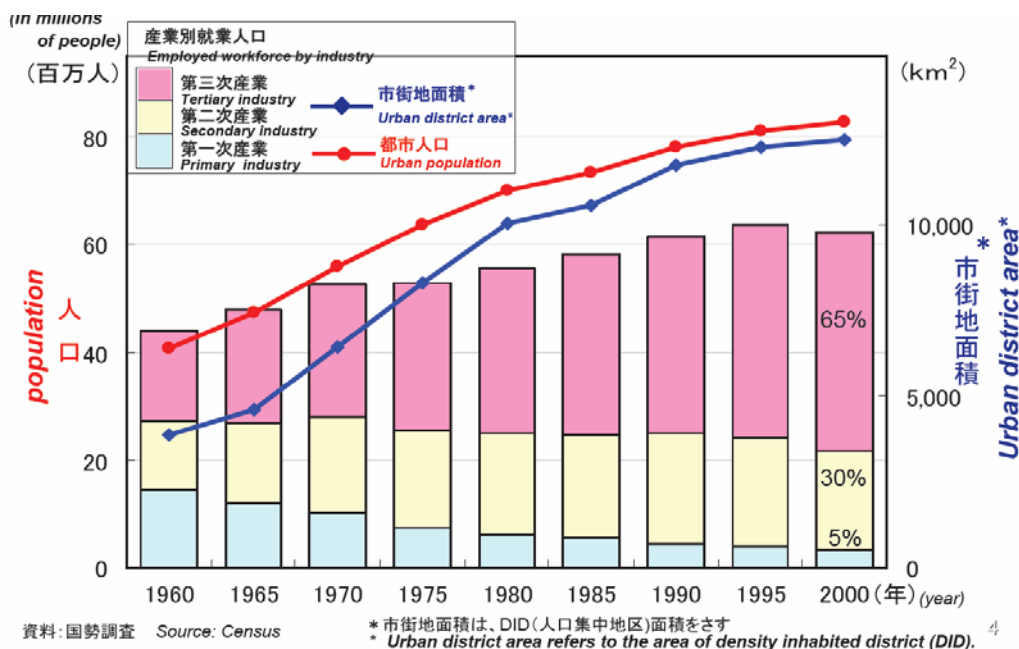
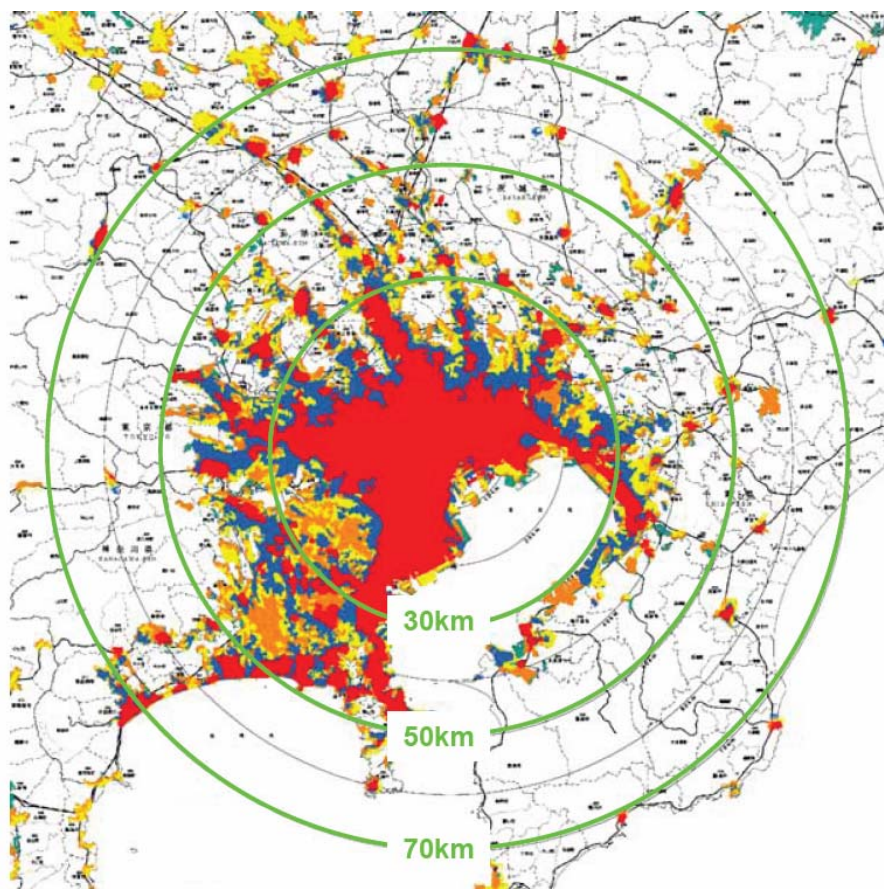
# Area development before 1960

- 1902 The concept of garden city proposed by Sir Ebenezer Howard was introduced for the residential area development
- 1910 **Ikeda-Muromachi City** of **Mino-Arima Electric Railway** was developed based on the idea **to develop railway together with residential area** in Japan
- 1910 – 1960 309 residential areas were developed by 14 private railway companies in Tokyo, Nagoya and Oosaka. In this period, an area was developed by applying **Land Readjustment Project by Full Acquisition System** based on **Land Consolidation Law**(⇒No necessary to suppose the increase of land price).



# Area development from 1960 to 1990

## Expansion of Urban District in the Metropolitan Areas



\* 市街地はDID(人口集中地区)をさす。  
\* Urban district refers to the density inhabited district (DID).

# Area development from 1960 to 1990

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According to rapid population growth and urbanization, huge demand for residential development was arisen in the Metropolitan Areas. **Housing Land Development Law** was enacted in 1964.

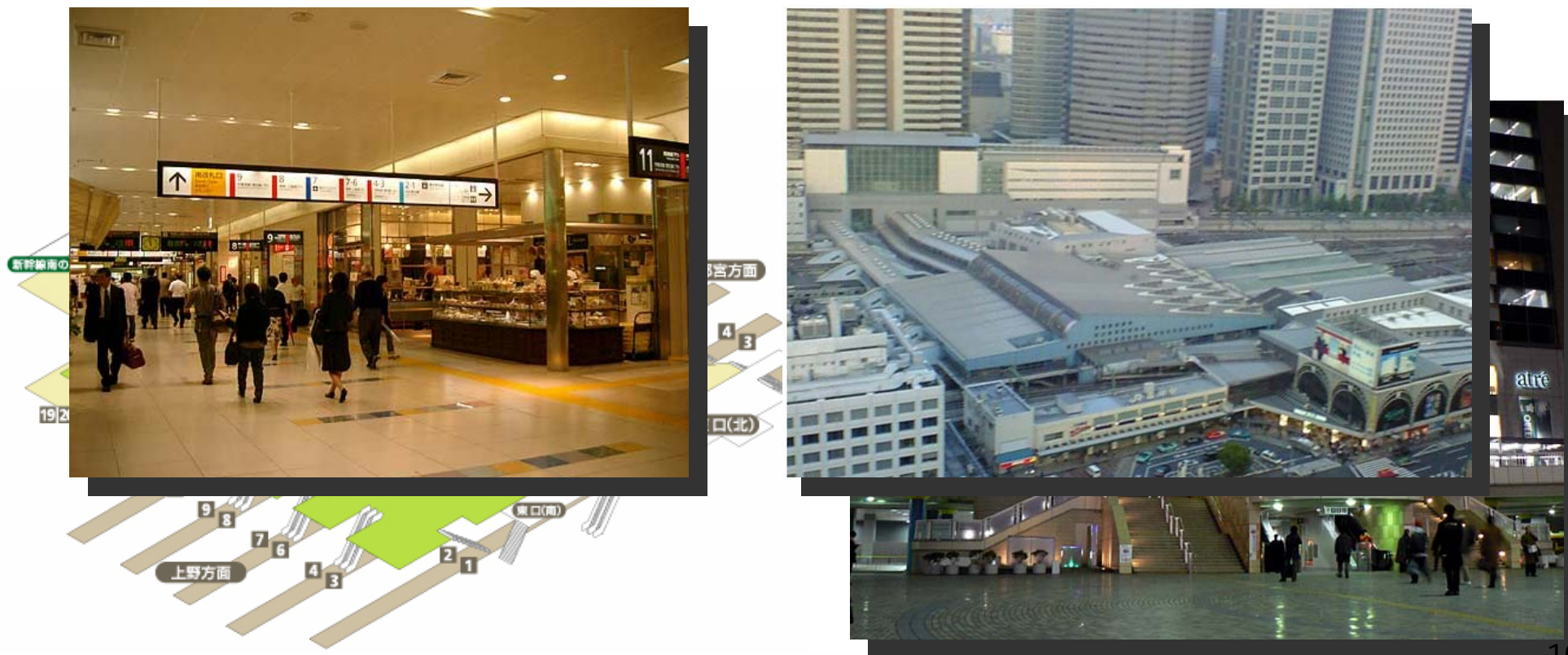
Rise of land price by area development created **revenue for a railway operator** through **a real estate company** which used to be one of group companies of the railway operator.

Applying **land readjustment project** to provide good quality of infrastructure such as road, park, other open space, etc. are essential.

# Area development after 1990

Facing aged society, population in Japan already started to decrease. Ridership also dropped. Railway operators have to find other sources to get revenue.

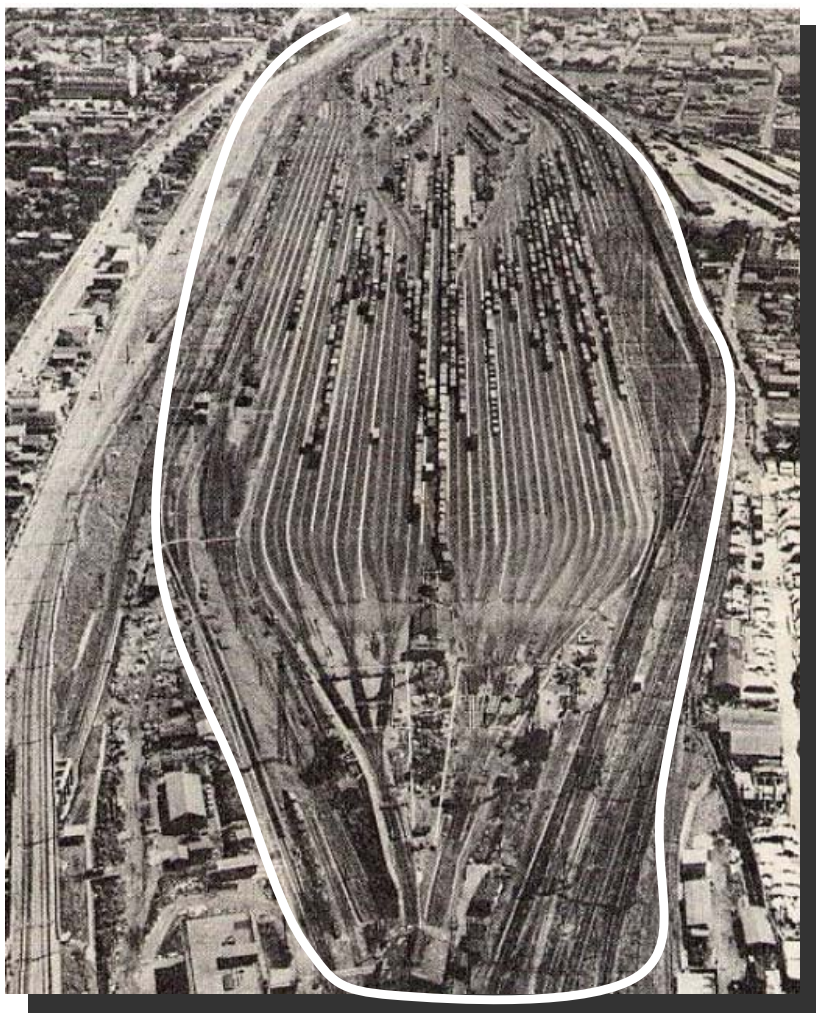
## Business at a railway station



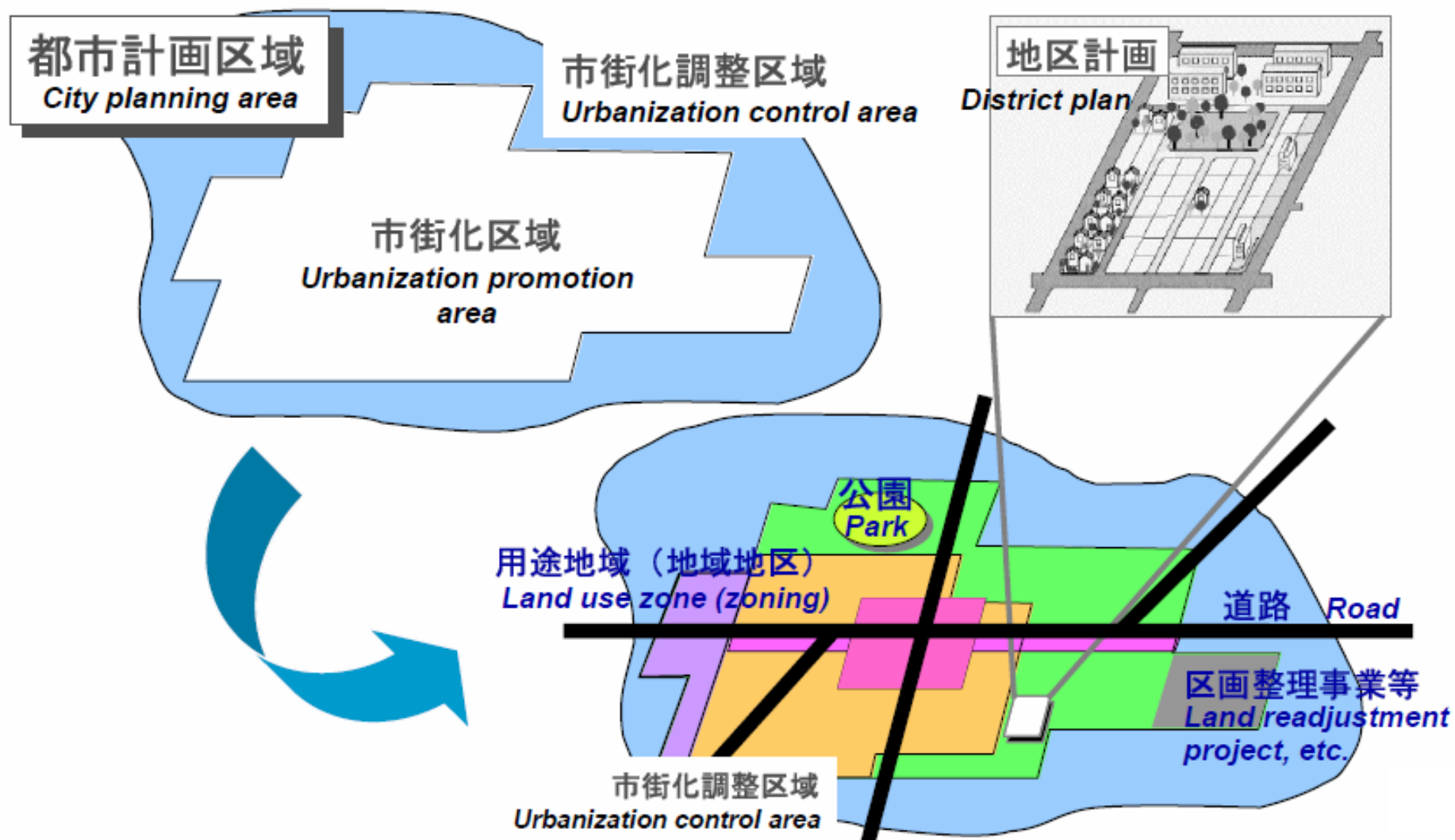
# Area development after 1990

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Urban renewal project at own land such as train depot.

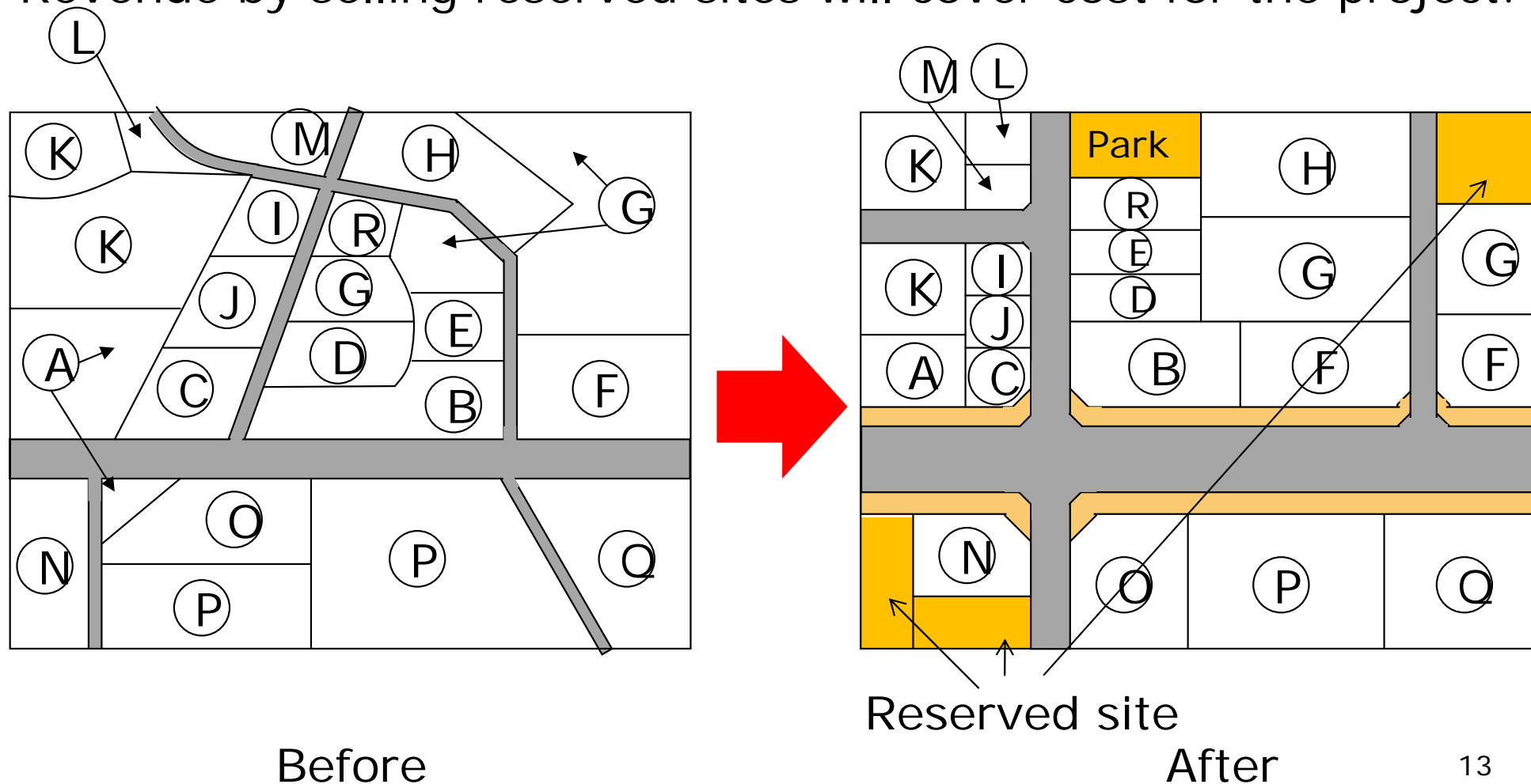


# Land Use Planning Based on City Planning Law



# Concept of Land Readjustment Programs

After applying land readjustment programs, public space such as road, park, etc. will increase and land price will also rise. Revenue by selling reserved sites will cover cost for the project.



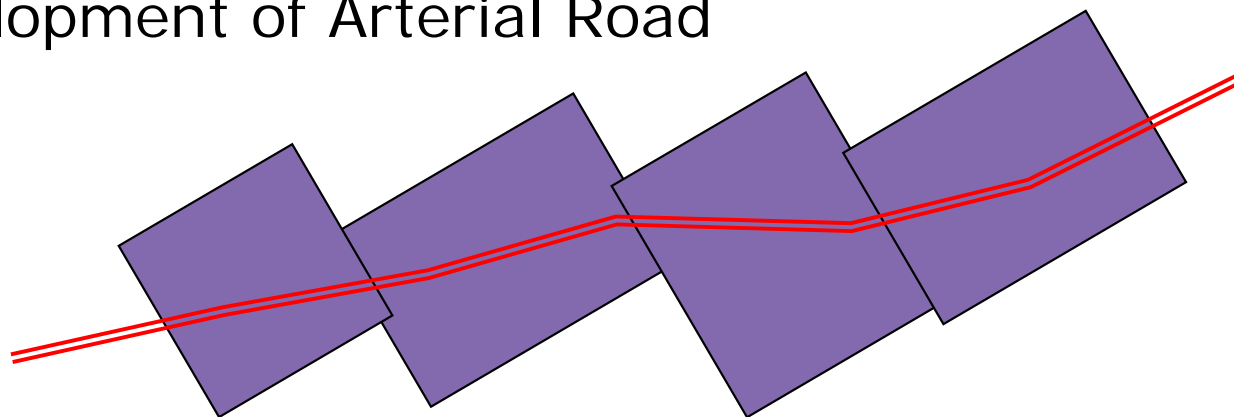
# Impacts of Land Readjustment Programs

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## Improvement of Urban Sprawl



## Development of Arterial Road



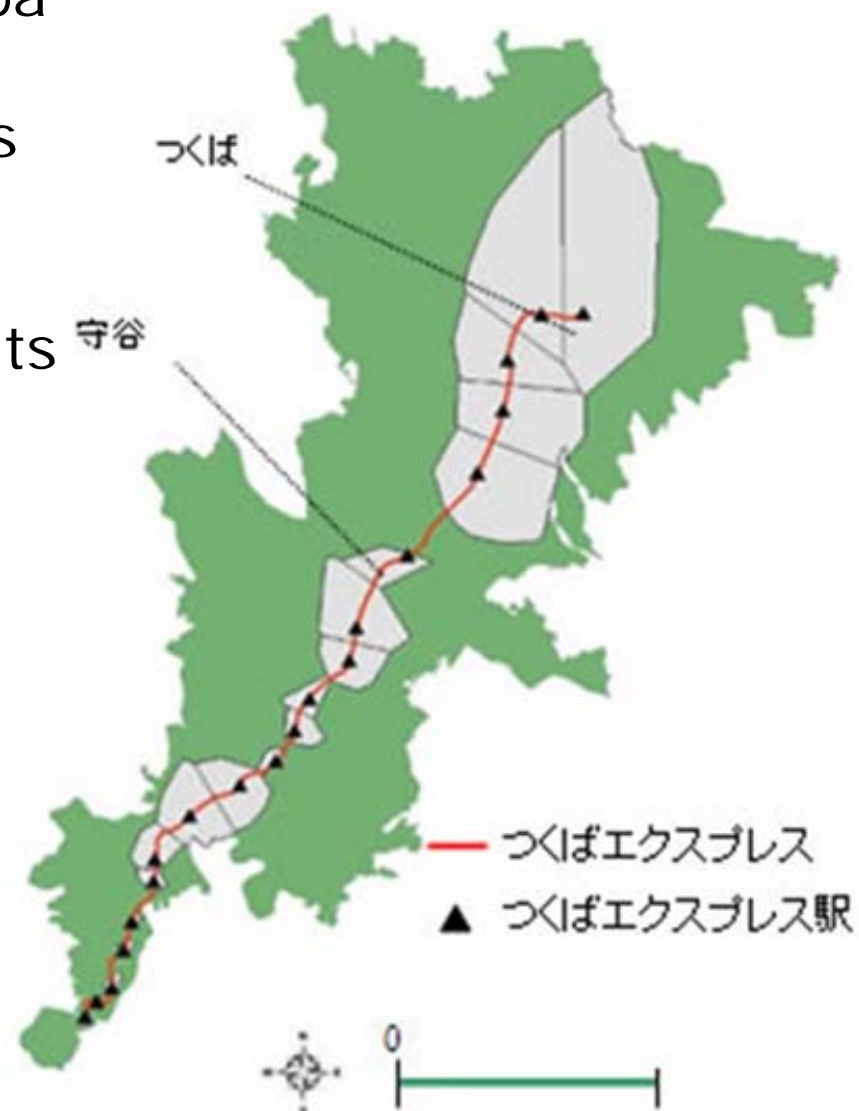
# Coordination of Housing and Railway Development at Tama Garden Area

Land readjustment project carried out at 54 areas along Tokyu Denen-Toshi Line. Total area became 5,000 ha



# Development of Tsukuba Express (TX)

The Tsukuba Express connects Tsukuba city and Akihabara (58.3 km, 20 stations) in minimum 45 minutes. This business was planned to prevent congestion on JR Joban line, and was decided to construct in 1985, started its construction in 1994 and started its operation from 2005.



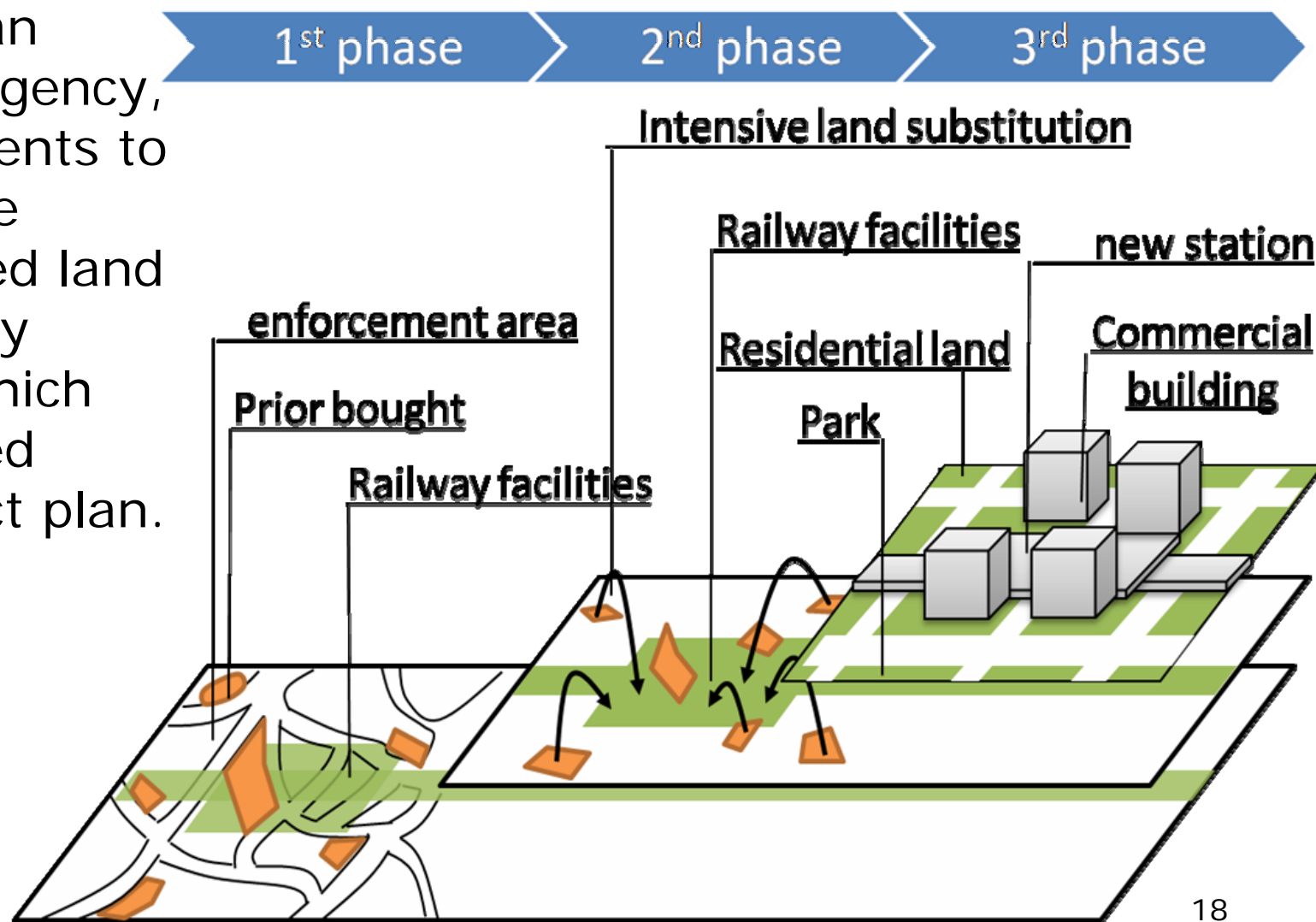
# Coordination of Housing and Railway Development in Urban Area

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- Problems at area development along railway
  - Expansion of construction period and un-recovered cost because of negotiation for land acquisition
  - Difficulty of land acquisition and lack of funds because of land price increment in metropolitan areas
  
- The law called the "Special Measures Related to the Coordination of Housing and Railway Development in Urban Regions" or simply "Takutetsu-ho" was established to carry out coordination of residential development and railway development .
  
- This is a model case for new development along railway that is designed to prevent urban sprawl and create a more livable residential environment.

# Integration Land Readjustment Programs

This allows a railway operator, Urban Renaissance Agency, local governments to consolidate the former acquired land into the railway facility area which was established under a project plan.



# Area Development along TX

Total around 3,280 ha along the TX line has already been developed for housing.

Total around 2,800 ha were developed using land readjustment programs.



Ootakano-mori



# Area Development along TX

- Other coordination were made as follows;
  - Arterial road which forms urban corridor was developed together with TX
  - Defrayal by petition station method
  - Project evaluation



1970

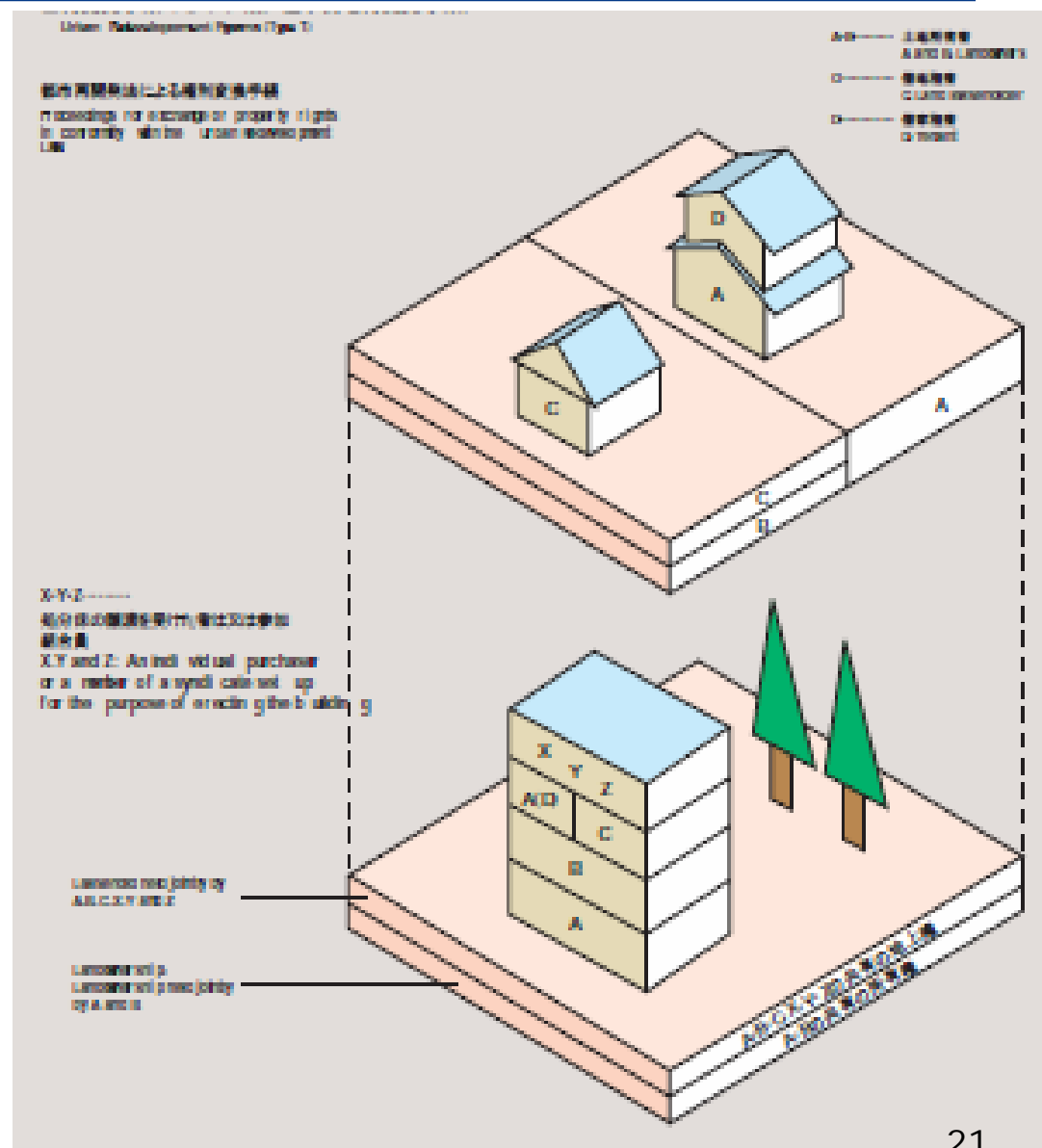


Present

Area development at Kenkyu Gakuen Station in Tsukuba.

# Concept of Urban Redevelopment Programs

A program is implemented in one of two ways through exchange of property rights between Interested parties for Type 1 Urban Redevelopment Programs or through direct purchase for Type 2 Urban Redevelopment Programs.



# Urban Redevelopment in Tama Plaza Station

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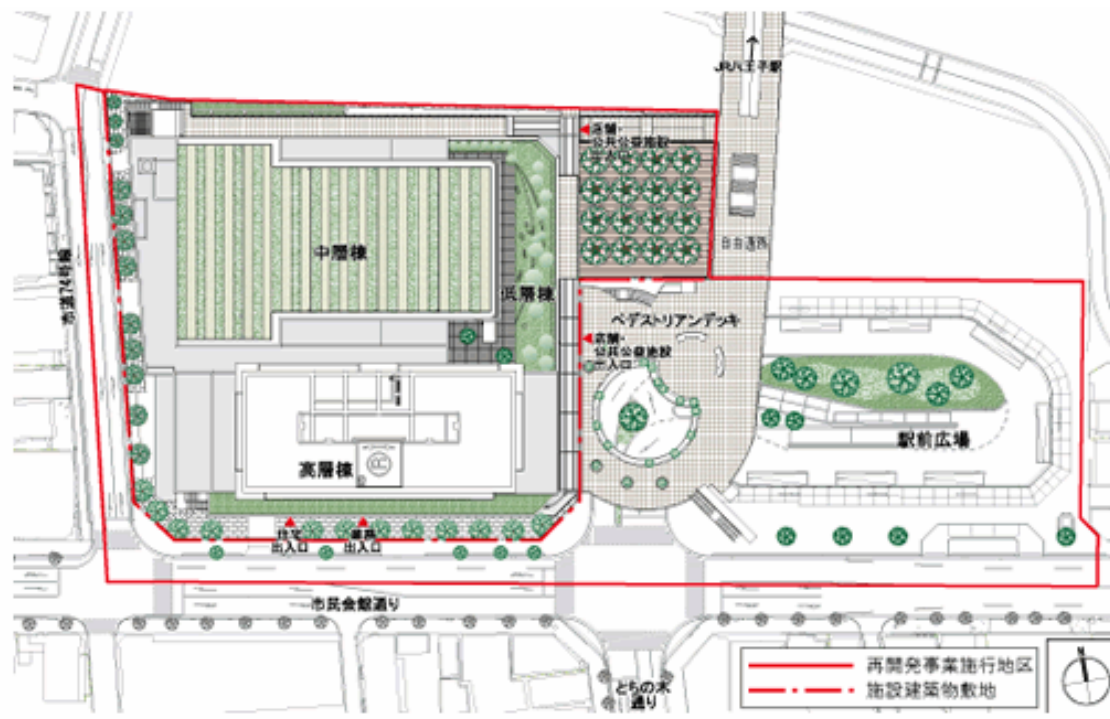
Souse: Mr. Ueno, Tokyu Construction Co. Ltd.

# Urban Redevelopment in Tama Plaza Station



Souse: Mr. Ueno, Tokyu Construction Co. Ltd.

# Urban Redevelopment in Hachioji Station



# Land Readjustment Project near Akihabara Station

TX Akihabara Station was developed together with Land Readjustment Project at 88 ha Akihabara area. Total project cost will be 346 billion Yen.

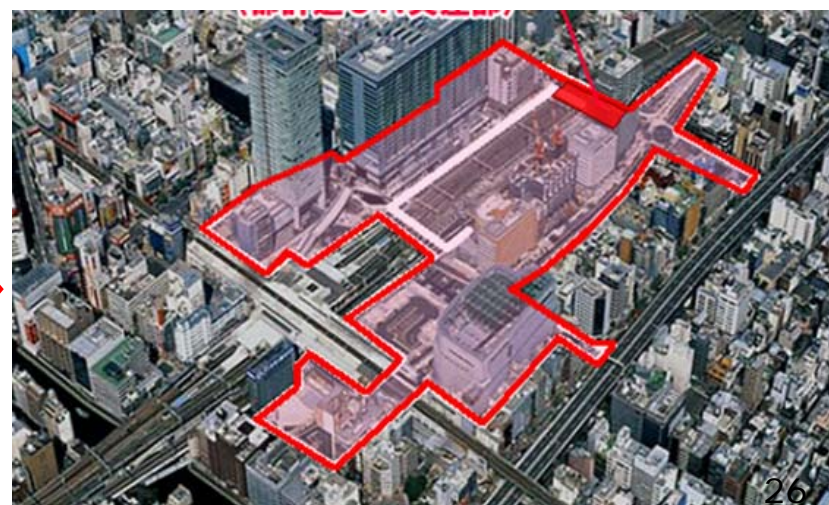
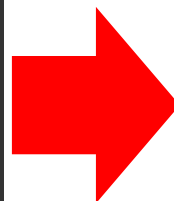


# Land Readjustment Project near Akihabara Station

Station square was  
provided.

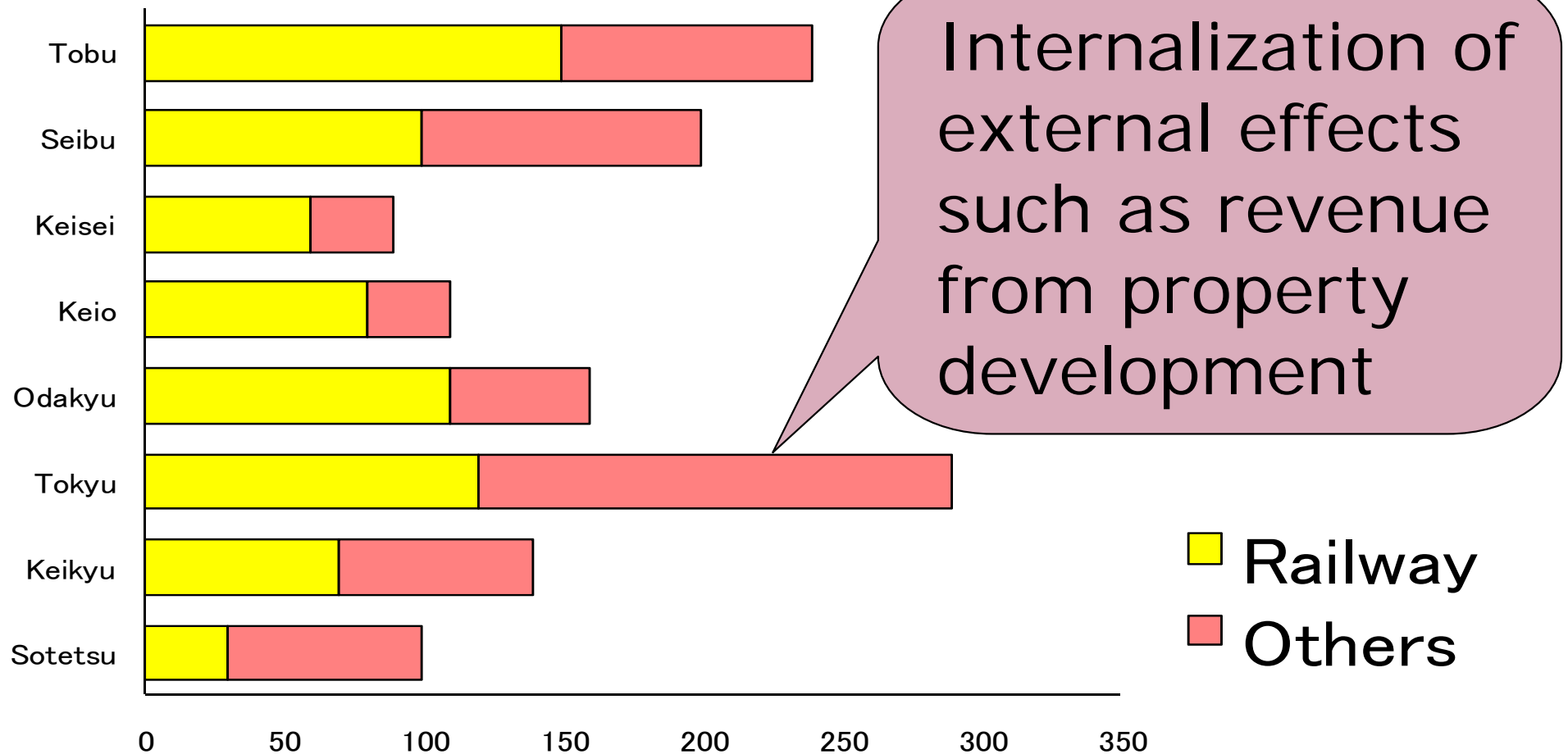
Ridership increased 20.9%

The number of resident was  
also increased.



# Revenue composition of private railways in Tokyo

Answer for the question of Dr. Agachi Sumalee



Souse: Mr. Ueno, Tokyu Construction Co. Ltd.



**Thank you for your attention**