TOKYO 2050: VISIONS FOR A STRUGGLING GIANT

Tokyo's urban transformation relies on both a local and a national planning model designating urban cores that enable economic and urban development interconnected through the most efficient transportation systems. This circular model is set to help the Asian megacity tackle the demographic and economic problems that Japan will be facing in the upcoming decades, way beyond the 2020 Olympic Games.

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ALAIN GUILHOT/DIVERGENCE IMAGES

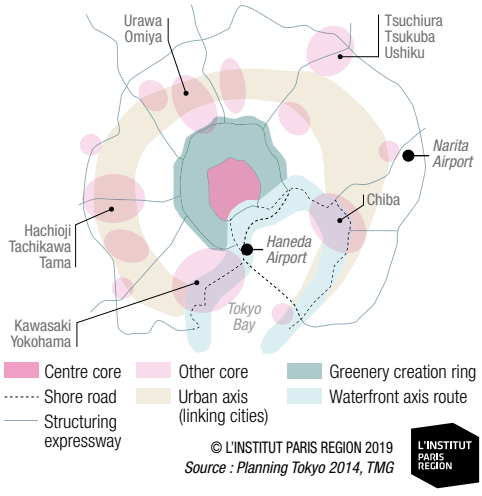
In order to understand Tokyo's and Japan's visions for 2050, it is necessary to highlight the economic and demographic projections for this decade. In its *Grand Design of National Spatial Development* policy report (2014), the national government notes several key challenges facing the country: decreasing population, low-fertility, extreme aging, natural disasters, and increased inter-urban competition. Major urban hubs will see small increases in population as regional migration continues. The Japanese economy will undoubtedly face a heavy burden as consumption levels fall and the available workforce decreases. Given these troubling forecasts and the solutions being sought by the Japanese government, where does Tokyo fit within Japan's national planning and what role will the megacity occupy? How can urban planning lead to a more promising future for Tokyo?

TOKYO'S CIRCULAR RAIL-ORIENTED PLANNING MODEL

Tokyo's current planning model revolves around the concept of the "Circular Megalopolis" which forms the base of urban development strategies for the city[1]. Its main idea is an organized urban structure: local centers acting as compact cores exhibit the essential urban functions; connected through strong transportation, commercial, residential, and mixed-use development occurs mainly around urban rail stations. This structure facilitates the delivery of services throughout the city, enhancing the growth of cores with unique economies or specializations, and promoting exchange and collaboration between localities and industries.

In 2017 the Tokyo Metropolitan Government's Bureau of Urban Development published its *Grand Design for Urban Development*. In this context, the *Circular Megalopolis* model got updated

TOKYO **CIRCULAR MEGAPOLIS**



Source : Planning Tokyo 2014, TMG

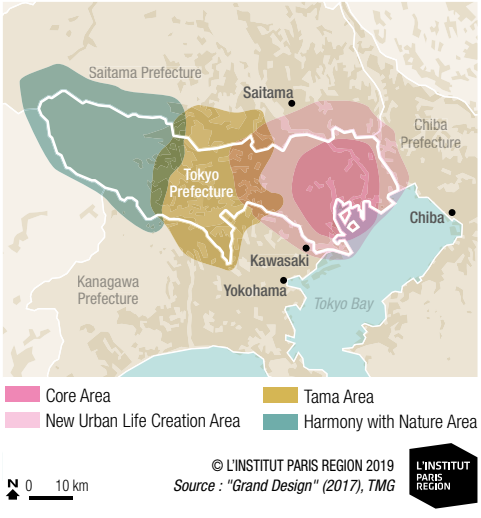
and enlarged to a larger scale in order to better include the different regions within the Greater Tokyo Area (Kanagawa, Saitama, and Chiba Prefectures), placing new emphasis on the specialized role of each sub-region. The *Grand Design* describes the current planning goal as "creating a highly developed, mature city that grows sustainably in harmony with the environment while employing the latest technology". The notions of maturity and technology reflect the recognition of demographic challenges Tokyo will face and the importance of using urban planning tools to tackle those challenges.

The *Grand Design* defines the administrative area of the Metropolitan Government itself as one of the sub-regions and divides Tokyo into four spatial areas, and two zones—each with a specific urban development focus.

1. The *Core Area* covers the most central wards and the waterfront area. It forms the economic heart of Tokyo. Throughout new road and rail links, including to the Tokyo International Airport at Haneda, the Core Area maximizes the potential for international exchange. It covers Tokyo's *National Strategic Special Zones* and *Special Zone for Asian Headquarters* aimed at attracting high value companies with incentives such as tax reductions, subsidies, and deregulated immigration and investment procedures.
2. The '*New Urban Life Creation Area*' includes several compact cities surrounding regional transport hubs. These traditionally suburban areas will take on more urban functions to provide a well-serviced and connected network of livable neighborhoods.
3. The *Tama Area* will offer improved living conditions, urban functions, and connectivity. It covers the *Tama Innovation Exchange Zone,* promoting research and collaboration between universities, laboratories and companies to facilitate technology innovative.
4. The '*Harmony with Nature Area*' is mostly about the mountainous Western part of Metropolitan Tokyo, providing ample green space and natural recreation opportunities to Tokyo's inhabitants.

Tokyo's primary strategy will be to harness the existing domestic attractiveness while boosting its international magnetism through the concentration of urban functions in the compact core, as to be seen in the following project examples, led by the long-term visions following the Olympic Games in 2020.

THE **GRAND DESIGN**
FOR METROPOLITAN TOKYO



VISIONS AND STRATEGIES FOR THE POST-OLYMPIC GAMES PERIOD (2020-2040)

The 1964 Olympic Games drove Tokyo's development as a modern city forward, bringing new infrastructural capacity with the completion of the high-speed train (Shinkansen) and introducing new urban developments. The 2020 Olympic Games will display Tokyo's advancement as a mature city with vitality. By reusing existing facilities and locating the bulk of sport events within the core and along the waterfront, accessibility will be kept high. The Athletes Village on the island of Harumi will be transformed into a mixed-use residential district in the post-Games period, expected to provide 5,650 new housing units. For the Metropolitan Government, the Games provide a platform to display its goal of transitioning to a highly-developed

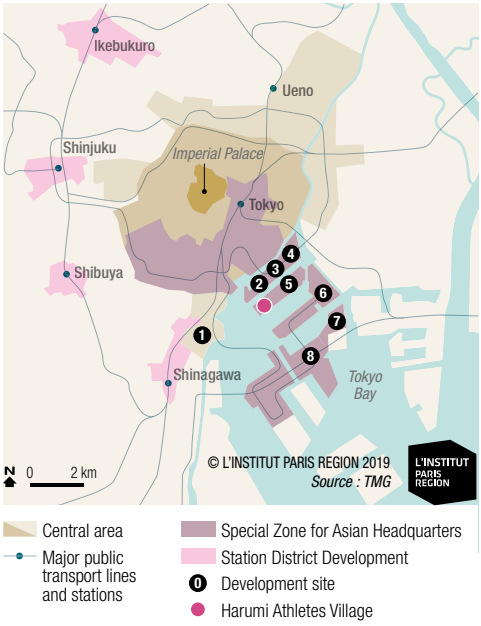
TOKYO WATERFRONT

The development of Tokyo Waterfront, reclaimed form the bay, continues to expand inward to central Tokyo. Several sites have been developed starting with the areas closest to the center: Shibaura ❶, Kachidoki ❷, Tsukishima ❸, Tsukuda ❹, Harumi ❺, Toyosu ❻, Shinonome ❼ and Ariake ❽. The overall area began to develop in earnest from 1990, continuing to densify as its attractiveness has slowly grown. The largest area of undeveloped land in the district of Harumi will serve as the Olympic Village, with a significant portion of its energy needs deriving from hydrogen power —in line with the Japanese Government's strategy of developing safer, cleaner, and reliable energy systems. Additionally, the district of Kachidoki gains importance throughout connection to central business districts by a circular road. ■

metropolis in harmony with the environment, while also acting as a catalyst for tackling socio-economic and demographic challenges over the next 20 years. Along with the creation of major infrastructure projects, such as new access roads and train lines connecting the waterfront to the core, several large-scale urban redevelopment projects, especially within the *Special Zone for Asian Headquarters,* will bring new opportunities for both foreign business and tourism. Globally connected urban functions will increase within Tokyo's central districts, as well as facilities for local residents.

When looking at the post-Games period though, several challenges can be identified. One is ensuring sustained economic growth in the years following the Olympics, as the often-associated economic bump historically fails to translate into long-term growth. In the past 30 years, only Atlanta (1996) and London (2012) succeeded in maintaining an upward trend, while other host cities gradually tapered and fell. Economic growth and productivity in Tokyo's case will also be influenced by the demographic realities in Japan. But while Japan's population is decreasing, Tokyo's population is still experiencing growth, especially within the central wards. With the completion of transportation and urban

MAJOR URBAN **DEVELOPMENT PROJECTS**



SHINAGAWA

The major urban project in the district of Shinagawa envisions to create a dense international exchange hub with the opening of the new Shinagawa JR train station for 2020 designed by architect Kengo Kuma. Around half of the width of the current railway area will be redeveloped to connect two major main roads transverse to the railways, and to create new public spaces and high-rise residential condominiums. The main focus of the project lies in the improvement of Shinagawa's business environment and transportation infrastructure, rather than creating a sustainable and green environment. The overall construction is aimed to continue past 2030. ■

TOKYO FUTURE SCENARIOS 2035

Looking to the future, threats to Tokyo's development are outlined in 2014 in a study by the Mori Memorial Foundation's Institute for Urban Strategies. Titled *Tokyo Future Scenario 2035,* the future of Japan's capital is here considered in the context of internal trends as well as international competition. Several "Key Driving Forces" are identified along with various specific actions allowing us to formulate strategies leading to positive outcomes. Yet, in view of the threats of failures of deregulation, promoting competitiveness and reforms of the social structure, negative scenarios were also outlined.

"Stormy" scenario

Tokyo's population peaks in 2050 and then declines, working-age population decreases, while the number of the elderly rises. The Growth Domestic Product (GDP) continues to fall, business activity grinds to a halt and tax burdens on citizens grow larger. Large-scale redevelopment does not happen due to a lack of funds. A long predicted earthquake strikes directly below Tokyo hitting the population numbers hard. As Tokyo loses its economic attractiveness, it becomes isolated from the international network. The unemployment rate rises and universities shut down due to managerial problems.

"Rainy" scenario

Tokyo has deregulated but fails to fully promote competitiveness and specialisation. The city suffers from economic and income stagnation, forcing people to move to the suburbs where the cost of living is cheaper. As much of the land in Tokyo's inner city is bought up for speculative purposes, the urban structure falls into disarray as landowners use their land haphazardly. Many buildings are left abandoned as the city is too busy assuring maintenance and management. Due to indiscriminately increasing the number of foreign workers, an ill-defined sense of openness, polarization arises between workers.

"Cloudy" scenario

Tokyo develops its talented human resources from within and outside of Japan and makes active use of the elderly population. GDP and productivity increase first, but start to shrink thereafter. The elderly employment lets personnel costs soar, leading to a weakening of Japanese firms in terms of global cost competitiveness. Companies are unable to retain talented young workers and the inheritance of Japan's manufacturing skills comes to an end. Tokyo loses its status on the global stage. Large-scale repairs of urban space and environment fail in their execution, as the overall urban area continues to expand. The number of immigrants increases dramatically and a mosaic of poorly integrated communities emerges.

"Blue Sky" scenario

Tokyo avoids becoming the back-office of Asia and instead comes to lead the Asian region. The labor participation rate rises, along with overall productivity, enabling stable economic growth and an increasing GDP. Tokyo becomes a showcase of leading-edge urban business and industries, which combine expertise in advanced transportation, information, energy conservation and security systems. Tokyo makes use of Japanese technology creating a universal standard. Traffic and environmental burdens are greatly reduced and a mix of skyscrapers and greenery emerges. The immigration policy allows society to transform into one where values are shared by all. ■

development projects during the post-Games period, as well as the inclusion of waterways reactivation and urban greening as a part of these projects, Tokyo aims to continue its progression as a liveable, economically robust city.

GREATER TOKYO IN JAPAN AND ASIA TO 2050

According to the *Regional Plan* (2005) and the *National Spatial Planning Act* (2006), the national government aims for autonomous regional development by establishing eight regional 'planning blocks' throughout the country. Tokyo, for example, is placed within the '*National Capital Region block*' which includes the prefectures within the Kanto region and Yamanashi Prefecture (38 million people). Each block would develop as a regional entity, providing dynamic functions and industries, international access, and facilitating the interregional exchange of people, goods, and information. The organization in regional blocks is now seen as key to overcoming the national challenges associated with depopulation and aging.

Much like the circular megalopolis structure utilized for Tokyo, albeit on a larger scale, national plans define that regions must concentrate development in 'compact' clusters while 'networking' across regions (and internationally) through transportation linkages and collaboration. In Tokyo's case, the potential opportunity stems from increased economic and industrial specialization across the adjoining prefectures that make up the *National Capital Region,* also improving ts networking with the nearby regional blocks. This may be further enhanced by the completion of the new high speed train, Chuo Shinkansen, under construction: from 2027, the new maglev (magnetic levitation) line will connect Tokyo to Nagoya in about 40 minutes, and later to Osaka in about 60 minutes, reaching a speed of over 500 km/h. The Chuo Shinkansen has the potential to further compress and network the economic and productive heart of Japan —bringing populated centers and employment opportunities closer together.

To achieve its goals of regional promotion and a balanced spread of population and economic opportunity, strategies seek to "rectify the overconcentration of functions in Tokyo" by resolving the imbalance between urban and non-urban areas. But this could weaken Tokyo's economy and ability to compete globally with other major cities. Tokyo performs well in city rankings, but, it is not immune to competition from regional cities like Singapore, Seoul, or Shanghai, nor can it remain competitive with London or New York without constant improvement. Tokyo's regional specialty is its concentration of functions, services, industry, and regional / international transportation links. Rather than weakening Tokyo's unipolar position within Japan, the capital should be strengthened by increasing links and cooperation between regions while retaining its ability to compete globally. ■

NATIONAL REBALANCING POLICIES ARE SEEN LOCALLY AS A THREAT TO TOKYO'S GROWTH

FURTHER READING

GRAND DESIGN OF NATIONAL SPATIAL DEVELOPMENT TOWARDS 2050 (PROVISIONAL TRANSLATION)
Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Government of Japan, 2014.

TOKYO FUTURE SCENARIO 2035
Institute for Urban Strategies, Mori Memorial Foundation, 2014.

URBAN DEVELOPMENT IN TOKYO 2016
Tokyo Metropolitan Government, 2016.

1. Cf. Lecroart (Paul), *Tokyo. Stratégies de développement urbain de la région métropolitaine,* Mission Report, Iaurif October 2002.