



~Think Together about the Relocation of the National Diet and Related Organizations~

Brasilia Today

Professor Koshi Yamamoto,
Graduate School of Nagoya Institute of Technology

1. General description

Brasilia is a highland city at an altitude of 1,100m. The year is divided into two seasons: rainy, from October to March, and dry, from April to September. Since the humidity during the dry season is below 20 percent, people need to take plenty of liquids to prevent dry skin and chapped lips. On one hand the temperature varies little throughout the year; on the other, it changes big in a day. During the daytime, the temperature exceeds 30 degrees centigrade, but it is chilly in the morning and evening.

Designed by Lúcio Costa, the city center (called Plano Pilot) is often said to have the shape of an airplane. In truth, he designed it imaging a cross. Taking the airplane as a motif, Plano Pilot, which literally means a master plan for urban planning, is heading toward the east, or east-southeast to be more precise. The body of the airplane on the east-west axis is the public zone, which is the core of capital functions, the wings on the north-south axis are the residential zones, and the area where the wings meet the body is the commercial zone. Plano Piloto has a very specific zoning plan which means each area has a single purpose. There is a huge artificial lake ahead of the airplane.



A model of Plano Pilot
at an early stage of construction

The body is approximately 10 kilometers long. Palácio da Alvorada, the official residence of the president, is located at the nose of the airplane. Near the President's official resident is Praça dos Três Poderes (Square of the Three Powers), where the national Congress, Supreme Federal Tribunal, and Palácio do Planalto (the official workplace of the President) are located. Government and other public offices are located along the main thoroughfare on the east-west axis. Cultural facilities are located around the public offices. Although the public offices used to have a unified design and height, there are many annexes built behind the main buildings today due to increasing demand of space. The main thoroughfare is a twelve-lane road, six lanes each way, with a several hundred meter wide green belt in the center. Heading toward the tail of the airplane from the TV tower, which is a symbol of Brasilia, there are Federal District government offices, sports facilities, and military facilities on the right, and a huge park on the left. What was a railway station at the tail of the airplane is now used as an intercity bus terminal.

In the area where the wings meet the body, there are several commercial facilities and a local bus terminal. The north and south hotel areas are restricted only for hotels. Since these areas have heavy traffic, parking space is insufficient. Concerning specific zone, the embassy area is also very beautiful. Embassies are mainly located around the front of the right wing. Brasilia University, where I took up teaching, is located at the front of the left wing.

The main wing of Plano Pilot stretches approximately 13 kilometers. Divided into the south (right wing) and north areas (left wing), the main thoroughfare on this north-south axis has seven lanes, including one lane in reserve for emergency vehicles or median strip. This main thoroughfare connects the city center



Bird's-eye view of Plano Pilot from
above the public office area

with the airport and satellite cities. On Sundays, this main thoroughfare closes to cars, turning into a vehicle-free pedestrian precinct and many citizens enjoy jogging and cycling. There are two sub-thoroughfares along the main thoroughfare on each side of the main. Each sub-thoroughfare has two lanes each way, and a median strip. Therefore, the main thoroughfare and two sub-thoroughfares have fourteen regular traffic lanes in total, seven lanes each way, forming a main transportation artery.

On the east and west of the main artery are residential zones. Each residential block, which is called a *quadra*, is a square of 240 meters by 240 meters. A *quadra* has a maximum of eleven buildings, which are three or six-stories, excluding the ground floor *pilotis*, and has plentiful parking. Each *quadra* has only one vehicle entrance, creating a dead-end and eliminating through traffic. Inside each *quadra*, cars and pedestrians are generally separated, and there is abundant greenery. There are some neighborhood stores near the *quadra*, but large super markets are located in the suburbs.

Lúcio Costa thought that Plano Pilot was large enough to accommodate future urban population to live in, but urban areas have spread outside Plano Pilot with over ten satellite cities around it. Some satellite cities have larger populations than Plano Pilot's population of approximately 400,000. In recent years, the urbanization is expanding outside the Brasilia Federal District into the nearby state of Goiás.

2. Urban Transportation in Brasilia

The main thoroughfare on the wings has no traffic lights with a speed limit of 80 kilometers/hour. The two sub-thoroughfares have no traffic lights either, except in the city center, and the speed limit of them is 60 kilometers/hour. Parallel to these thoroughfares are several local streets with speed limits of 50 to 60 kilometers/hour. As a general rule, turning left is not allowed. (In Brazil, cars drive on the right-hand side.) Cars take a right turn first. Then, using a U-turn lane, they turn and go into the opposite direction. Streets around the *quadra* have rotary intersections with a speed limit of 40 kilometers/hour.

East and west *quadra* separated by the main thoroughfares and sub-thoroughfares are served by streets, which are all connected with clover shaped cubic interchanges. Pedestrians and cyclists were not well considered in planning. There are only two or three underground passages for them in each of the south and north areas.

Even today, cars have priority over pedestrians in Brazil. In Brasilia, however, pedestrian crossings were extensively introduced at the street level. If a pedestrian is trying to cross, all cars stop and wait until he/she gets to the other side. Japan can learn from the good manners of Brazilian drivers and follow this example. However; it is ironic that these good manners, often cause traffic jams.

Buses were the only public transportation in Brasilia until the subway was introduced. The subway, which was constructed based on the claim that every capital should have a subway system, has only one route connecting the city center to a satellite city to the south of Plano Pilot. Bus stops cannot be described as clean. There are no timetables and route maps available to passengers.

Transportation in Brasilia has three major characteristics. Firstly, people of low and middle income use buses. Secondly, the structure of their trips is simple. In the morning, people move from suburbs to the city center, and return in the evening. Thirdly, most car owners with school age children drop them off at school and pick them up; most schools have two or three shifts a day. Some students study in the morning, and some in the afternoon. In addition, many workers go home for lunch. These factors create heavy traffic around the lunch hour too, causing traffic jams and making the transportation in Brasilia less efficient.

The airport locates approximately twelve kilometers away from the city center. While the airport is almost as old as the capital, a recent large-scale repair with a very innovative design has improved the airport. Although the airport is called an international airport, not many international flights use the airport.

3. Conclusion

Brasilia is a modern city specialized for capital functions. Business and industry are not very active. While commodity prices are slightly higher than in Rio de Janeiro or in Sao Paulo, Brasilia is safe and has comfortable weather for living. This young capital was constructed forty-seven years ago, and Plano Pilot was listed as a UNESCO World Cultural Heritage Site in 1987. There has been substantial controversy over Brasilia's urban planning. It is recommended that we carefully watch further development of Brasilia.



The public office area and the area where the wings meet the body, seen from the TV tower

Agendas for Government Measures for Recovery and Reconstruction after an Epicentral Earthquake in Tokyo

Report from the Investigative Commission of the Cabinet Office

Tomohisa Shiimoto

Deputy Director Post-Disaster Recovery and Reconstruction
Cabinet Office, Government of JAPAN

An epicentral earthquake in Tokyo is defined as a magnitude 7, it is comparable to the Great Hanshin-Awaji Earthquake, which is about the same scale as the 7.3 magnitude, with the seismic source in the Southern Kanto area, including Tokyo. It is estimated that such an earthquake will occur several times within the next one or two centuries. The government's Central Disaster Prevention Council (chaired by the Prime Minister) has been working hard to reduce the impact of such earthquakes, establishing the Outline of Measures against Epicentral Earthquakes in Tokyo (2005) and the Disaster Prevention Strategy for Epicentral Earthquakes in Tokyo (2006).

Developing measures for prompt recovery and reconstruction, however, has been slower than developing preventive and emergency measures. Therefore the Investigative Commission for Recovery and Reconstruction Measures after an Epicentral Earthquake in Tokyo was established in February this year to facilitate developing such recovery and reconstruction measures. The commission aims to foresee what problems may arise, and what the government should do in the case of an epicentral earthquake. The title report from the Investigative Commission of the Cabinet Office contains the results of their investigation.

Characteristics of epicentral earthquakes in Tokyo

This scenario is based on an earthquake occurring in the northern part of Tokyo Bay, which was reported by the Specialized Investigation Committee for Measures against Epicentral Earthquakes in Tokyo, the Central Disaster Prevention Council, in July 2005. Assuming the earthquake occurs at 6 pm on a winter day, when wind velocity is 15 meters/second, it is estimated that 11,000 people would be killed, 850,000 houses and buildings would be completely destroyed or burned down, and economic damage would reach to 112 trillion yen. Two major characteristics of epicentral earthquakes in Tokyo are the enormous impact caused by dysfunction as a capital and devastating damage. Dysfunction as a capital could gravely influence the lives of all Japanese, not limited to the people living in the stricken area. In our global economy, financial and physical distribution function could easily move abroad. The damage is estimated to be devastating, far beyond our imagination. The estimate indicates that approximately eight times as many houses and buildings as the Great Hanshin-Awaji Earthquake will be completely destroyed or burned down. The scale of the recovery and reconstruction will be beyond anyone's experience, and a very long time will be required.

Social circumstances

In Japan, the aging of the population will accelerate even further. Both the number of the elderly and their proportion in the entire population will increase as the decrease in the birth rate continues. Japan's population has already started decreasing. We can no longer expect high economic growth as we used to enjoy.

If an epicentral earthquake occurs in Tokyo under these circumstances, recovery and reconstruction from such an earthquake will not necessarily lead to population increase or economic growth of the area. Improving quality, rather than increasing quantity, is important for better living environment. Some committee members indicated that the most appropriate strategy should be adopted from the nation-wide and long-term viewpoints.

Agendas brought up

Thirty-five agendas were brought up, including the following:

Concerning dysfunctionality of political and administrative center

- What system should the government establish to efficiently implement recovery and reconstruction measures?
- How can the functions of the Diet and central government ministries be maintained?

Concerning support for the vast number of victims

- How can a vast quantity of shelters be supplied?
 - How can permanent housing be supplied?
 - What measures will be necessary to supply housing to victims trying to rebuild their lives where they were evacuated to?
 - What measures will be necessary for small businesses to ensure job security and reconstruct local economies?
- Since the stricken area is Japan's economic center, the following is also important:
- How can the middle- and long-term impact on the Japanese economy be evaluated, and what measures will be necessary?

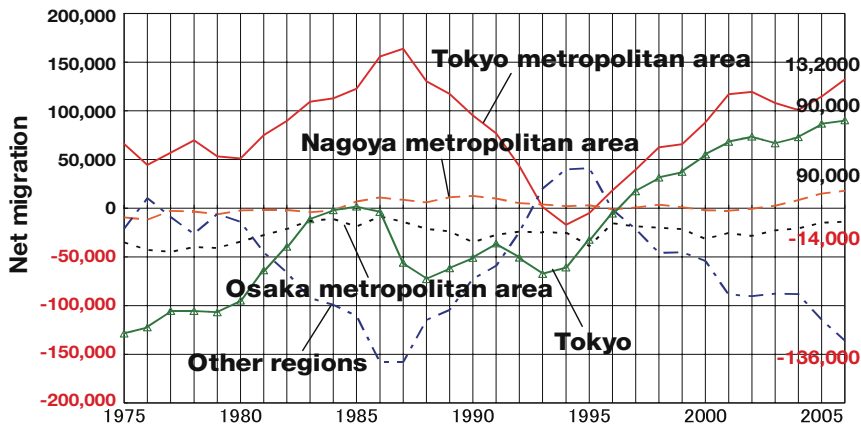
Future efforts

Detailed study concerning measures for recovery and reconstruction after an epicentral earthquake in Tokyo is required. The Cabinet Office and other authorities concerned should investigate to determine whether there are other agendas to be investigated in addition to agendas already brought up in this report, as well as determining the necessary actions for actually implementing the measures, and establishing action plans from institutional and financial perspectives, concerning the agendas brought up in this report.

Japan, as seen from data

Starting from this issue, we would like to examine various data on Japan. The first data we would like to show is migration in the three metropolitan areas. The following graph shows net migration, i.e. the difference between the number of people migrating to and departing from the Tokyo, Nagoya, and Osaka metropolitan areas, as well as in Tokyo proper and regions other than the three metropolitan areas. The graph indicates net migration to the Nagoya and Osaka metropolitan areas were low. Most migration took place between Tokyo metropolitan area and regions other than the three metropolitan areas. Since the mid-1990s, people have been moving into the Tokyo metropolitan area again.

Migration in the three metropolitan areas and other regions



Source : The graph was prepared by the Ministry of Land, Infrastructure and Transport, based on the Migration Report on the Basic Resident Register by the Ministry of Internal Affairs and Communications
 Note : The Tokyo metropolitan area includes Saitama, Chiba, Tokyo, and Kanagawa; the Nagoya metropolitan area includes Gifu, Aichi, and Mie; and the Osaka metropolitan area includes Kyoto, Osaka, Hyogo, and Nara. The three metropolitan areas are the Tokyo, Nagoya, and Osaka metropolitan areas, and other regions are regions other than the three metropolitan areas.

Learning on the Relocation of the Diet and Other Organizations is Taking Place around Japan

On Tuesday, May 29, a third year student from Kaijo Junior High School of Shinjuku Ward, Tokyo visited the Capital Functions Relocation Planning Division of the Ministry of Land, Infrastructure and Transport (MLIT) for social studies. The student studied with enthusiasm, asking questions on the relocation's impact on the natural environment, and about remaining problems to be solved for the relocation.



Topics

Recent Major Activities Related to Relocating the National Diet and Related Organizations

- As part of the Prefectural Residents' Day event held in Fujioka Town on June 9 and 10, the Tochigi Prefectural Residents' Council for the Relocation of the National Diet and Related Organizations had an information corner. Panels were exhibited and brochures were distributed, to provide information on the relocation.
- On March 19, the Mie-Kio Council for Promoting Capital Function Relocation presented a request concerning the relocation of capital functions to the members of the Inter-party Committee of Both Houses on the Relocation of the National Diet and Related Organizations. In the request they urged the committee members to immediately decide upon the priority relocation of core functions for crisis management, as well as to discuss strenuously realizing capital function relocation as a whole.
- On March 17, the three regions of eight prefectural governments that are candidate sites for the relocation of capital functions jointly placed an ad in Weekly Keizai, Weekly Diamond, Weekly Economist, and Weekly AERA magazines, promoting the relocation of capital functions. In the ad, Mr. Jitsuro Terashima, Honorary Chairman of the Japan Research Institute, and Mr. Monte Cassim, President of Ritsumeikan Asia Pacific University, emphasize the international significance of relocating the capital functions.

Accessing Various Information

Various information concerning the capital functions relocation has been provided on the MLIT Homepage on the Internet. Please visit this web-site.

Also if you are interested in items in this leaflet and others, please let us know. We are pleased to send related documents to you. We are awaiting your contact.

We are Waiting for Your Opinion

Address : Capital Functions Relocation Planning Division,
 National and Regional Planning Bureau, MLIT
 1-2, Kasumigaseki 2-Chome, Chiyoda-ku,
 Tokyo 100-8918 Japan

Homepage : <http://www.mlit.go.jp/kokudokeikaku/iten/index.html>

E-Mail : itenka@mlit.go.jp

Telephone : +81-3-5253-8366 FAX : +81-3-5253-1573