

City Planning and Urban Development in Tokyo

Bureau of Urban Development
Tokyo Metropolitan Government

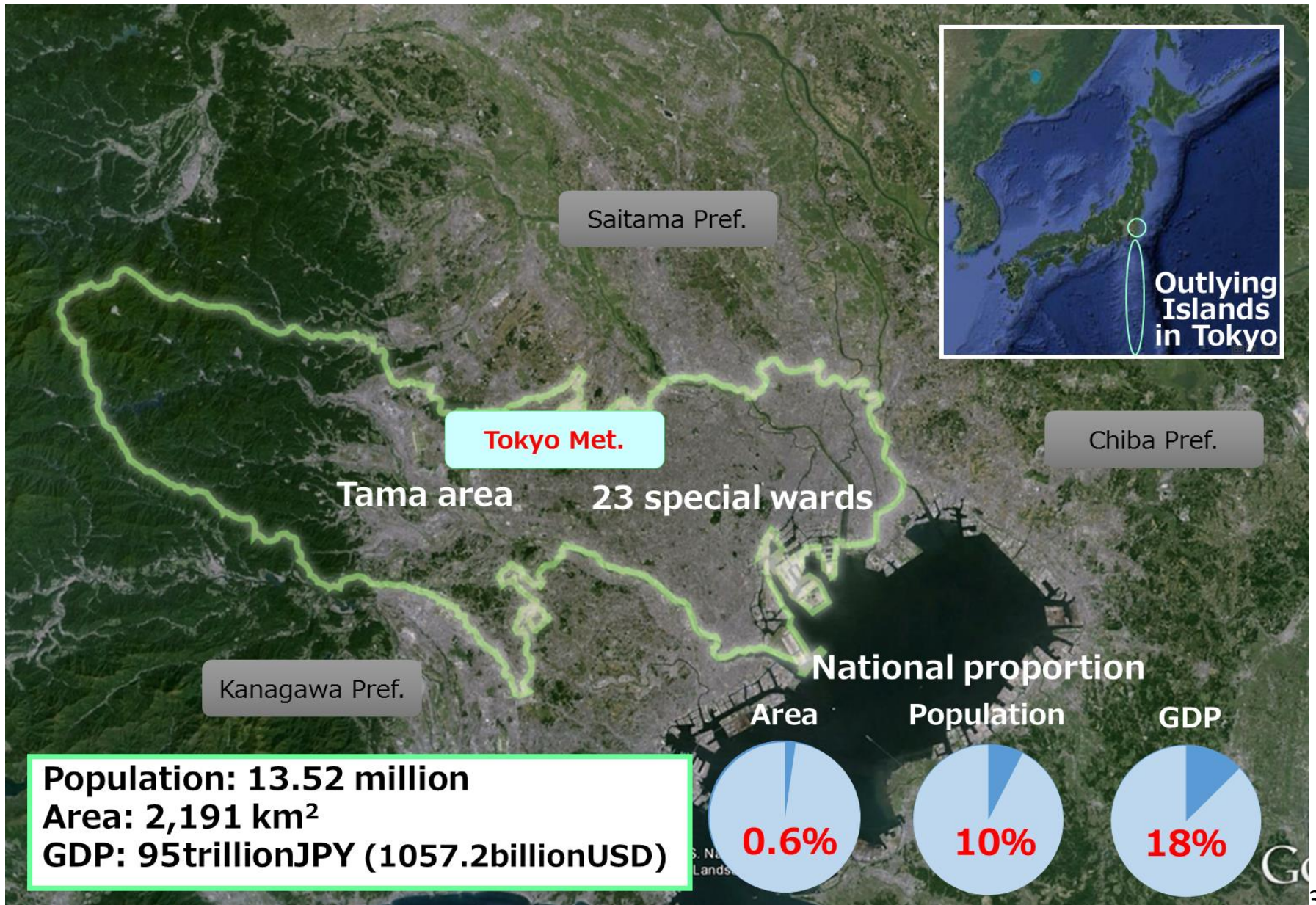
Contents

I : Outline of Tokyo

II : The Grand Design for Urban Development

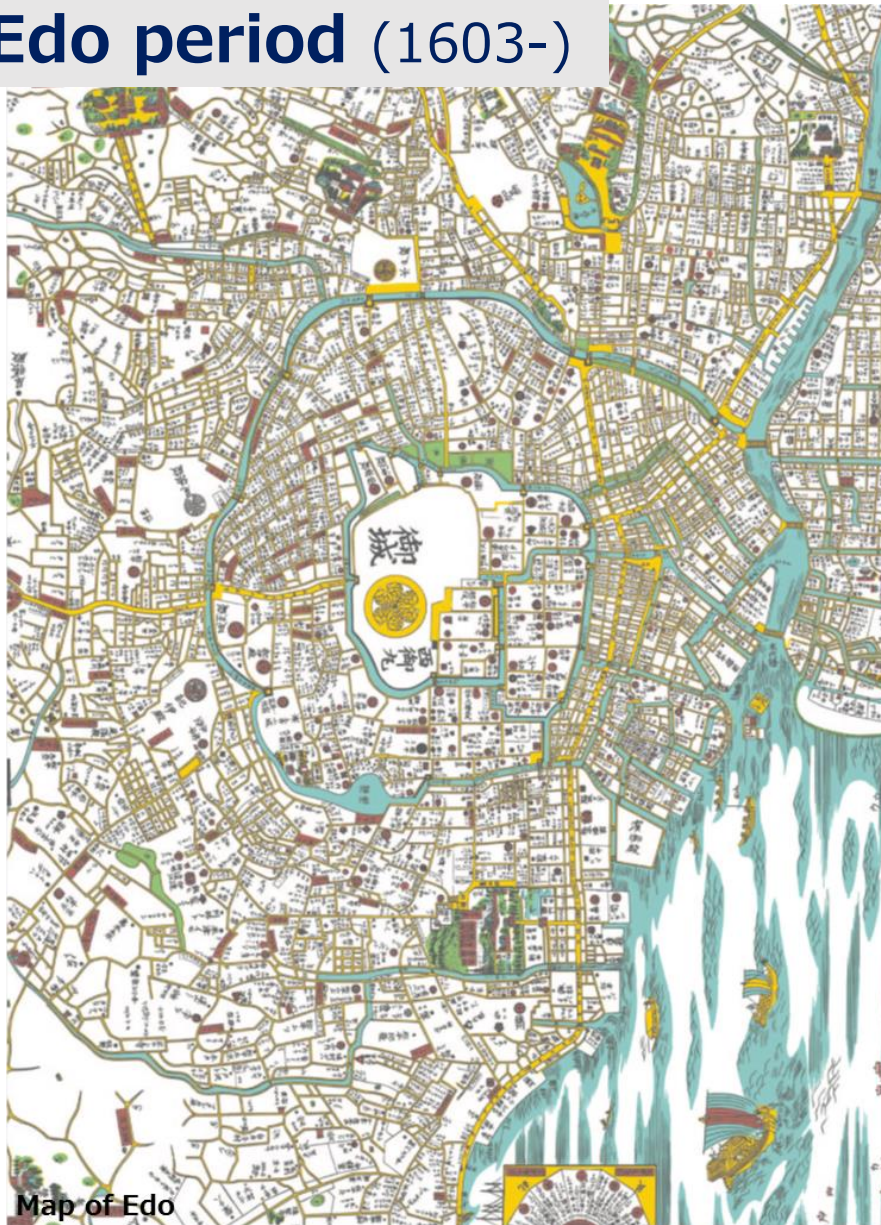
I : Outline of Tokyo

Outline of Tokyo



History of Development in Tokyo

Edo period (1603-)



Map of Edo



Ryogoku Bridge (Sumida River)



Bird's-eye view of Edo



Great Fire of Meireki (1657)

History of Development in Tokyo

Meiji period (1868-)

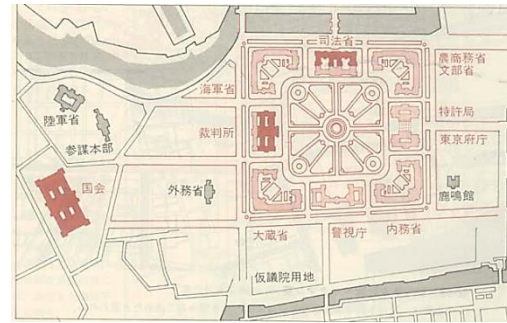
- So called “Hired foreigners” drafted city center plans but these were not realized.



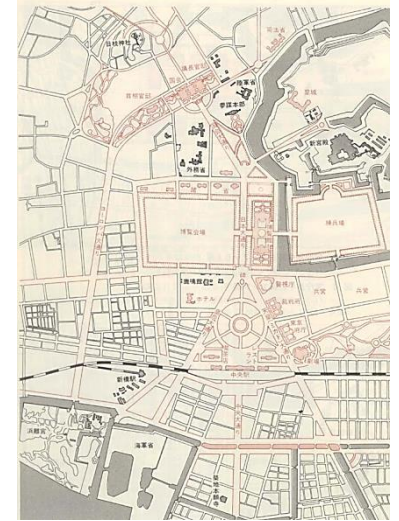
Wilhelm Böckmann
(1832-1902)



Supreme Court House



Ende's plan (1887)



Böckmann's plan (1886)

- In Marunouchi, the land appropriated to the army was sold to the private sector in 1890, then the area was developed as Japan's first central business district.

“London Block ” was so-called due to its western appearance of streets lined with red-brick buildings and the area which housed large-scale office buildings was named “New York Block” due to its scenery.



History of Development in Tokyo

Taisho period (1912-)

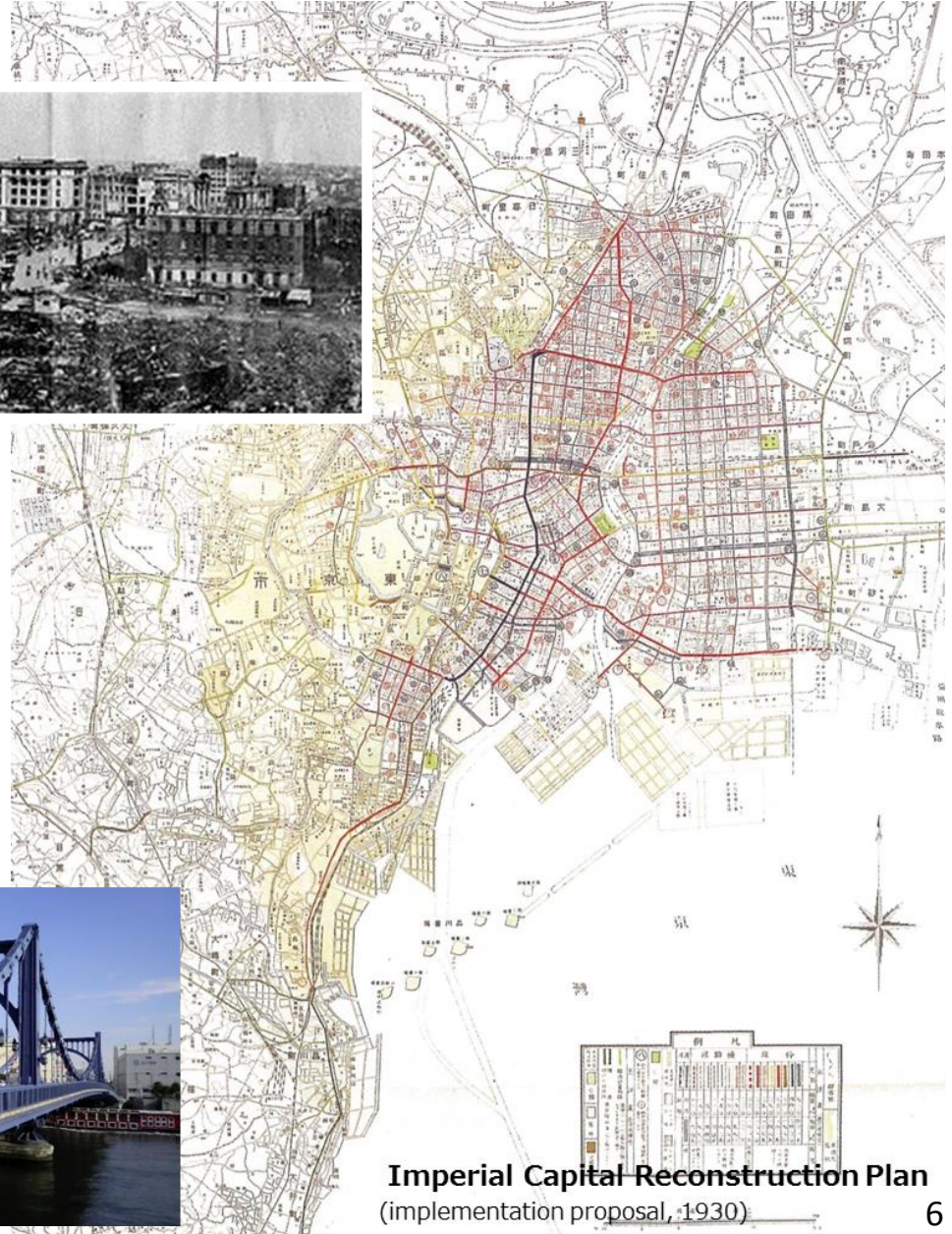


Great Kanto Earthquake
(1923)



Shimpei GOTO
(1857-1929)

Kiyosu Bridge (Sumida River)

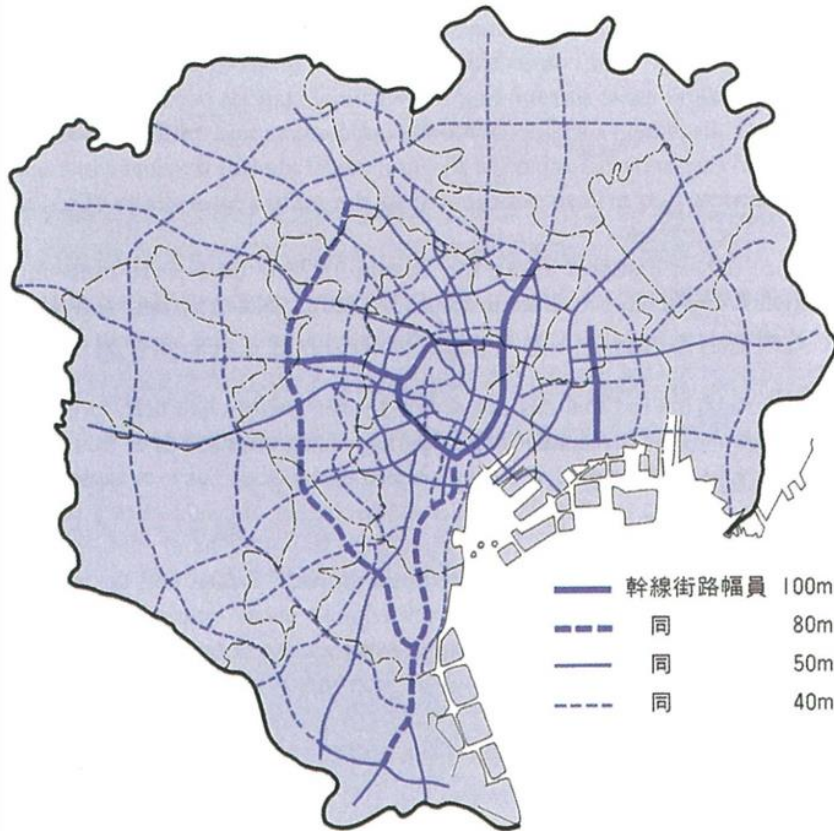


Imperial Capital Reconstruction Plan
(implementation proposal, 1930)

History of Development in Tokyo

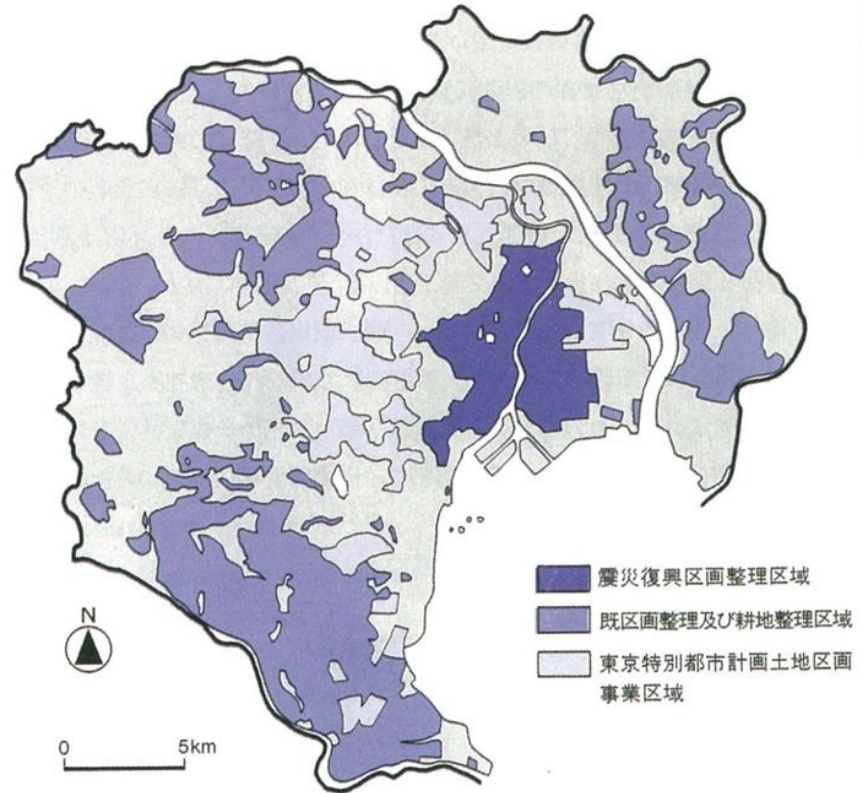
Showa period (1926-)

■ The Postwar Reconstruction plan drafted after World War II



Main Roads Plan
- Postwar Tokyo Reconstruction Plan (1946)

出典：東京の都市計画百年



Land Readjustment Plan
- Postwar Tokyo Reconstruction Plan (1946)

出典：東京の都市計画百年

■ The agricultural land reform in 1946 promoted the individual possession of land.

History of Development in Tokyo

■ Construct Infrastructure



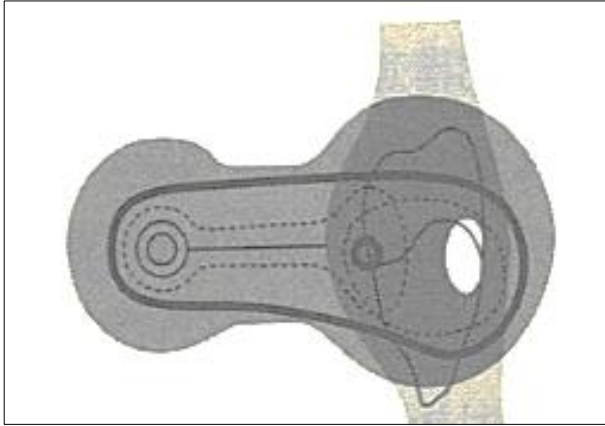
**Tokaido Shinkansen
(In service from October 1964)**



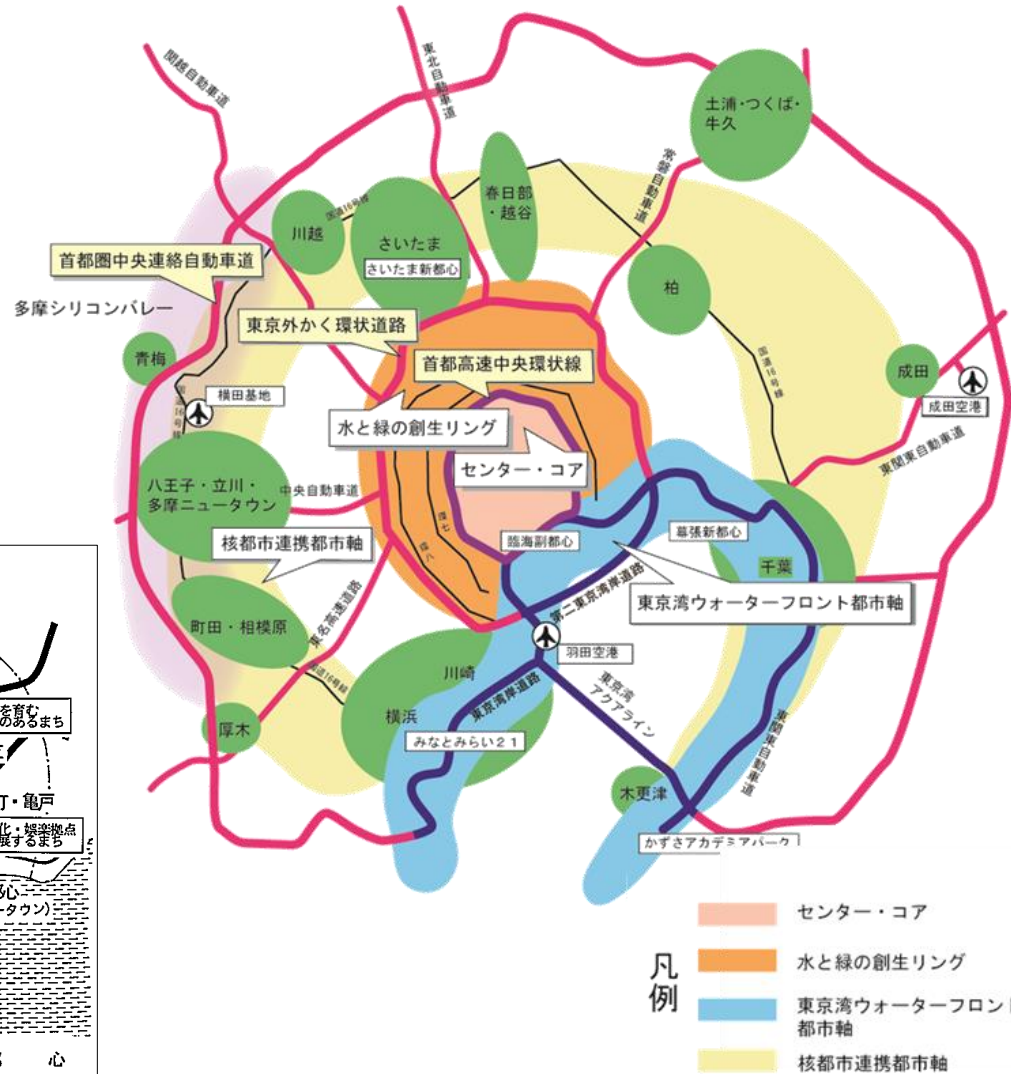
Tokyo Metropolitan Expressway

Urban Structures

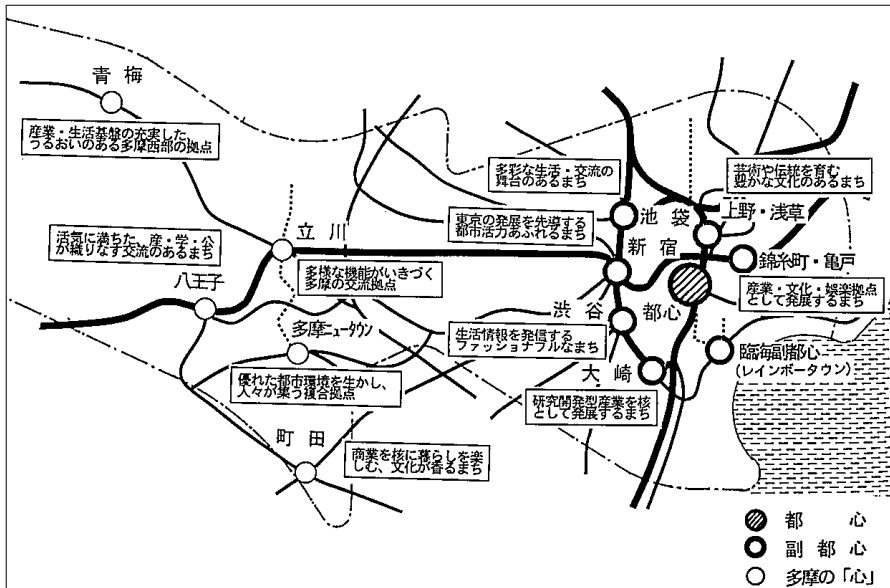
Bipolar Structure (1971)



Circular Megalopolis Structure (2000)



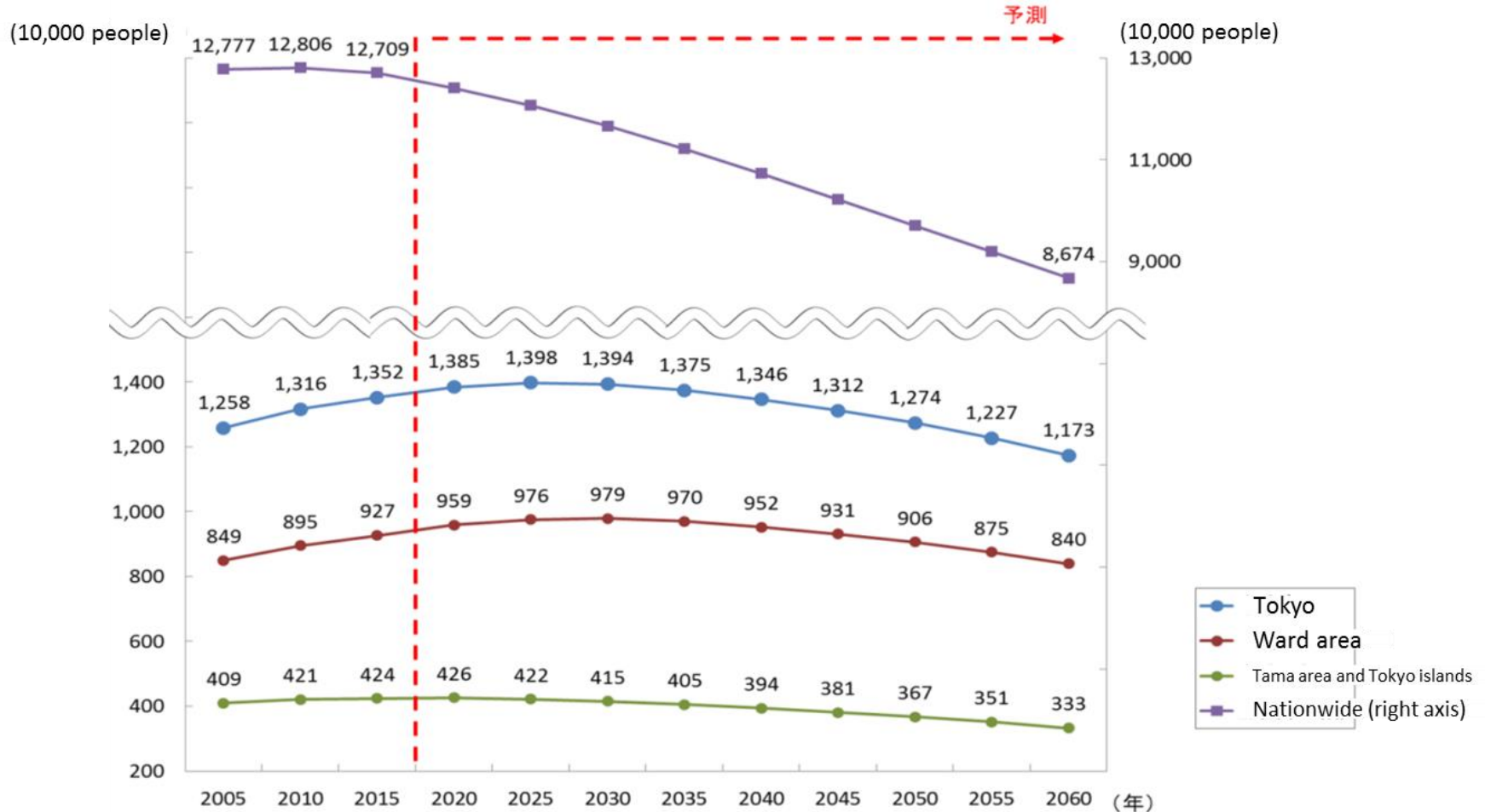
Multi-Core Urban Structure (1982)



Projections for Tokyo's Population

- The population of Tokyo will decline after **hitting a peak in 2025**.
- By 2040, it is projected that this will be **13.46 million people** (shrinking by about 500,000 from 2025).

Changes in Populations of Japan and Tokyo



(備考) 2020年以降の東京の人口は東京都政策企画局による推計

II : The Grand Design for Urban Development

Contents

- I : Role of the Grand Design for Urban Development
- II : Tokyo society and the activities of citizens in the 2040s
- III : The future role of Tokyo
- IV : The new urban vision Tokyo must strive for
- V : Strategies for urban development and specific initiatives
- VI : Individual vision for each area
- VII : Toward realization of the vision for the 2040s

I . Role of the Grand Design for Urban Development

Chronology

09/2016 TMG City Planning Commissioned Report

「The Urban Image of Tokyo in 2040 and the Route towards its Implementation」



09/2017 「Grand Design for Urban Development」 Released

Plan Outline

Outline the urban form that Tokyo should aim for, as well as the fundamental urban development policy and concrete plan for its implementation.

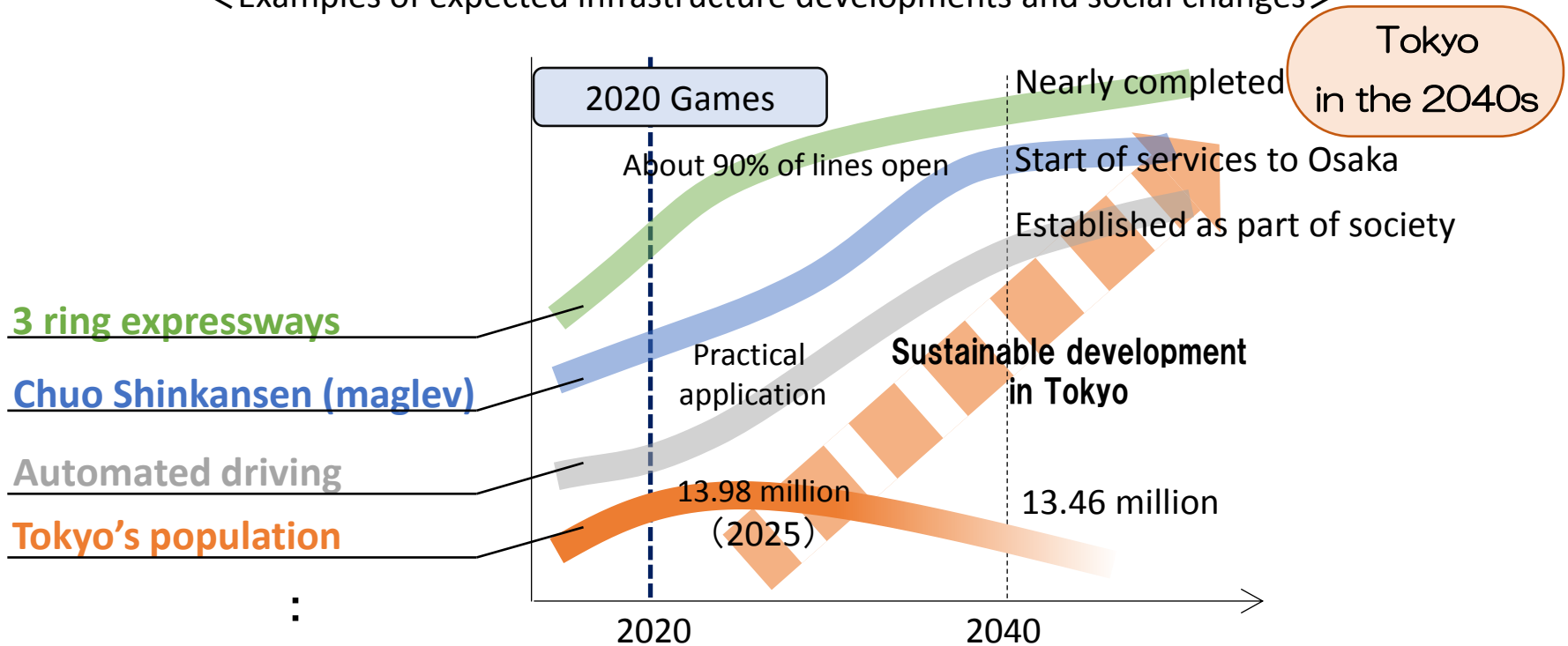
Time Period

- Target period roughly a quarter-century forward to 2040s

II . Tokyo society and the activities of citizens in the 2040s

As a bright future prospect taking into account factors such as a graying society, technological innovations in a wide range of fields, and progress in infrastructure development, an image of social conditions and Tokyo resident activities in the 2040s was drawn up as a premise for urban development with a view to make Tokyo a better city.

< Examples of expected infrastructure developments and social changes >



Ⅲ. The future role of Tokyo

Tokyo's roles in the world

- Is tolerant and nurtures exchange among **diverse groups of people and cultures**
- Builds and promotes **pioneering models for solving** urban challenges
- Fuses tradition and innovation to create **new value**

Tokyo's role in Japan

- Exhibits **its capability** as Japan's capital **to promote economic activities**
- **Cooperates with various areas** to create and promote an even more attractive Japan

< Showcasing leading technologies in urban spaces >



< Projection mapping show at Tokyo Big Sight >



IV. The new urban vision Tokyo must strive for

Goal of urban development

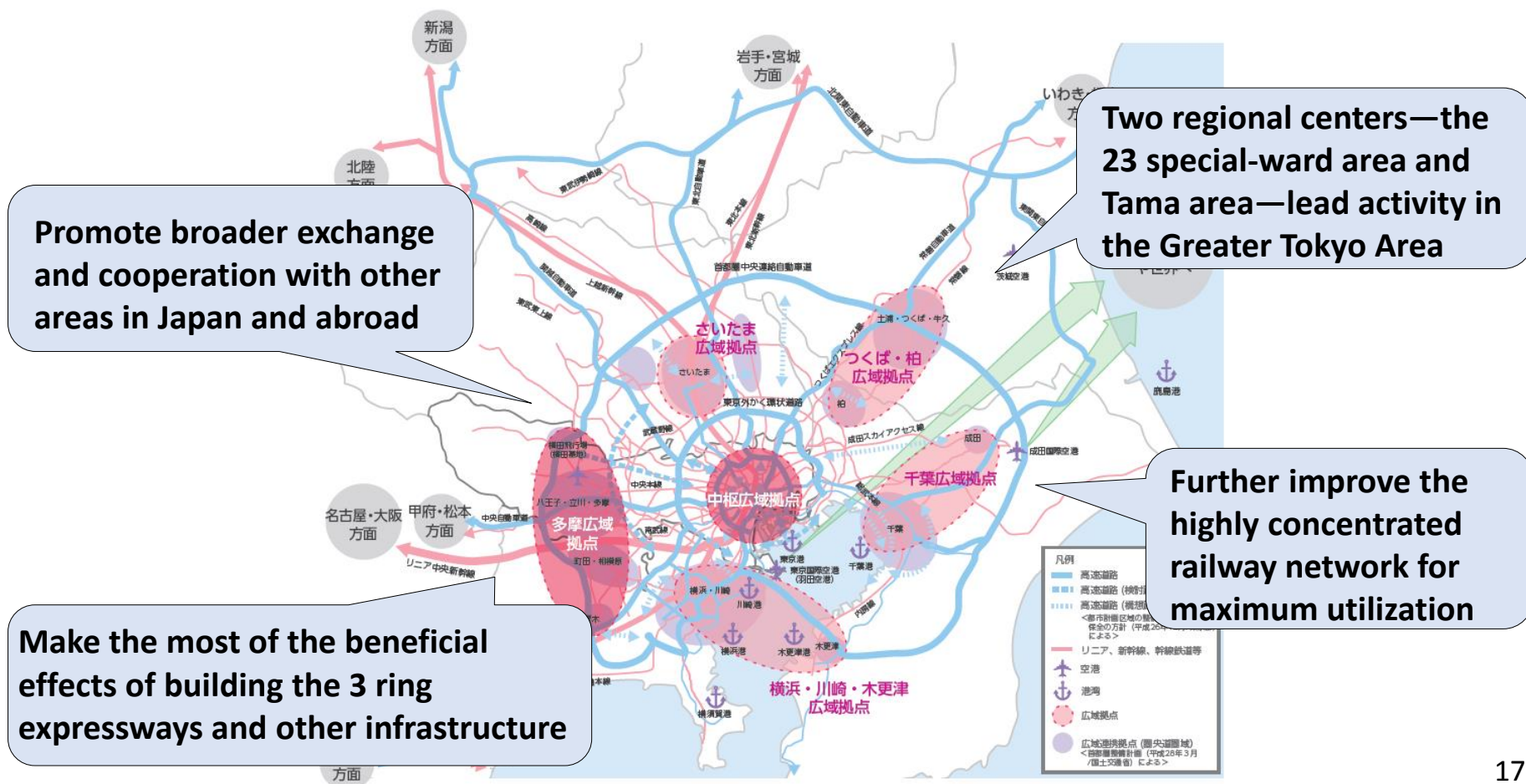
“A highly developed mature city that is relaxing and full of vitality”

As a highly developed mature city, grow sustainably in harmony with the global environment while also employing the latest technology.

Urban Structure Tokyo Should Pursue 【Urban structure on a regional level】

- While evolving upon the circular megalopolis structure with the aim to realize an “**urban structure for exchange, collaboration, and taking on challenges,**” also take into consideration a wider area, and **bolster exchange and coordination among various fields, including industry and tourism.**

＜City structure for exchange, cooperation, and taking on challenges＞

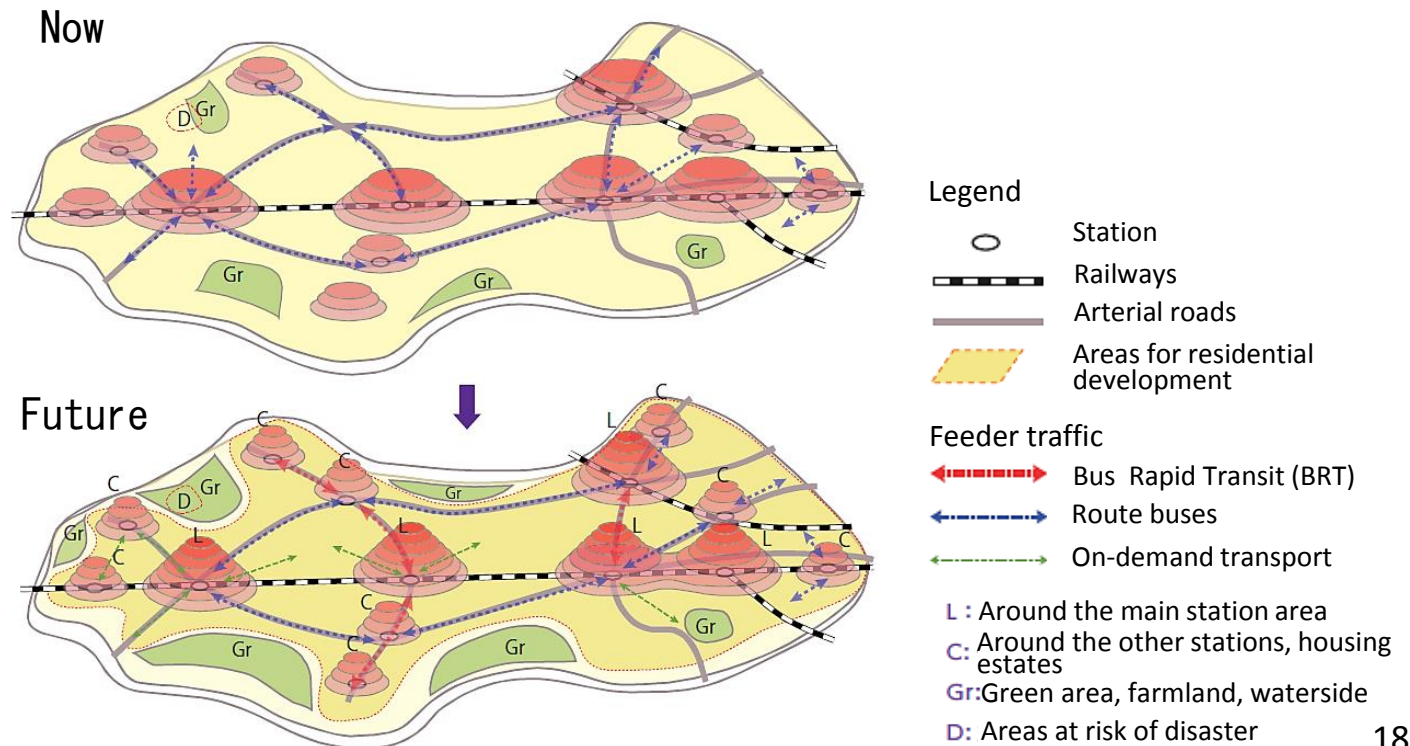


Urban Structure Tokyo Should Pursue

【Urban structure on the local level】

- **Concentrate** functions essential for living **around major stations and other centers**, and realign urban structures into “**compact cities**”
- **Through the securing and effective use of transportation networks**, rebuild areas into **communities where everyone can easily engage in activities**
- Turn each community into a place where local **resources and features are harnessed** and **people can feel attached to the community**

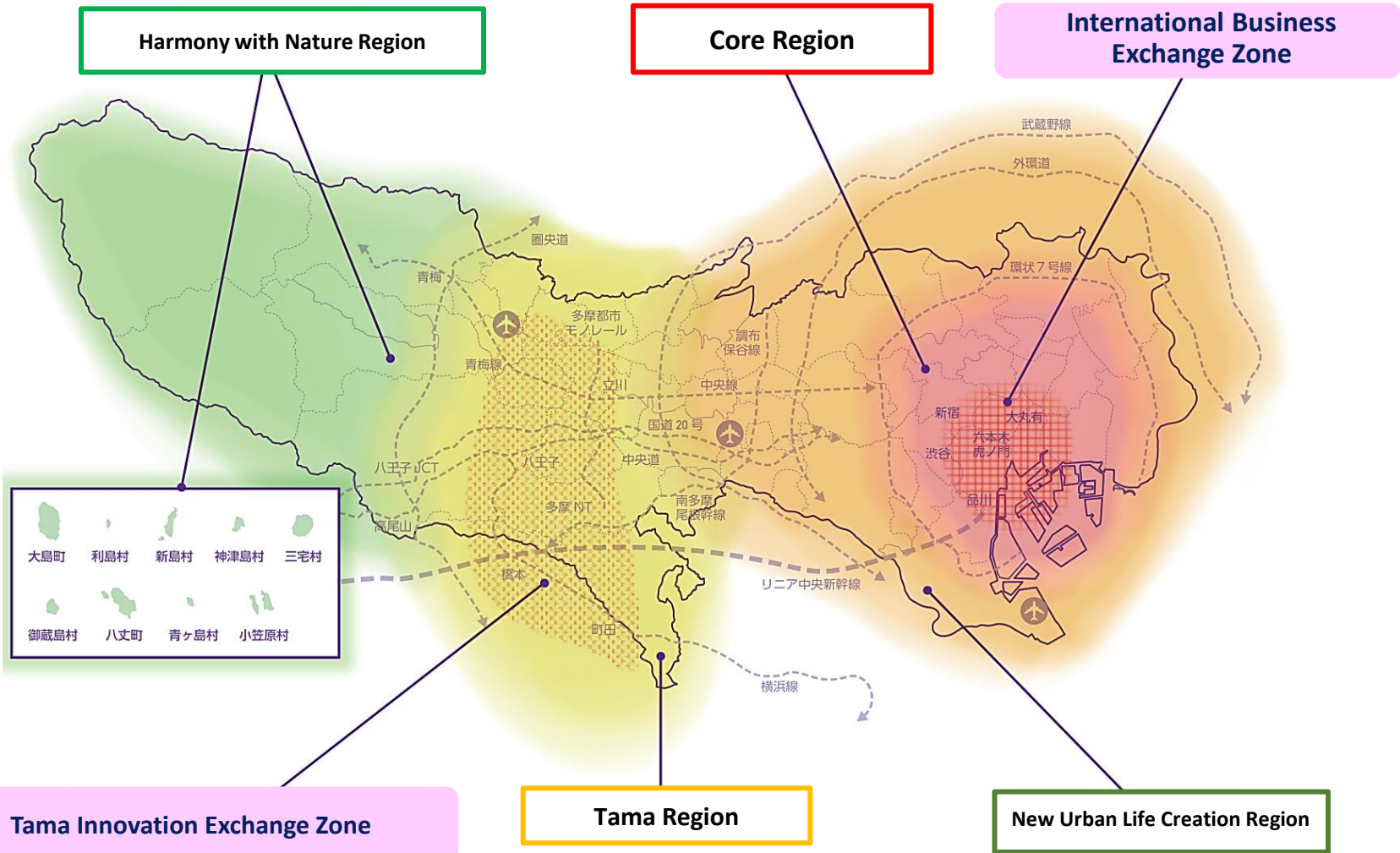
< Image of compact city structure >



New division of regions/zones

【Four regions and two zones】

- **Four regions** are newly defined, with an eye to achieve the integrated development of central Tokyo and the waterfront area
- **Two zones** serve as the engines driving Japan and Tokyo



※ The characteristics of adjacent regions/zones loosely merge for continuity.
※ The range of the zones may change in line with changes in the concentration of urban functions and social changes.

V . Strategies for urban development and specific initiatives

Establishment of **7 strategies, 30 policy directions, and 80 measures** that are cross-sectoral



Strategy **01** Create hubs full of vitality that generate sustainable growth



Strategy **02** Achieve flexible, unrestricted Exchange of people, goods, and information



Strategy **03** Build a city that addresses the risk of natural disasters and environmental issues



Strategy **04** Build a supportive and comfortable environment for all



Strategy **05** Realize highly convenient lifestyles and create diverse communities



Strategy **06** Build a city with a network of beautiful seasonal greenery and water



Strategy **07** Create new appeal through the arts, culture, and sports

Future Images



Global business activities are conducted in the central part of the special-ward area.



Young foreign students and researchers gather to create innovations in the Tama area.



On Tokyo's islands, many people enjoy local "treasures" that have been refined.



Waterfront at night offers opportunities to enjoy Tokyo's unique charms.

Challenge of urban development

- By implementing concrete efforts across sectors, we will realize the intended city image.
- Clearly define a positive attitude towards the challenge of urban development and present the future situation for which the city should aim.

City rankings of the world

▶ Secure Tokyo's No. 1 position

Peak congestion of roads and railroads

▶ Resolve congestion

Dense wooden housing area
13,000ha

▶ No wide-area fires

No-electric poles in Tokyo

▶ Removal of utility poles

Life satisfaction level of Tokyo citizens

▶ 70% or more

Public transport blank areas

▶ Resolved

Total amount of greenery

▶ Do not reduce

Citizen sports implementation rate

▶ 70% or more

Seven strategies for urban development

Strategy 1: Create hubs full of vitality that generate sustainable growth

Concentration of universities and research facilities



Tama area creates innovation

Continue to be an international business city that leads the world

Sustainable growth of business hubs



Characteristic, diverse hubs and neighborhoods are new urban attractions

Urban development with a diversity of functions

We will advance vibrant urban development to support Tokyo's growth.

1. Ikebukuro



Vibrant international center that draws on its rich base of arts and culture

2. Shinjuku



Center of exchange that leads Tokyo's development with various functions such as business, exchange, and tourism

3. Kita-Aoyama 3-Chome

Trendsetting center for culture and fashion

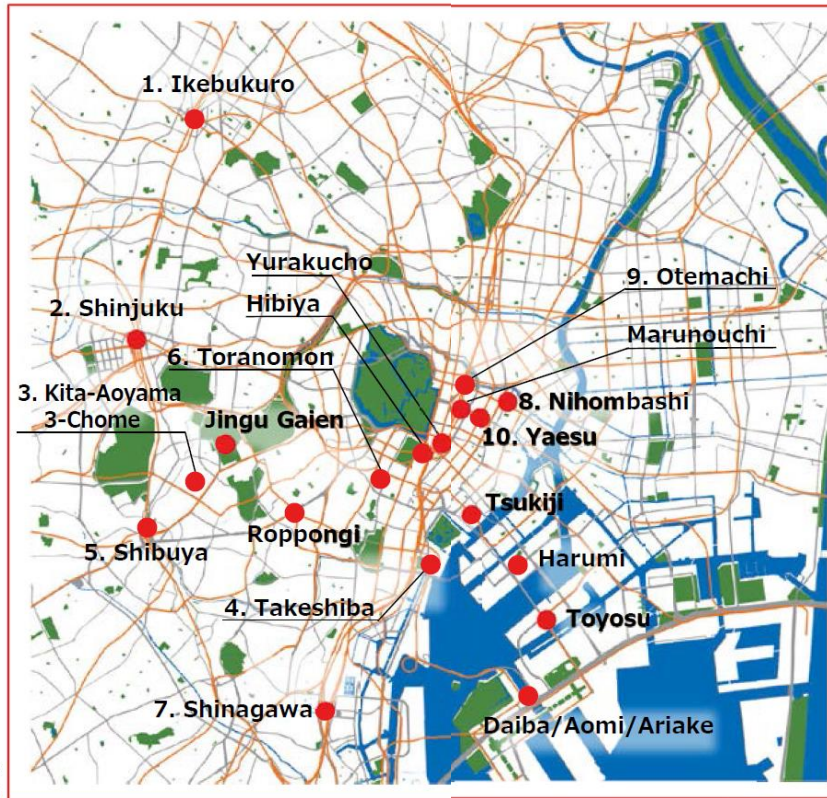
4. Takeshiba

Business center that builds on the strengths of the private sector and contributes to greater global competitiveness

5. Shibuya



Center setting trends for lifestyle culture



6. Toranomom



Transportation hub connected to airports and the waterfront area

7. Shinagawa



New international center

9. Otemachi



Hub for international business and new industry creation / Elegant cityscape

10. Yaesu



Vacant site formerly used by Haneda Airport

8. Nihombashi



International financial and business center that comes with hotels and residences

Otemachi – Marunouchi - Yurakucho

1960



Now



1997



District area	120 ha
Working population	230,000 people
Site area	66 ha
Building total floor area	678 ha
Number of buildings	107 buildings (Including the planning construction)

Shibuya



Shinagawa

New Station (Yamanote Line)



Scheduled to open in 2020

**Linear Chuo Shinkansen
(Maglev Train)**



Tokyo-Osaka 1hr./438km
(scheduled to open in 2037)

Tokyo-Nagoya 40min./286km
(scheduled to open in 2027)

**New Station
(Yamanote Line)**



← Tamachi
Station

**Planned
Skyscraper Site**

**Shinagawa
Station**

Toranomon

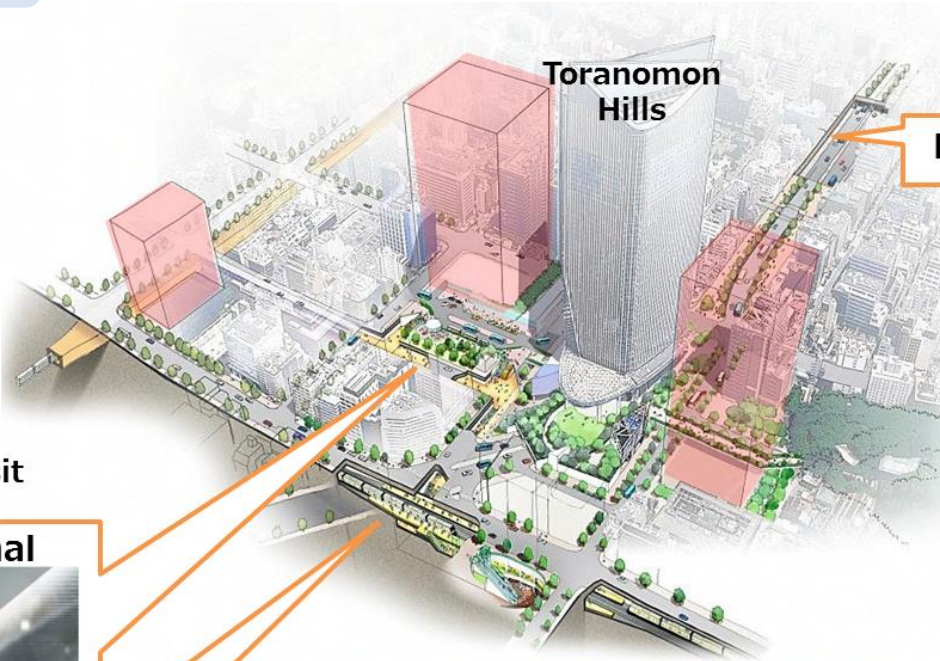


BRT : Bus Rapid Transit

New Bus Terminal



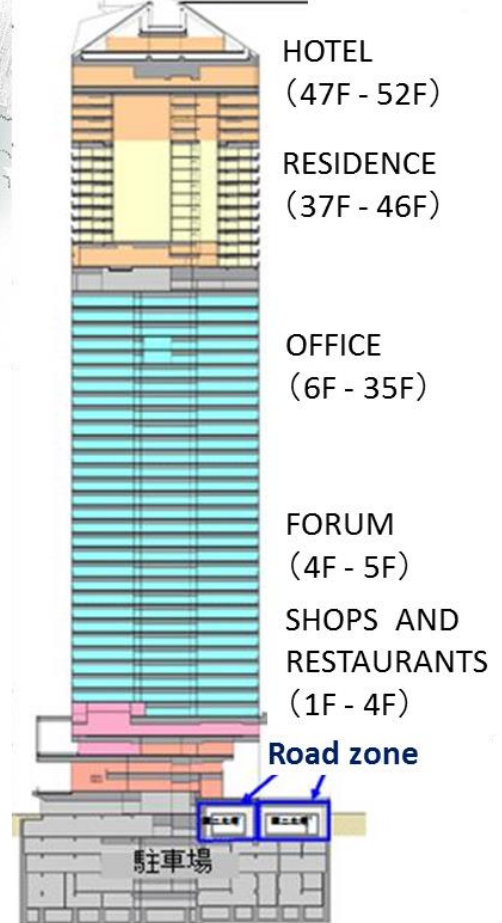
New Station (Subway)



Ring Road No.2

Toranomon Hills

▼ 247m



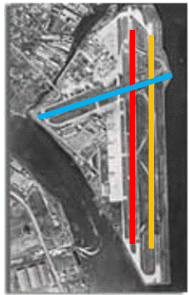
Shinjuku

- Nishi-Sinjuku is the site of a former water purification plant



Strategy 2: Achieve flexible, unrestricted exchange of people, goods, and information

Further enhancing the functions of Haneda Airport



1964: Runway C completed
<Tokyo 1964 Olympic Games>



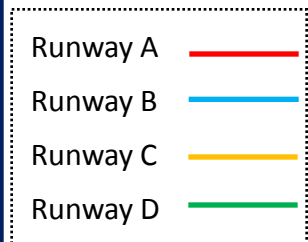
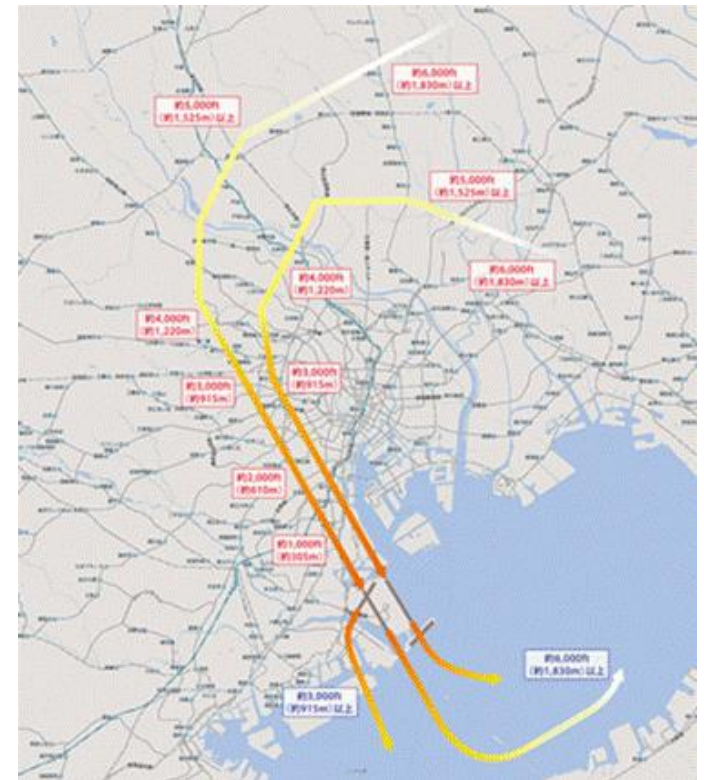
2000: Expansion using new landfill

1978: Narita Airport opened
(Haneda became a domestic airport.)



2010: Runway D completed

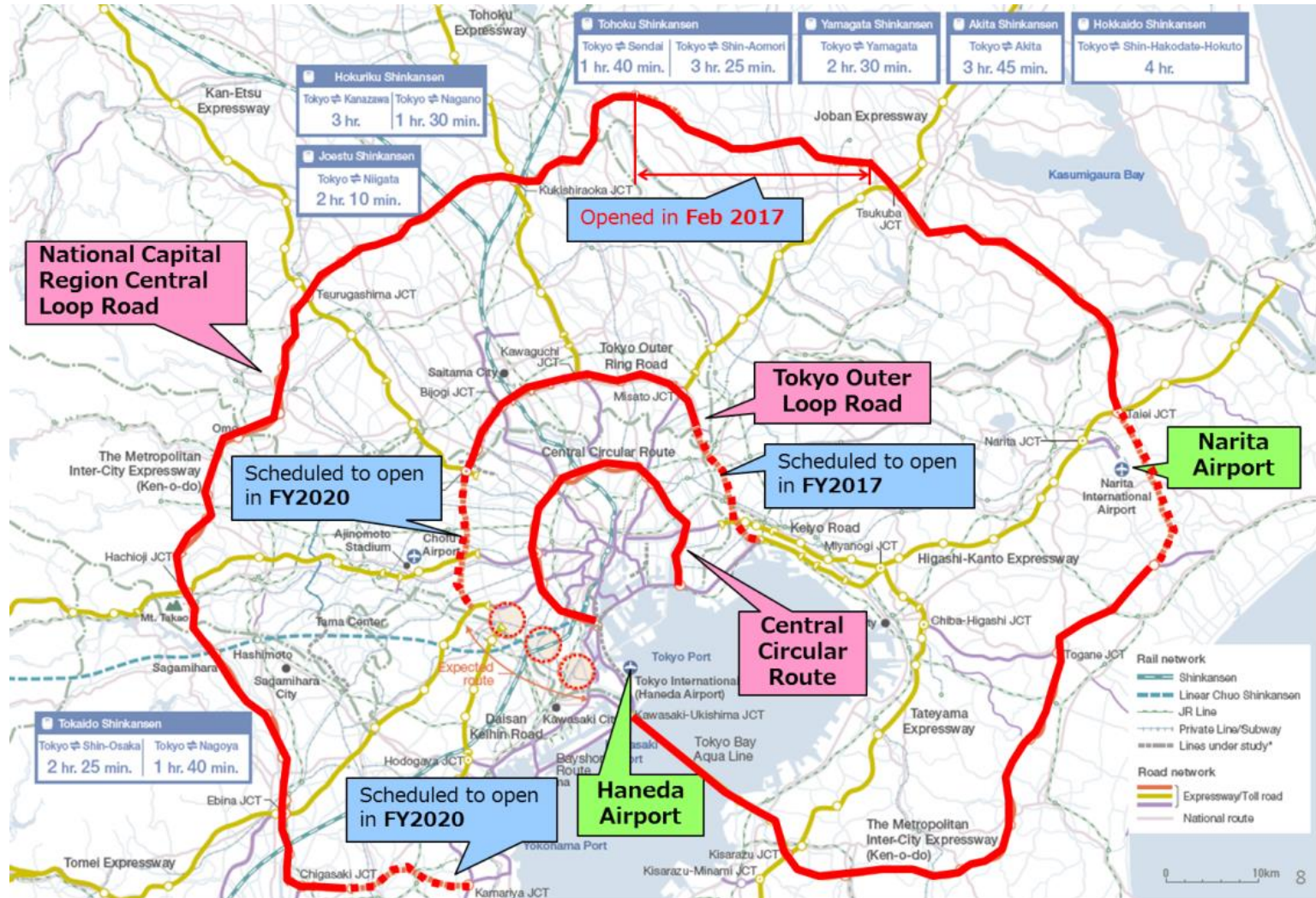
<Haneda resumed handling international flights.>



Functions to be further enhanced by 2020

Development of the Three Ring Expressways

- About 79% has been completed (as of February , 2017)
- About 90% of the Three Ring Expressways is scheduled to be opened by fiscal year 2020.

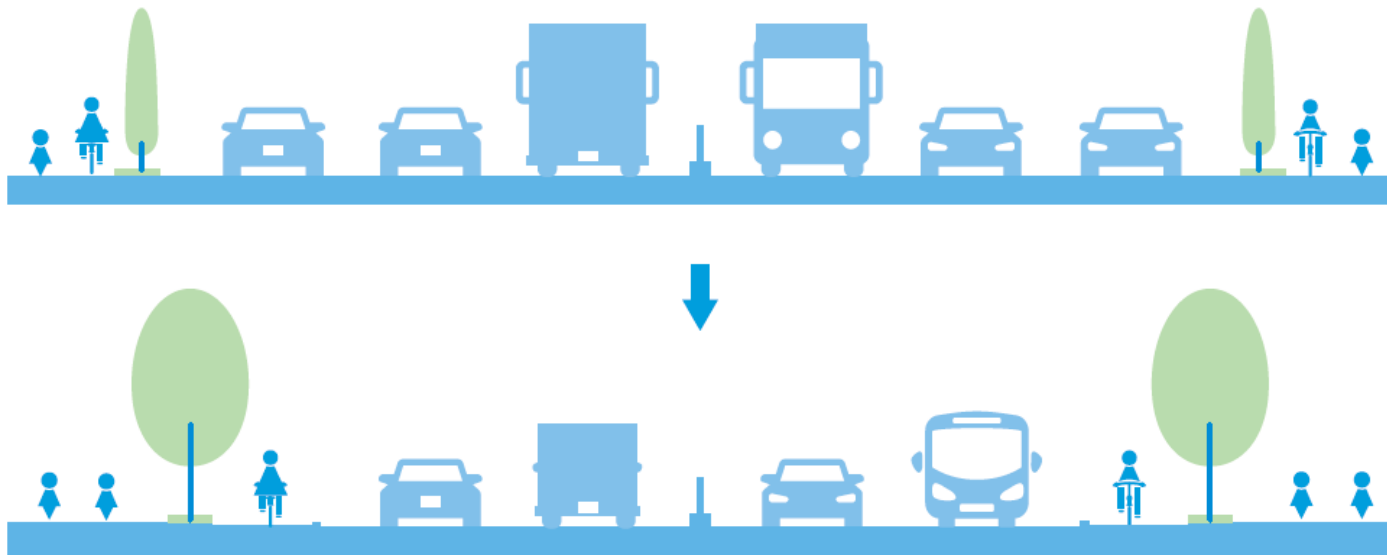


Remake road spaces to create more comfort and vitality

▪ Build a road network for smoother traffic

Remake road spaces to maximize the effects of construction of the three ring expressways and other developments, and which consider future changes in traffic volume, to **generate new added value** such as comfort and vitality.

<Image of remaking road space>



Development of Road Network (City-Planned Roads)



道路の整備状況は平成28年3月現在

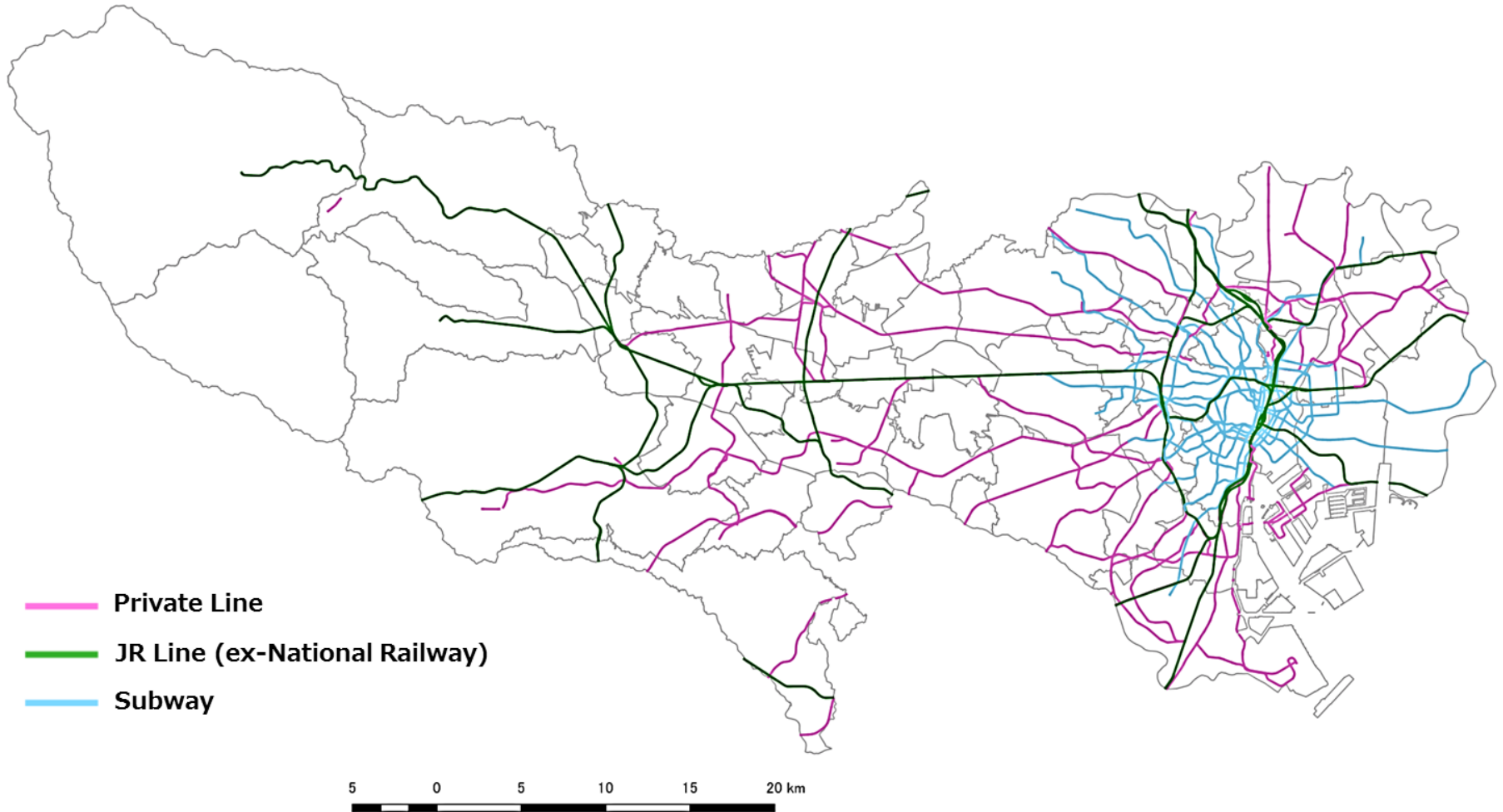
骨格幹線 (優先※)	骨格幹線 (完成及び概成、事業中)	骨格幹線 (未着手)
補助幹線等 (優先※)	補助幹線等 (完成及び概成、事業中)	補助幹線等 (未着手)
都県境を新たに接続 (優先※)	都県境を新たに接続 (新規計画中)	

※優先: 今後10年間(H28~H37)で優先的に整備すべき路線 (優先整備路線)

(資料)「東京における都市計画道路の整備方針(第四次事業化計画)」(平成28年3月)から作成

Rail Network

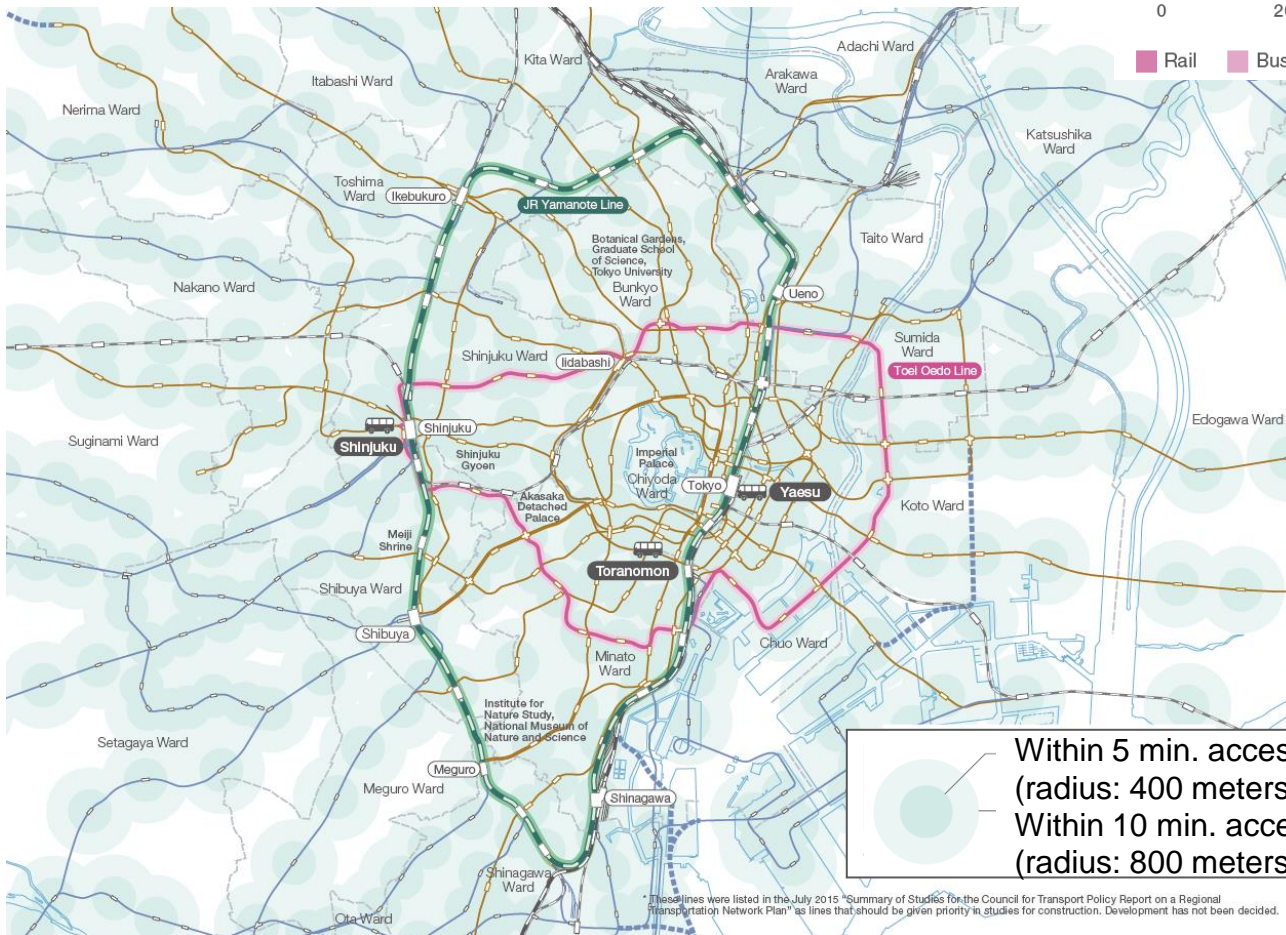
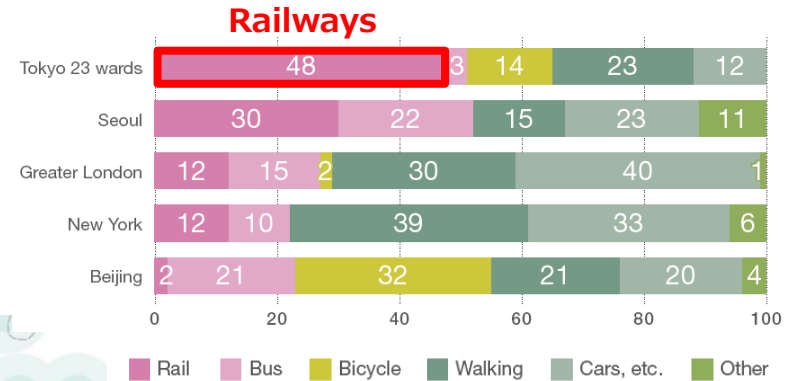
- Many train lines have been constructed by private companies





Rail Network

- In most parts of central Tokyo, it takes 10 minutes or less to get to the nearest railway station.

<Breakdown of transportation modes>



 Within 5 min. access to the nearest train station (radius: 400 meters)
 Within 10 min. access to the nearest station (radius: 800 meters)

* These lines were listed in the July 2015 "Summary of Studies for the Council for Transport Policy Report on a Regional Transportation Network Plan" as lines that should be given priority in studies for construction. Development has not been decided.

Rail Network

■ Upgrading facilities for safety and convenience



Installation of platform screen doors

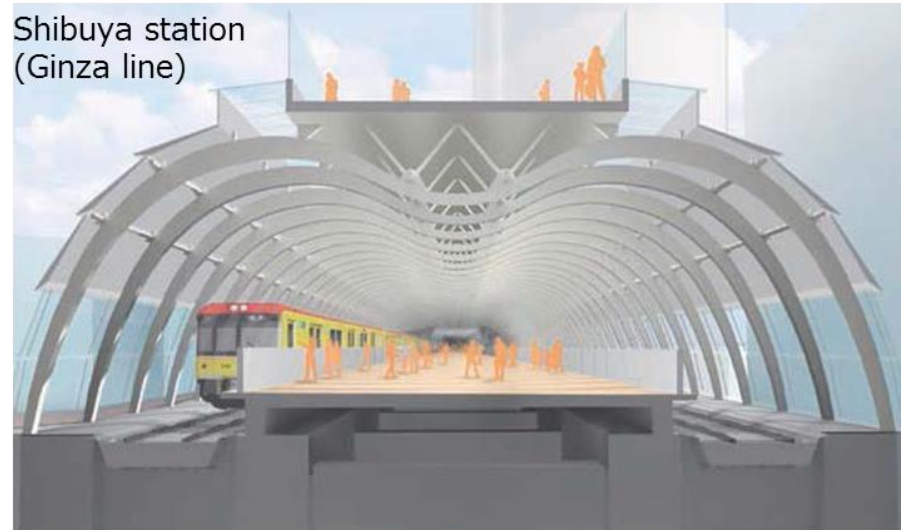
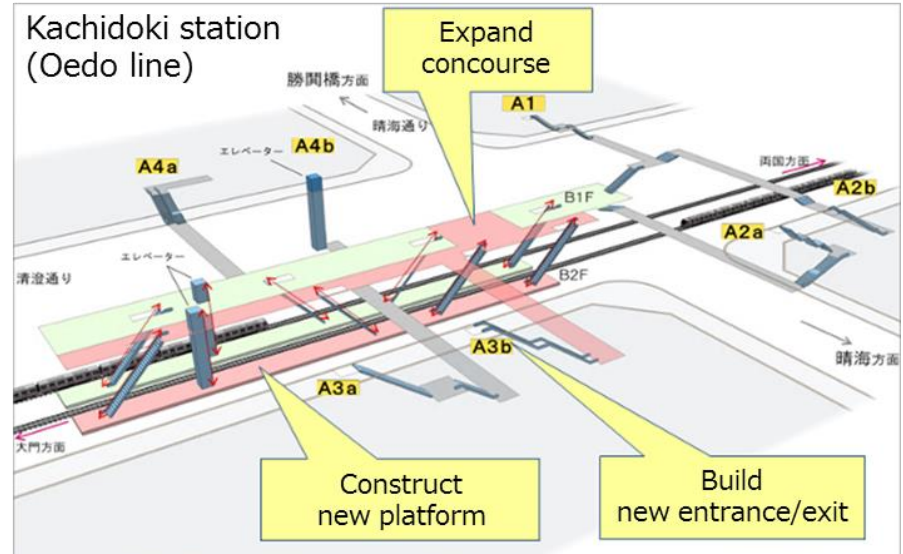


Installation of elevators, etc.



Installation of universal-access toilets

Improvement and renewal of stations



Using rail stock as a key, create a town where anybody can move around easily

- **Make Metro stations the face of the city**

Outfit stations with sunken gardens, introduce various functions reflecting local needs, and **create a convenient and lively space.**

<Example of open-space in front of underground station>

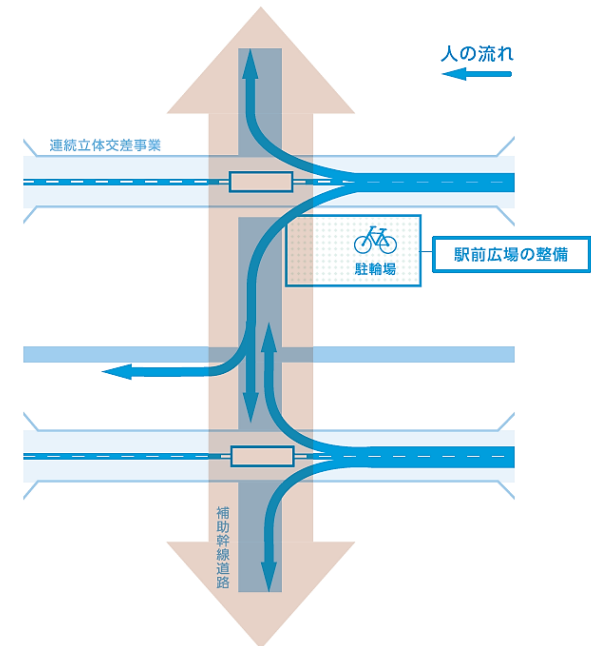
(Chuo-ku Kyobashi Tokyo Square Garden)



- **Complete feeder routes to make life more convenient**

By maximizing the use of rail networks, as well as combining leading-edge technology with various transport modes **make a transport environment where anybody using stations as a central point can move easily**

<Feeder routes (bus, bicycle etc) depicting flow of people>



Strategy 3: Build a city that addresses the risk of natural disasters and environmental issues

Build a city resistant to disaster by contemplating various possible forms of damage

- **Form a city that won't burn or collapse**

Along with maintaining important disaster-prevention routes

Facilitate fire-resistant building upgrades along corridors to create fire breaks.

- **Revitalize the cityscape unique to Tokyo**

While maintaining the allure of alleyways and wooden architecture, encourage fire-proofing and earthquake-safe buildings.

- **Guarantee the continued appeal of communities at new locations**

Accelerate the improvement of dense wooden-housing districts, and ensure the appeal of new living locations for residents.

< Image of appealing new residence >



(画像提供) Asahikasei Real Estate
(CG作成) 株式会社アバン・デザイン

Residences

- Many old wooden houses still exist and many people live in them comfortably.
 - Close-set wooden housing areas are at risk of suffering major damage such as outbreaks of fire.



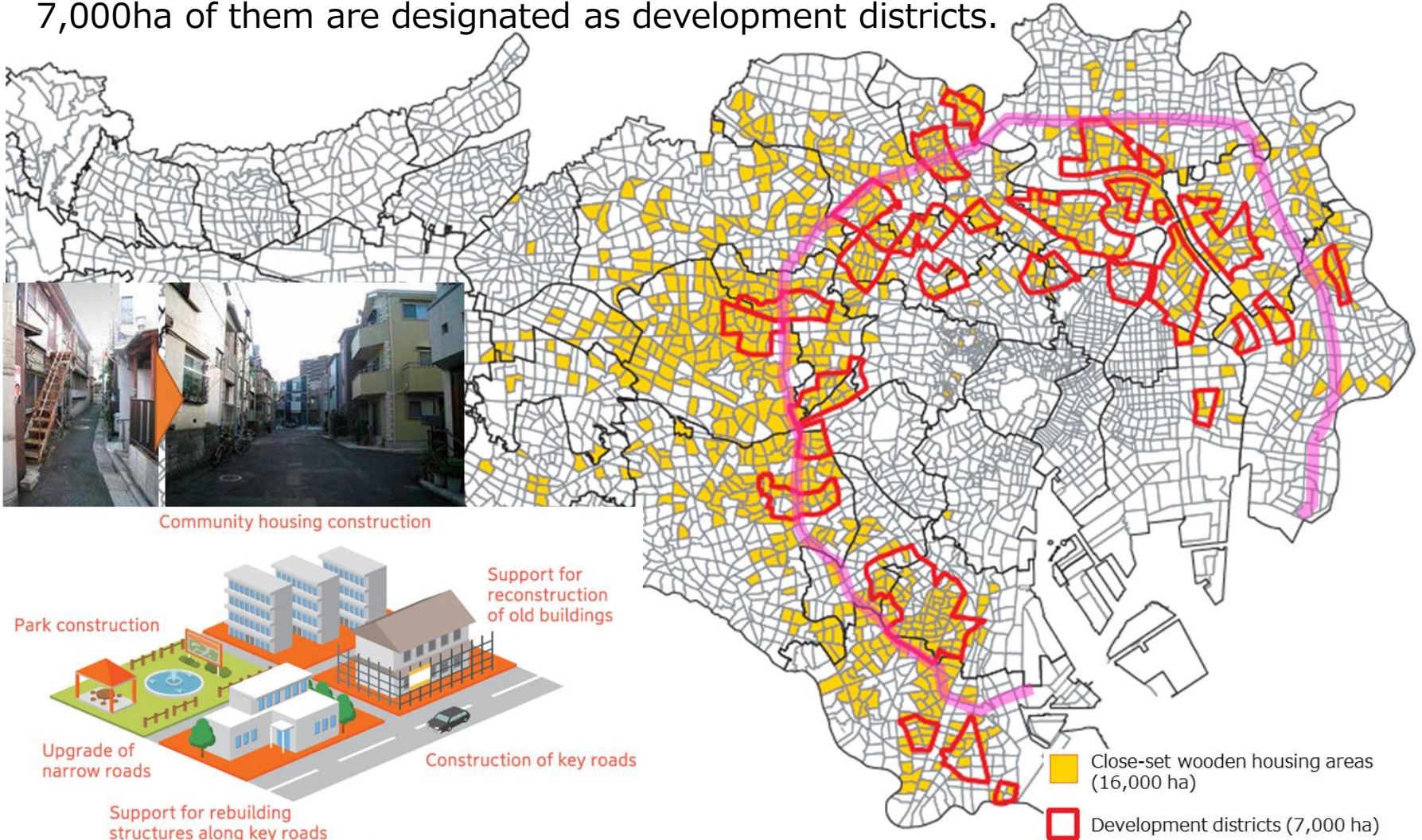
Large fire in Itoigawa (Niigata pref.) at Dec. 2016



Residences

■ Fire resistant

There are about 16,000ha close-set wooden housing areas in Tokyo.
7,000ha of them are designated as development districts.

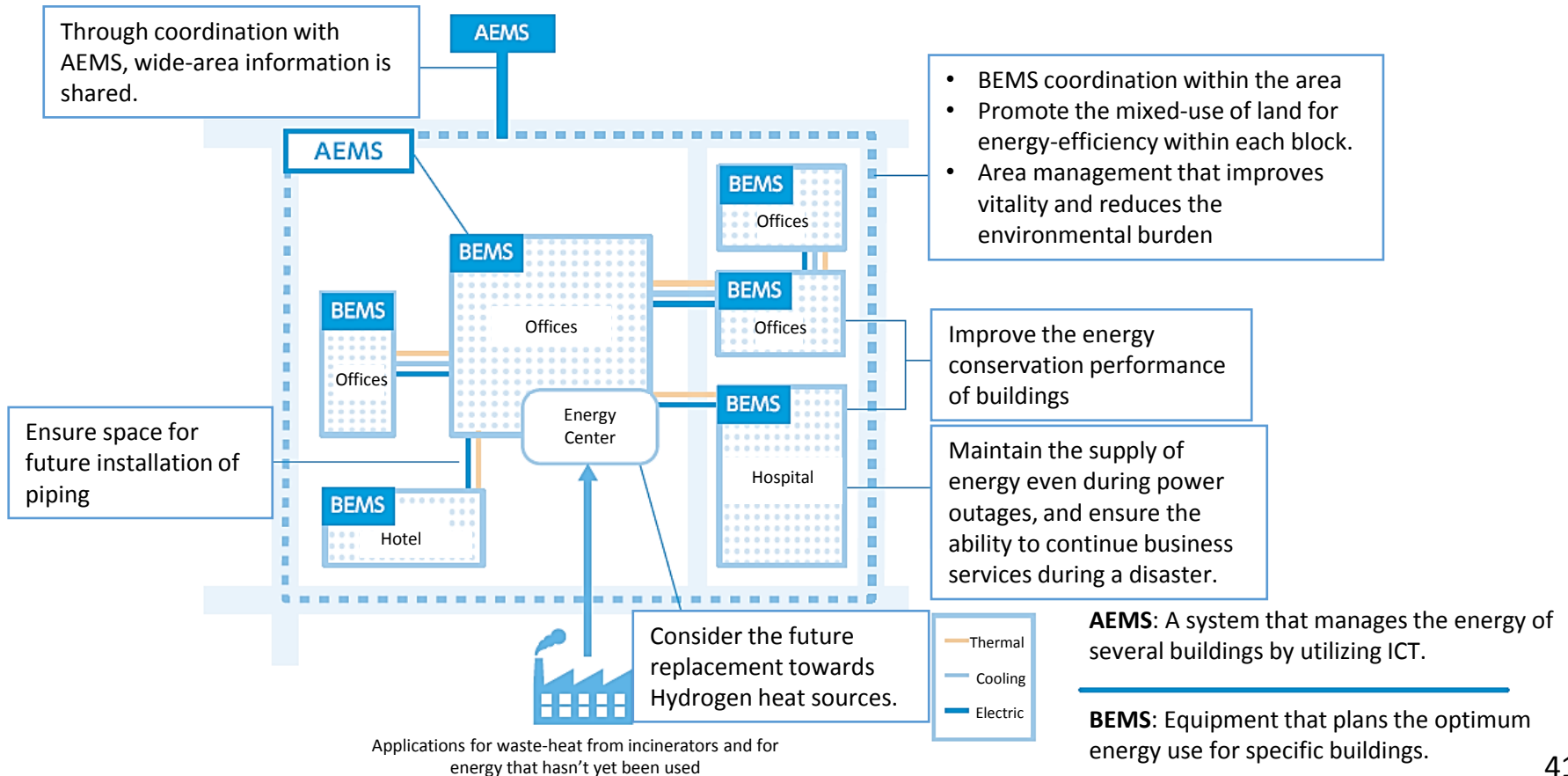


Decrease the entire city's energy burden

▪ Restrain CO₂ emissions while accumulating urban facilities

Promote Zero Energy Buildings (ZEB) and Energy-efficient buildings, while converting various types of useful buildings and adapting the energy for districts and neighborhood plots.

<Image of area-wide energy usage implementation>



Leading the World in Energy Efficiency

The rise of energy utilization efficiency and the fall of overall energy consumption

- Promote energy saving and low carbon emitting buildings.
- Reducing CO2 emissions by 62% from the 1990 level.



Solar panels

Energy saving and low carbon emitting building.
(Shimizu Corporation Headquarters building, Chuo-ward)

Strategy 4: Build a supportive and comfortable environment for all

Prepare an environment where senior citizens and people with disabilities can feel fulfilled and children can grow strong and healthy.

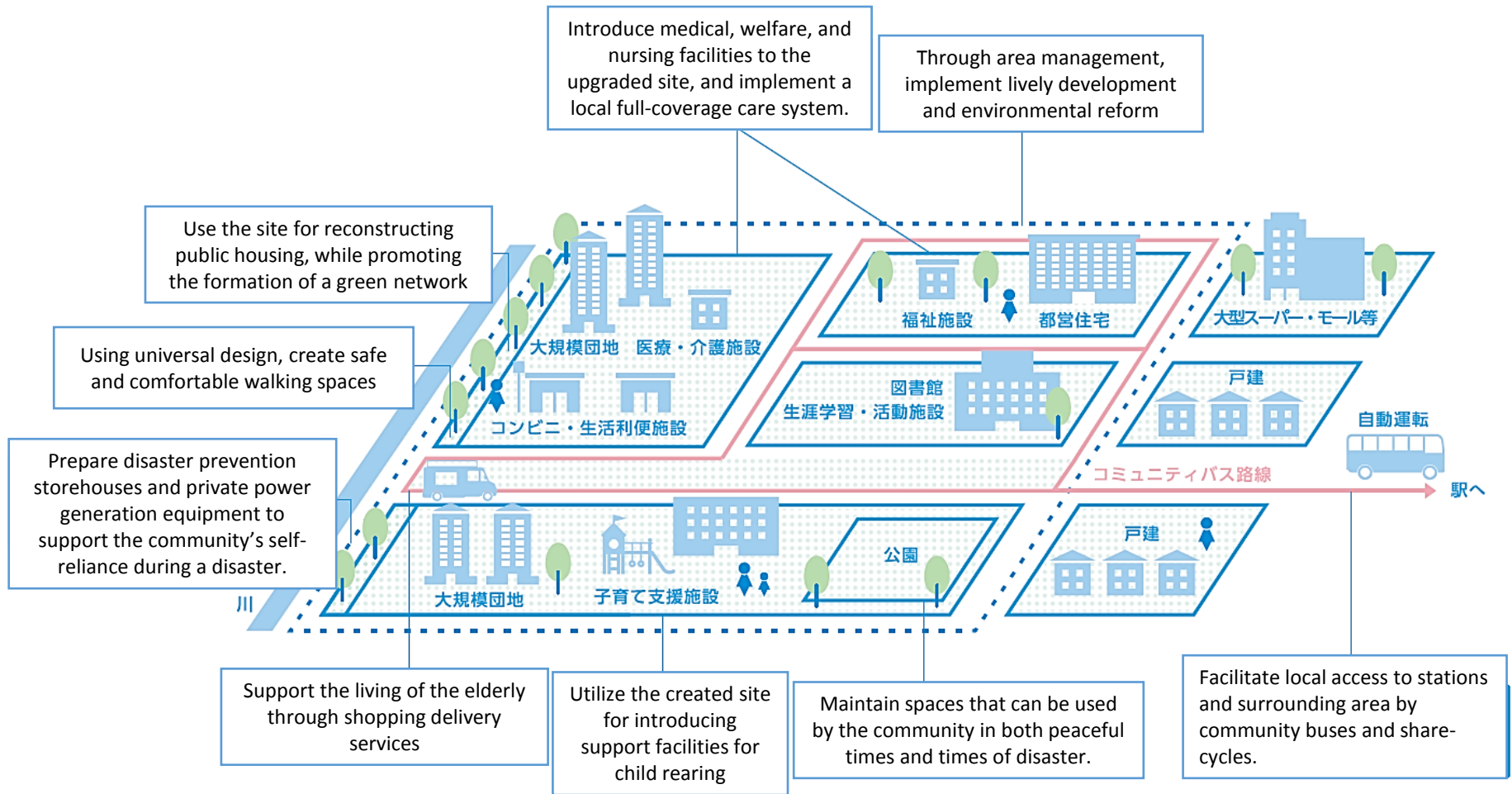
▪ Realization of rich lives

Create a society where everyone can lead vibrant lives, can choose where to live according to their life stage and individual attributes, and live with a sense of purpose.

<Example of a housing complex where generations from children to the elderly can interact>



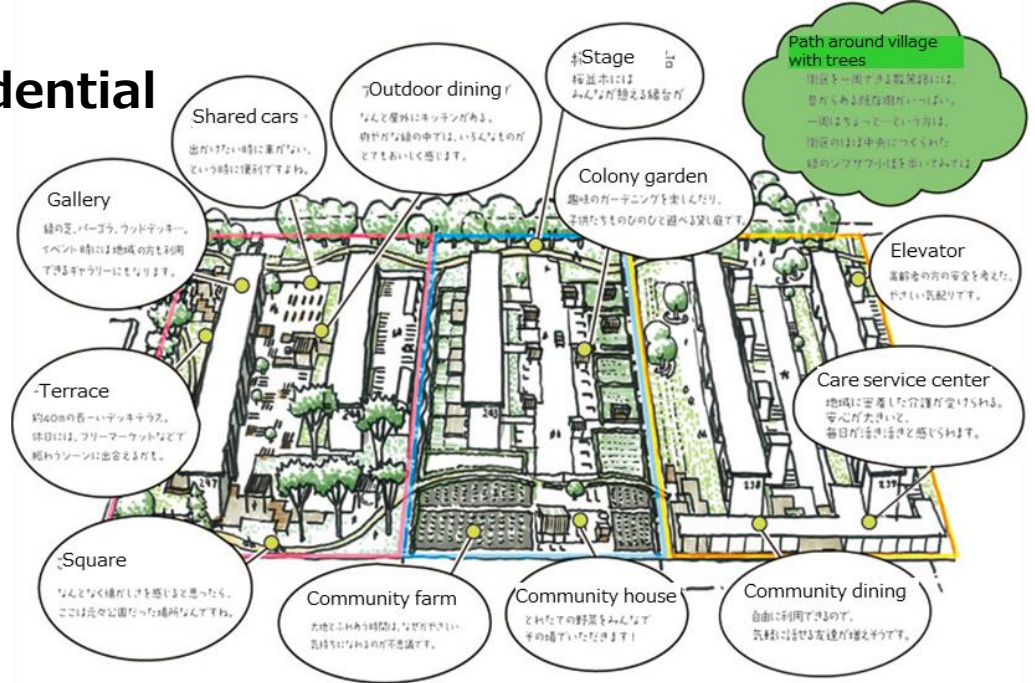
Image of Upgrading Large-scale Multi-unit Apartments while enhancing Urban Functions



Residences

Revitalizing large-scale residential developments

Before



- 1 Shared flats
- 2 Flats with small farm
- 3 Flats for elderly with health and welfare services

After



Strategy 5: Realize highly convenient lifestyles and create diverse communities

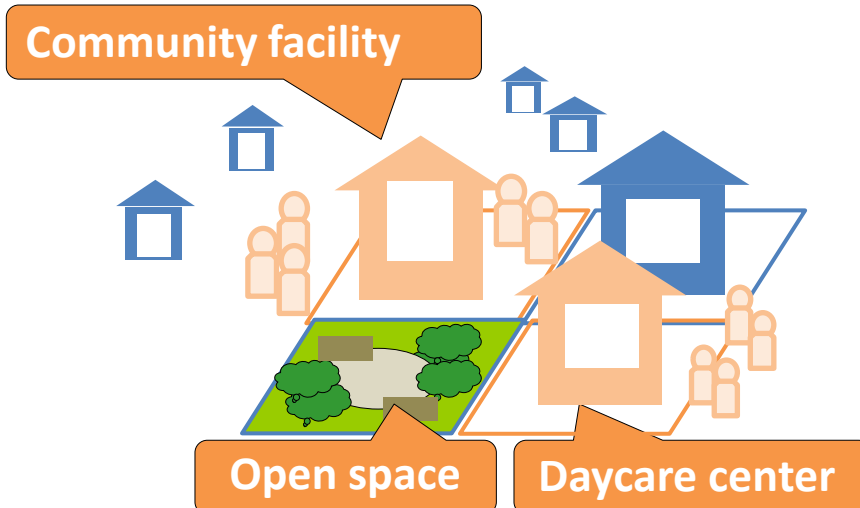
Raise a local area's added values by renewing vacant houses and vacant land.

▪ Make use of vacant houses to create exchanges among people

Utilize vacant houses for community purposes. At the same time, **dispose of old vacant houses** and advance the creation of spaces that contribute to **community revitalization**.

<Image of vacant houses converted into local community facilities, etc.>

<A warehouse renovated into a cafe>



Strategy 6: Build a city with a network of beautiful seasonal greenery and water

A major principle is to not reduce Tokyo's total amount of greenery

- Protect precious greenery and balance active urban life with a rich ecosystem
- Nurture urban agriculture which is a valuable part of industry and invigorates the community
- Create urban spaces where people can enjoy the water

Preserving and regenerating high quality greenery



Yokosawairi Satoyama Nature Reserve

Branding of local Tokyo vegetables



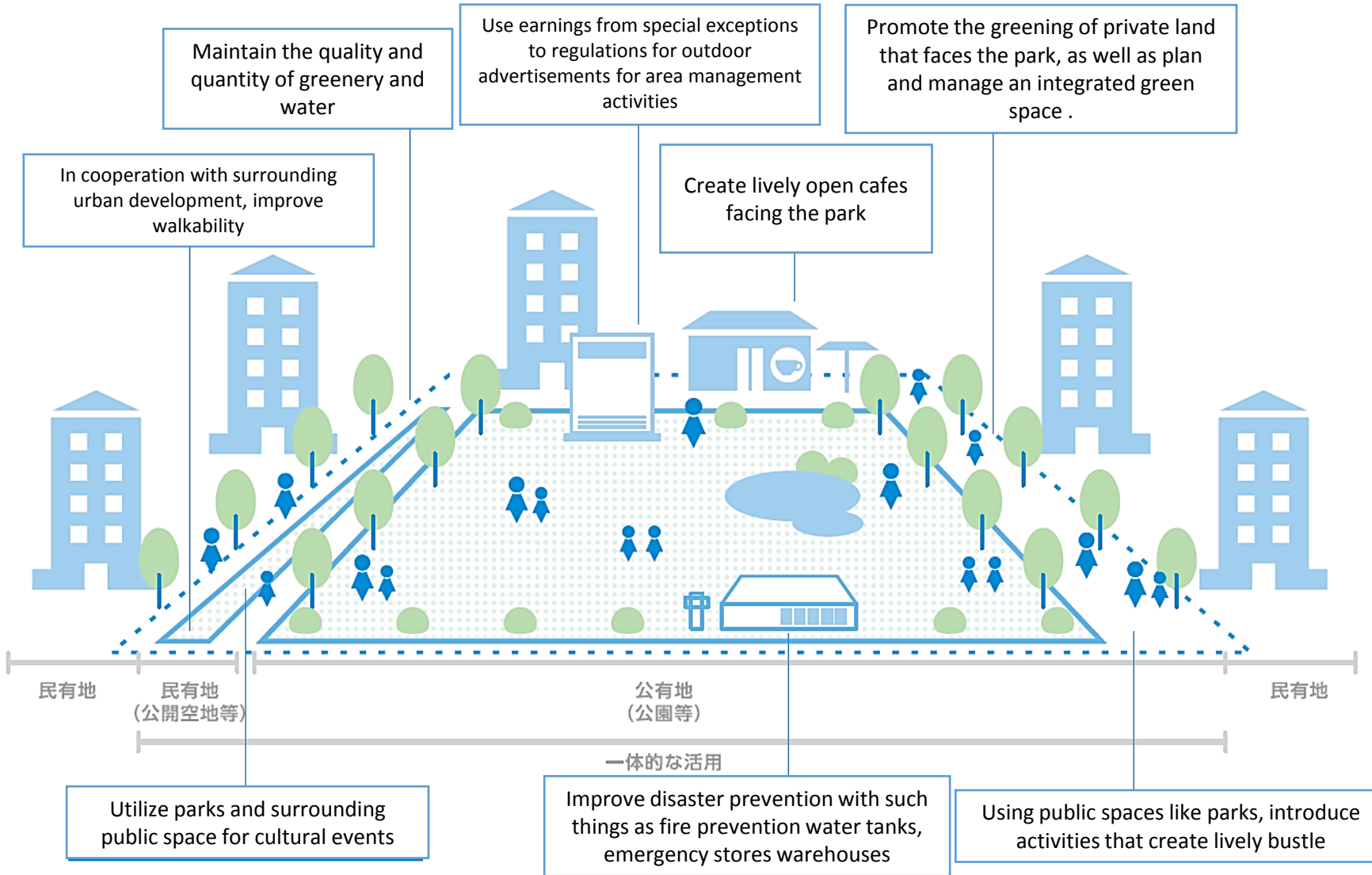
Harvesting experience

Creating vitality in waterfront areas



Tennozu, Shinagawa-ku

Image of Utilizing Lively Park Space



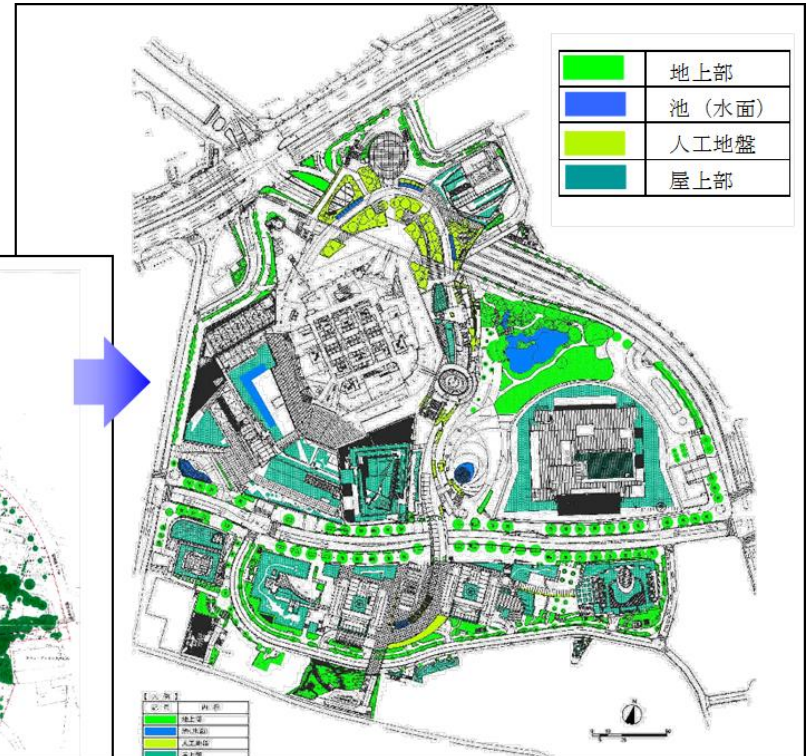
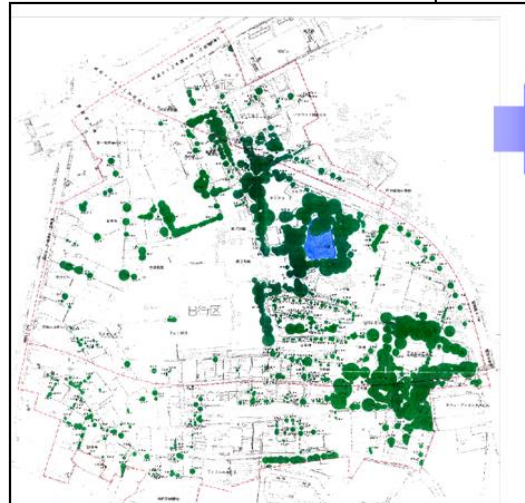
Greenery



Otemachi Forest
at Otemachi Tower

Roppongi Hills

Green Area
16,500m²
→26,000m²



Strategy 7: Create new appeal through the arts, culture, and sports

Use local history, tradition and culture for town development

▪ Can sense Tokyo's history and culture everywhere in the town

Through utilization of development opportunities and others, **steer efforts for** preservation and protection of historical buildings, civil engineering heritages, Edo culture, and **high quality architectural design.**

< Building a cultural facility using the opportunity presented by a development project >
(GINZA SIX Noh Theater)



< Lighting-up of a historical building >



Restoring Historical Elements



Coredo Muromachi/Fukutoku Shrine (Nihonbashi, Chuo-ward)



Reconstructed Shrine



Mitsubishi-ichigokan Bldg.



Tokyo Station

Create Bustling Spaces for Culture and the Arts in the City Center

- **Public space is used for Cultural and Arts activities**

Maintain a structure where area management organizations can utilize pedestrian and public spaces as lively cultural/arts areas.

<Example of events in public spaces>



Chiyoda-ku, Marunouchi Nakadori



Ota-ku Sakasagawa Dori

Athletes Village after Tokyo 2020 (Image)

Waterfront Scenery and Harmony

- Improved line of sight and flow of movement from inner city areas out towards the water.
- The nice skyline of a residential district visible from sea.
- Combining seamlessly the residential land with surrounding greenery and wide spaces.



Harumi
Central Axis

March Mobility
Station

Ferry Port

Hydrogen Station

Planned School
Space

Liberal Wide-open Spaces

- Walking paths where you can enjoy waterfront scenery (Rainbow Bridge, etc)
- Cafes set up near the ocean

A Transformed Townscape

- Gentle change in colour (Low-rise to High-rise)
- Wall-surface design scheme (Uneven, rugged outside surface)

※現時点でのイメージであり、今後変更の可能性あります。

VI . Individual vision for each area

For Tokyo to achieve further high quality growth, it is crucial that each hub and region use its **individuality and potential to the fullest, and compete with each other to create new value.**

To realize the new urban vision, **various parties, including Tokyo's residents, municipalities, and private developers, must cooperate** to promote attractive urban development and **enhance the vitality of Tokyo as a whole.**

Here we presented a glimpse of our future vision for Tokyo's hubs and areas, including:

- Hubs where central functions that support the economy, industry, and others are concentrated
- Hubs serving as the center of people's lives and exchange
- Areas with historical townscapes and facilities for the arts and culture
- Areas with waterfronts, greenery, and open agricultural land

VII. Toward Realization of the Vision for the 2040s

○ Urban development through the participation and collaboration of various parties.

- In close cooperation with stakeholders, residents, business people, and municipalities, promote urban development leading towards the future vision sought

○ Policy-guided urban development

- Promote the early settlement and reform of specific plans and various policies, such as reform of 「Plan for Development, Preservation, and Maintaining Town Planning Zones」 and 「Plan for the use of committees for urban development」

○ Project-style urban development

- Strive for the best policy with joint-ownership and cooperation by stakeholders, including multi-faceted themes that are able to come to a solution.

○ Leave a legacy to the next generation

- Steadily strive for that which should be achieved and realize a 「Advanced mature city with vitality and comfort」 、 while reliably handing over our future to the next generation.



Thank you for your attention.

<reference>

The Grand Design for Urban Development is announced on the website
of the Tokyo Metropolitan Government

http://www.toshiseibi.metro.tokyo.jp/keikaku_chousa_singikai/keikaku.html