

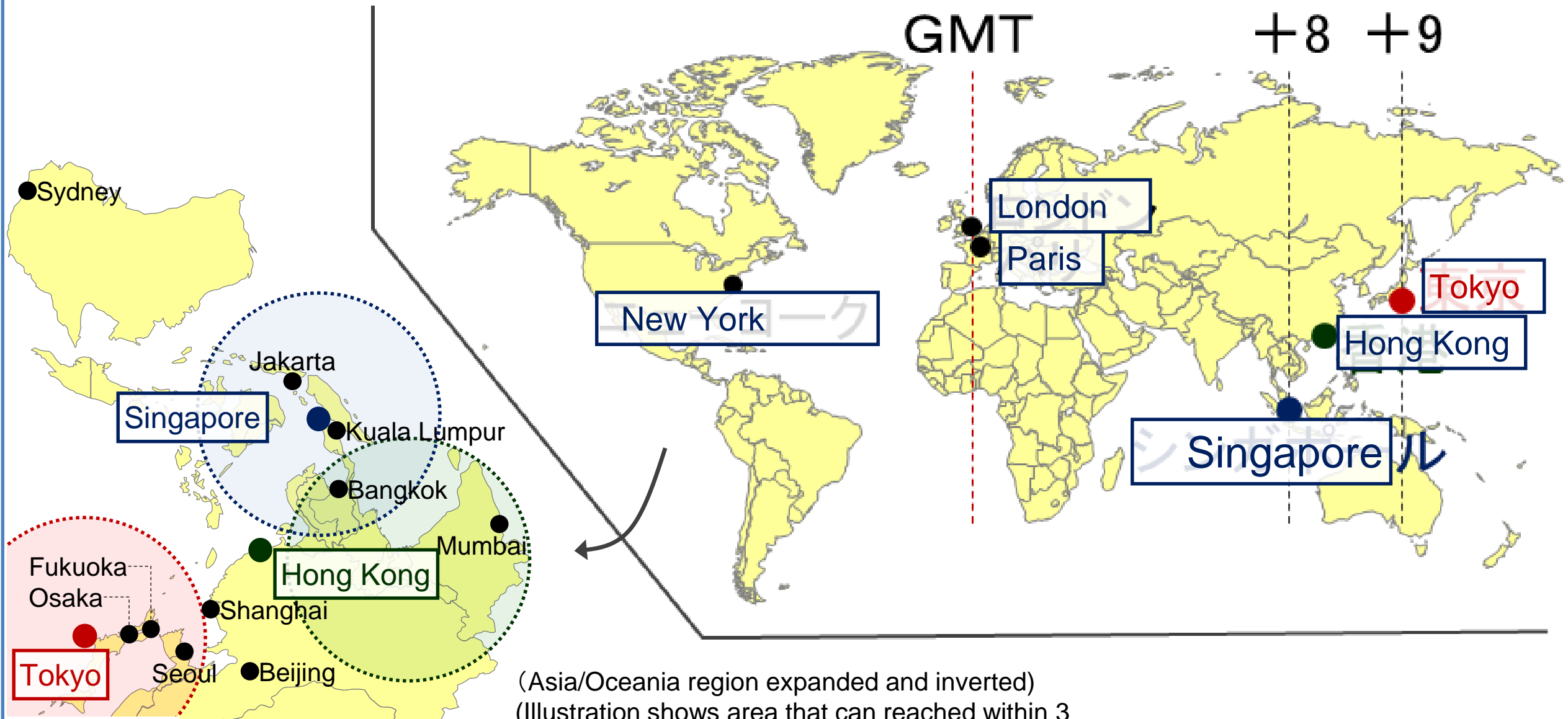
Reinforcing International Competitiveness of Cities

Moritaka Sato, Division Manager
Urban Renewal Promotion Division, City Bureau,
Ministry of Land, Infrastructure, Transport and
Tourism

Present Condition of Japan's Cities

○ International companies, etc. recognize Japan (Tokyo) as being located in the Far East, in a place that is inferior in terms of location to Singapore, which has excellent access to ASEAN countries, etc. and Hong Kong, which has excellent access to China, etc.

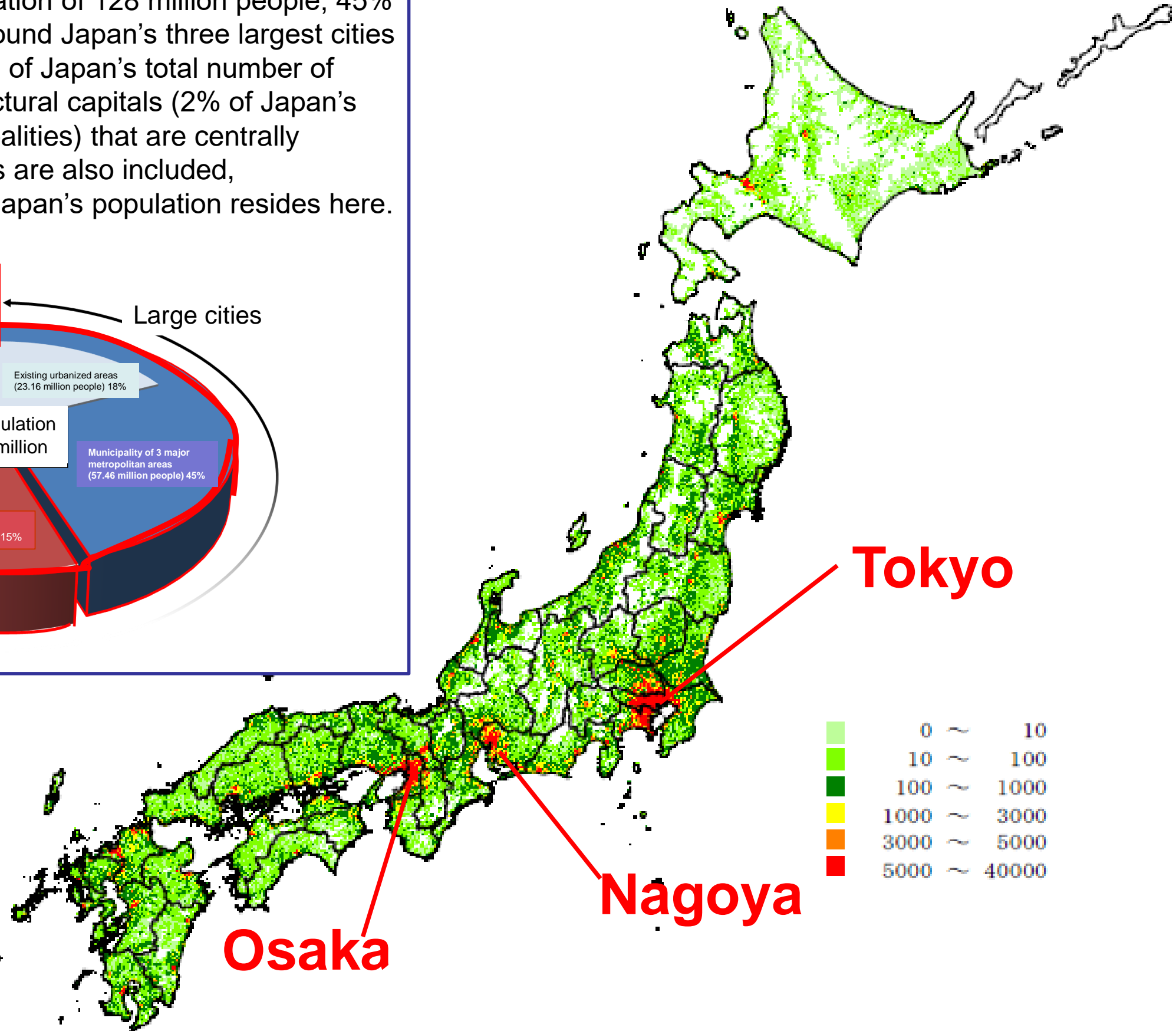
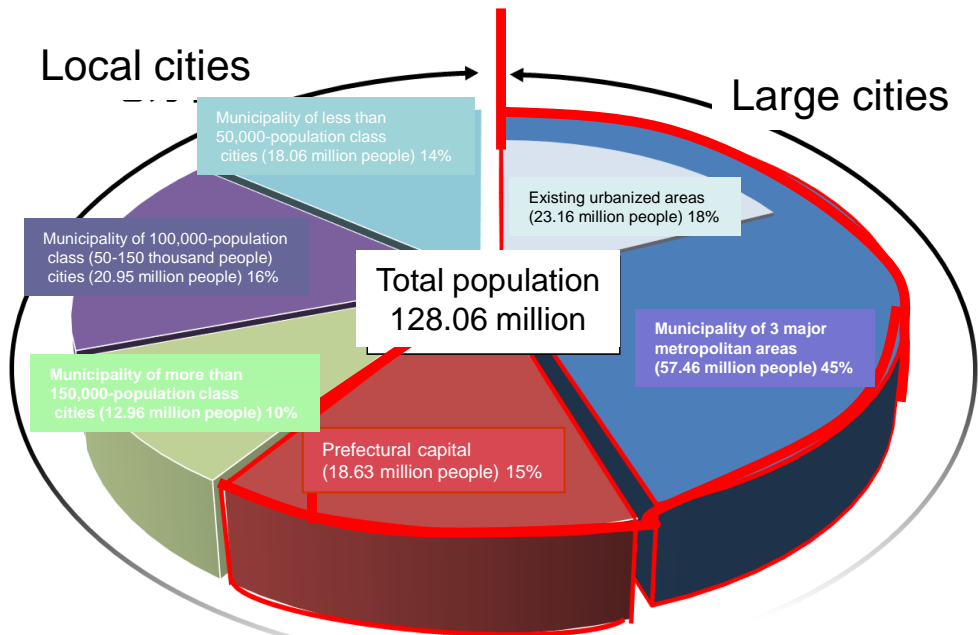
Location within the world and Asia



(Asia/Oceania region expanded and inverted)
(Illustration shows area that can be reached within 3 hours from Tokyo/Hong Kong/Singapore)

Japan's urban composition

- Of Japan's total population of 128 million people, 45% live in municipalities around Japan's three largest cities (which account for 18% of Japan's total number of municipalities). If prefectural capitals (2% of Japan's total number of municipalities) that are centrally located in these regions are also included, approximately 60% of Japan's population resides here.



Great Kanto Earthquake (1923)

- No. of fatalities: Approx. 140,000 (90% caused by fire)
- Complete or partial destruction: Approx. 250,000 houses
- Town area destroyed by fire: Approx. 3,500ha (approx. 44%)



Scene after disaster (Kyobashi, Tokyo)

Great Hanshin Earthquake (1995)

- No. of fatalities: Approx. 6,400 (80% caused by collapsing structures)
- Complete or partial destruction: Approx. 210,000 houses
- Town area destroyed by fire: Approx. 7,500 houses
- Road blockages caused by building collapse



Scene after disaster (Kobe City)

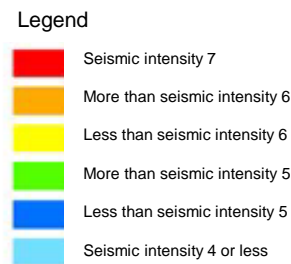
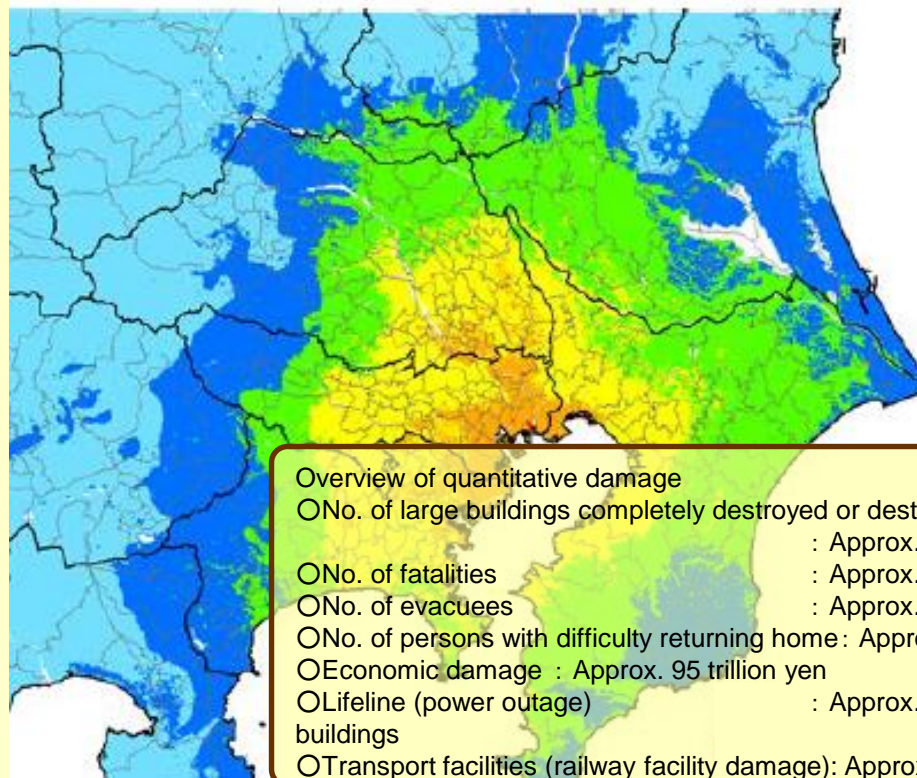
Great East Japan Earthquake Disaster (2011)

- No. of fatalities: Approx. 19,000 (90% caused by tsunami)
- Complete or partial destruction: Approx. 400,000 houses
- No. of persons with difficulty returning home: Approximately 5.15 million (Tokyo area)
- Wide-ranging liquefaction/landslide collapse damage



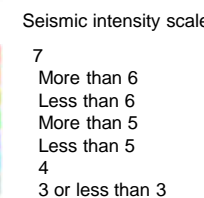
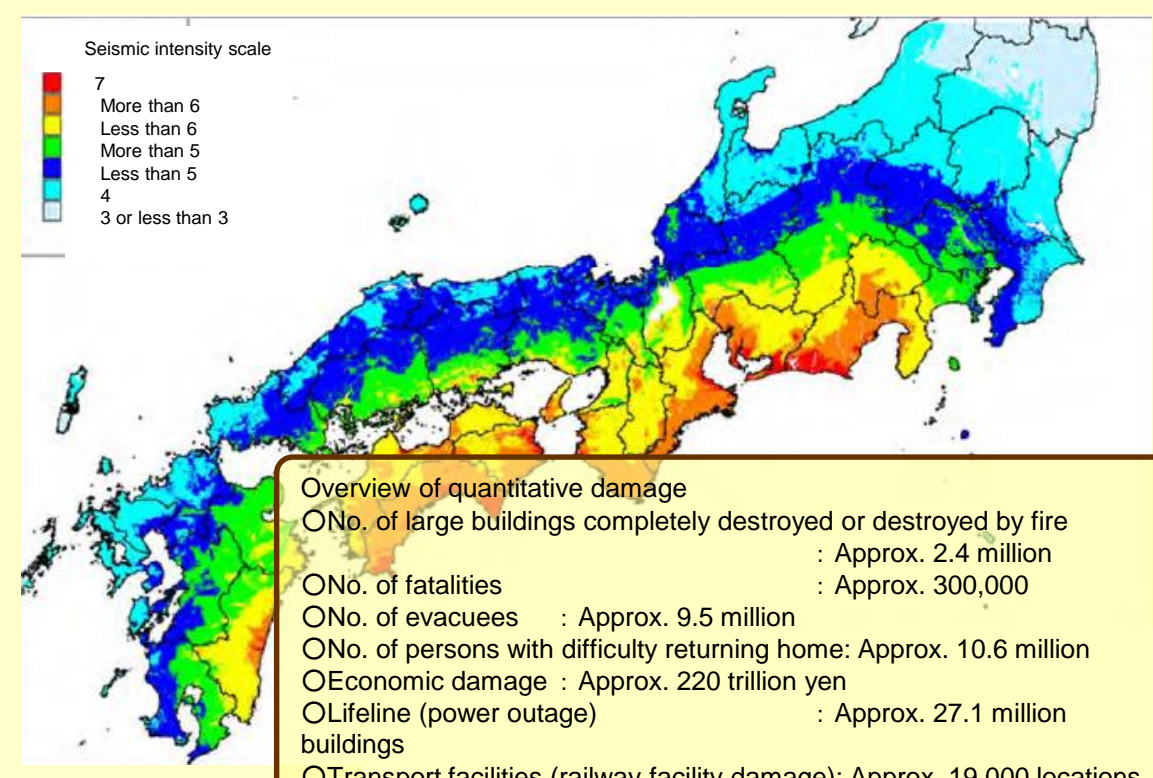
Scene after disaster (Kesenuma City)

Earthquake directly beneath Tokyo (assumed damage)



- Overview of quantitative damage
- No. of large buildings completely destroyed or destroyed by fire : Approx. 610,000
 - No. of fatalities : Approx. 23,000
 - No. of evacuees : Approx. 7.2 million
 - No. of persons with difficulty returning home: Approx. 8 million
 - Economic damage : Approx. 95 trillion yen
 - Lifeline (power outage) buildings : Approx. 12.2 million
 - Transport facilities (railway facility damage): Approx. 840 locations

Nankai Trough earthquake (assumed damage)



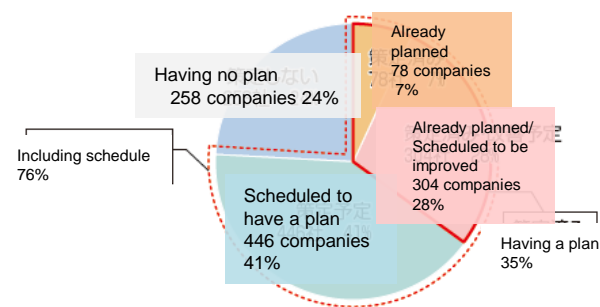
- Overview of quantitative damage
- No. of large buildings completely destroyed or destroyed by fire : Approx. 2.4 million
 - No. of fatalities : Approx. 300,000
 - No. of evacuees : Approx. 9.5 million
 - No. of persons with difficulty returning home: Approx. 10.6 million
 - Economic damage : Approx. 220 trillion yen
 - Lifeline (power outage) buildings : Approx. 27.1 million
 - Transport facilities (railway facility damage): Approx. 19,000 locations

For city center business location areas supporting Japan's international competitiveness, energy self-reliance/multiplexing, etc. are challenges for the resolution of vulnerabilities.

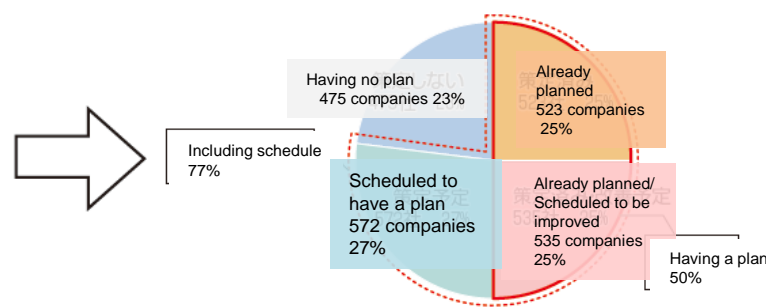
○ Since the Great East Japan Earthquake Disaster, companies planning on BCP have greatly increased and companies' disaster response awareness has been increasing.

○ When continuing business in time of disaster, infrastructure such as electric power becomes bottlenecked.

Planning on BCP as of April 2011

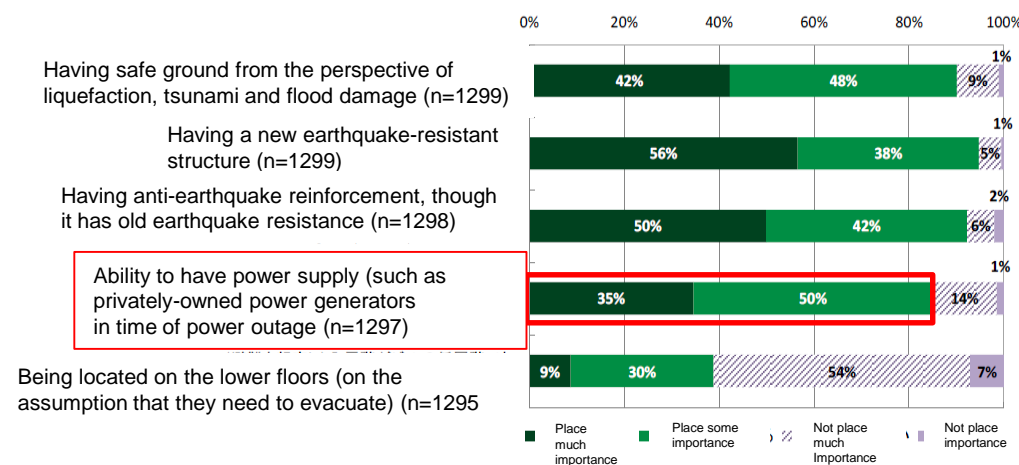


Planning on BCP as of November 2012

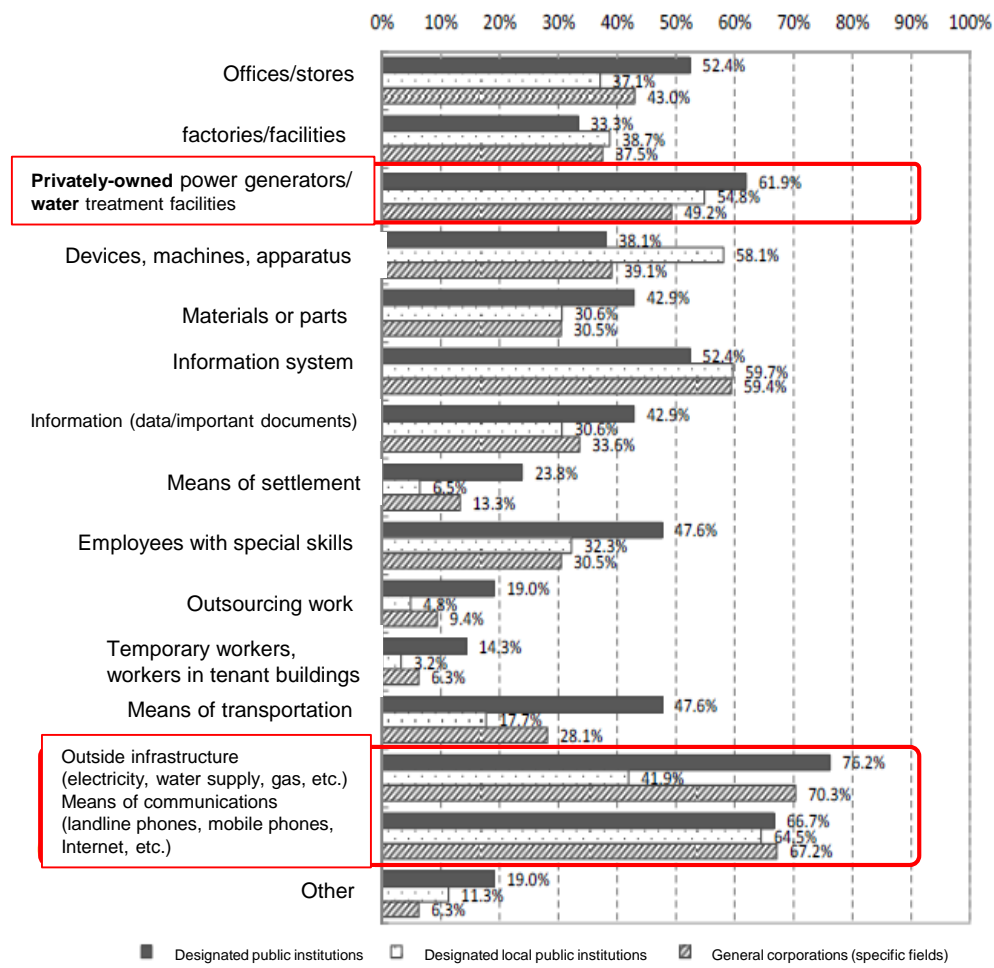


January 10, 2013 Extract from materials published by Mori Building Corporation

○ In terms of building functions to be focused on when selecting office buildings, more than 80% of companies mentioned "Ability to have power supply in time of power outage".



Source: Extract adapted from materials published by Xymax Real Institute Corporation (October 11, 2013)



Source: Factual investigation of business continuation in specific fields (2013, Cabinet Office)

Companies with the intention of taking out new office leases mentioned buildings with high-grade equipment and excellent earthquake resistance, etc.

Common responses in Tokyo office needs survey:

- Want to move to building with excellent earthquake resistance
- Want to move to building with high-grade equipment
- Want to move to building with excellent disaster prevention system/backup system
- Want to move to building with excellent security

Policy towards Reinforcing International Competitiveness of Cities

Targeted form of large cities

①A town where it is easy to do business globally ②A town where it is easy for aged persons to live and for children to be born ③A beautiful town overflowing with water and greenery, and rich with history and culture ④A safe town with peace of mind

3 basic policies

1. Acceleration of favorable circulation of urban regeneration

- Deepening urban regeneration system (Enhancing international competitiveness of cities)
- Implementation of cutting-edge disaster prevention/reduction functions (City ensuring business continuation and providing escape)
- Efficient distribution environment maintenance (Repeated maintenance of distribution locations/optimization of device distribution)

2. Formation of large city “compact + network” Promotion of new public transported-oriented urban development

- Urban development alongside railway lines by government and people together
- Environmental maintenance to deal with low birth rate/ageing society (Making doctors’ surgeries closer to housing, etc.)
- Conservation/regeneration of water and greenery/farming (Conservation/regeneration of water and greenery, conservation/application of urban agricultural land, etc.)

3. Construction of disaster-resilient large cities (disaster prevention/reduction)

- Wide area disaster prevention/reduction initiatives
- Improvement of dense urban areas
- Improving safety of underground shopping centers, etc.

In relation to the above, the following viewpoints are important: “Make use of and expand cities’ individual accumulation”, “Ensure greater diversity/sustainability with cooperation/mutual complementation”

⇒ In large city policy, emphasis is given to enhancing cities’ international competitiveness improving their disaster prevention performance

Basic policy of urban regeneration (Cabinet decision)

Private-centric urban regeneration
(large cities and regional urban centers)

Urban regeneration urgent maintenance regions
(specified by cabinet order: 53 regions)

Enhancing international competitiveness of cities

Special urban regeneration urgent maintenance regions
(specified by cabinet order: 13 regions)

Special cases of urban planning, etc.

Urban regeneration special districts
(81 districts)

Acceleration of approval for urban regeneration projects, etc.

Urban planning proposal system

For private urban regeneration businesses

Tax system exceptions

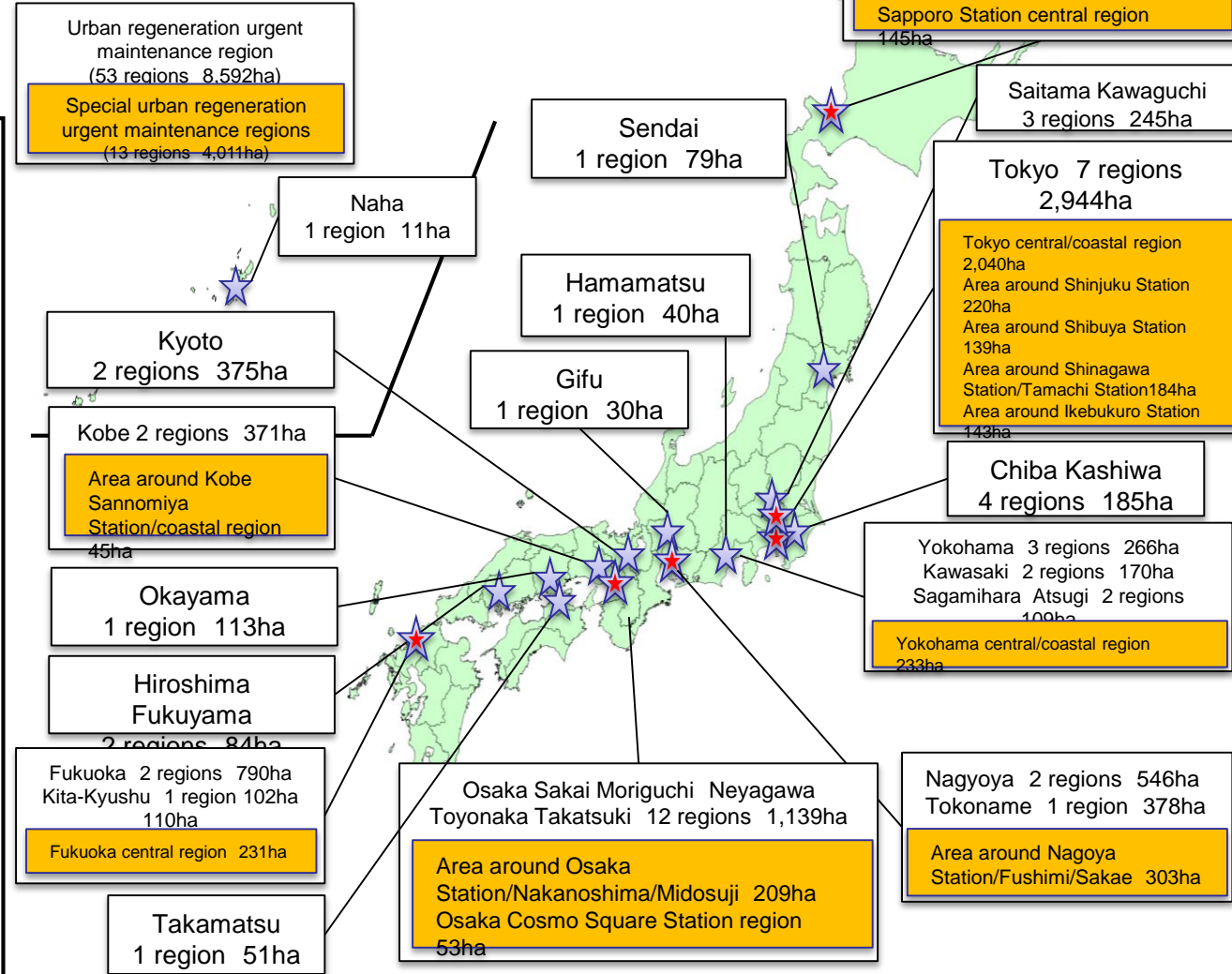
Financing support

(112 plans authorized)

Urban regeneration safety maintenance plan
(18 plans)

List of urban regeneration urgent maintenance regions

Legend



Examples of authorized private urban regeneration



Toranomon Hills
(Tokyo central/coastal region)



Grand Front Osaka
(Area around Osaka Station/Nakanoshima/area around Midosuji)

Focusing on the 2020 Tokyo Olympics, Japan's large cities, like cities such as New York and London, are promoting private urban development projects on both hard and soft sides while flexibly maintaining and applying existing urban infrastructure in order to improve international business environment and disaster prevention performance, etc. so as to propel the economy of the whole country as locations for economic activities that go beyond national borders.

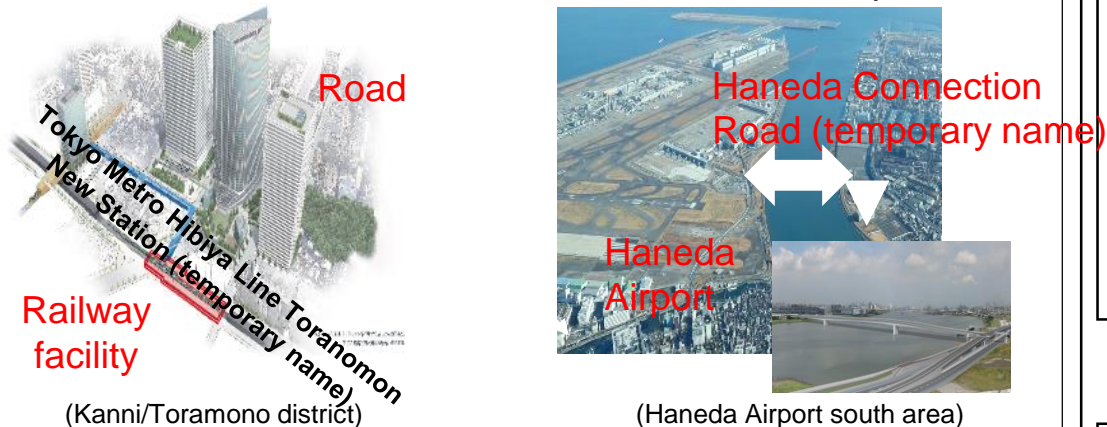
In particular, the business center locations of large cities accumulate world-standard business functions/residential functions by promoting infrastructure maintenance, calling in international investment and personnel, and enhancing international competitiveness.

Maintenance of facilities enhancing international competitiveness (hard maintenance, etc.)

Public welfare facilities maintenance model

- New construction or alteration of roads
- Construction or improvement of railway facilities
- Bus terminal maintenance ○Maintenance of facilities around railway stations
- Urban area redevelopment projects ○Land readjustment projects
- BRT maintenance

Overview of urban infrastructure development



Distribution business location maintenance model (international competition business continuation location maintenance project)

- Maintenance of large-scale distribution business maintenance facilities, etc.

BCD maintenance model (international competition distribution continuation location maintenance project)

- Maintenance of energy conduits, etc.

Enhancing international competitiveness/city sales support projects (soft countermeasures, etc.)

- Presentations domestically and overseas for city sales
- Establishment of foreign-language information/guidance boards in public spaces
- Maintenance of international competitiveness enhancement facilities



Exhibiting at international event



Maintenance of international conference venues

Enhancing initiatives for flexible, beneficial use of city center spaces

- Making flexible the obligations for parking lot establishment to counterbalance local parking supply and demand, etc.
- Support for cooperative projects between government and people aimed at sharing a vision of the future of urban transport, such as revision of parking supply and demand, etc.

Attracting private investment/international personnel

Formation of international business locations/world-standard residential spaces

Taking into account the effects on the social economy of large-scale disasters in regions where urban functions are accumulated, based on the large-scale chaos when up to approximately 5.15 million people in the Tokyo area had difficulty returning home, etc. in the Great East Japan Earthquake Disaster, there is support for both hard and soft integrated, systematic countermeasures through cooperation between government and people in order to ensure the safety of people staying in urban regeneration urgent maintenance regions, main stations and areas around central stations, and continue urban functions.

Urban regeneration urgent maintenance regions + main stations + areas around central stations

Conference for urban regeneration urgent maintenance regions/people with difficult returning home countermeasures

○ **Formation of urban regeneration safety guarantee plan/area disaster prevention plan**

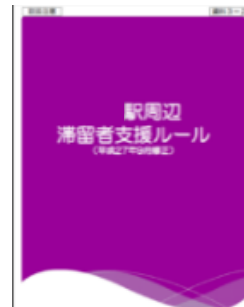
- Maintenance and management of evacuation routes, evacuation facilities, emergency reserves storehouses, etc.
- Contents of work to be carried out in time of disaster (evacuation guidance, information collection/provision, provision of stored supplies, etc.)
- Contents of training carried out in normal times, etc.



Both soft and hard countermeasures based on plans

Soft countermeasures

Establishment of disaster drills, information transmission rules and emergency reserve rules, and formation of rules relating to evacuation methods and securing evacuation facilities, etc.



Formation of rules

Hard countermeasures

Maintenance of disaster prevention emergency reserve storehouses, emergency communication/information provision facilities, emergency power generators, etc.



City Future Gallery (temporary name) concept

Establishing centralized opportunities to enable people to personally experience the development of Tokyo as a global city, changes in urban development, and future plans, etc. will lead to initiatives for inbound demand, such as transmitting the appeal of Japan's cities, calling out to foreign companies and advanced foreign personnel, and attracting foreign tourists, etc., as well as outbound promotion such as overseas expansion of urban development and promoting export of infrastructure systems, etc.

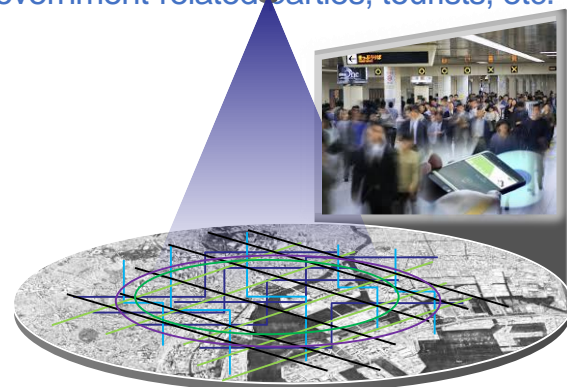
Tokyo locations (hub functions)

Facilities transmitting in an impressive, easy-to-understand way that origins, future vision and advanced infrastructure technology, etc. of Japan's cities

City model & projection mapping

Simulated experience equipment

Targets: Investors, overseas businesspersons/government-related parties, tourists, etc.



⇒ Data of places, etc. related to images on-screen is plotted by projection mapping onto a city model



⇒ Personal experience of history of Tokyo, etc. (processes and changes from past to present to future, etc.) by wearing a VR (Virtual Reality) headset



Cutting-edge technology systems



⇒ Exhibiting and providing personal experience of cutting-edge equipment such as robot guides and new forms of mobility, etc.

MIPIM 2018

Exhibiting at one of the world's largest real estate trade fairs, organized by Reed Midem (*2) and held every March in Cannes, France. Approximately 24,200 people participated in MIPIM 2017 (Cannes), held in March 2017. In 2018, it will be held from March 13 (Tue.) to 16 (Fri.).



Transmitting information of urban foundation technology

Production of portal site (in Japanese and English) to serve as receptacle for company-crossing information transmission through cooperation between government and people as an initiative aimed at 2020 for city sales and overseas expansion of urban foundation technology (transport, city development, etc.)

URL: <http://www.uit.gr.jp/info-porta>

