

Evaluation of Tokyo's City Planning in 1973-2000

Relationship of Urban Space and Floor Area Ratio

That Focuses on Original Land Use of Tokyo with Zoning Regulation

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Abstract

In order to control Tokyo's growing city space after a period of high economic growth (1954–1973), the Tokyo Metropolitan Government created a multi-center oriented master plan that addressed the population concentration of Tokyo in 1971. As a method of space control, floor area ratio zoning was partially started in 1963, and floor area ratio zoning completely replaced height limit in 1973 after revision of the City Planning Act (1968). The practice of controlling growth under the master plan was continued until it was held up in 2000, when a new plan had to be implemented to tackle the increasing concentration. The purpose of this study is to evaluate the city planning of Tokyo during approximately three decades, specifically from 1973 to 2000.

1. Introduction

In order to control the growing city space after a period of high economic growth (1954–1973), the Tokyo Metropolitan Government created a multi-center oriented master plan that addressed Tokyo's population concentration in 1971. As a method of space control, the floor area ratio (FAR) zoning system was partially instated in 1963, and FAR zoning completely replaced height limits in 1973 after the 1968 revision of the City Planning Act. The controlling of space use under the master plan with the FAR system continued until a holdup occurred over its concentration in 2000; special "urban renaissance" districts were created to promote the relaxation of the FAR zoning that underlies the space control method. Because of these events, Tokyo's city planning can be divided into three periods: "1973 and before," "1973 to 2000," and "2000 onwards." This study evaluates Tokyo's city planning during the roughly three decades between 1973 and 2000.

Tokyo Metropolis is located at the center of the Greater Tokyo Area. The Administrative District is composed of two areas known as "the 23 special wards area" and "Tama." The Imperial Palace is located at the center of the 23 special wards area. The city center (Marunouchi, Nihombashi, and Ginza) is

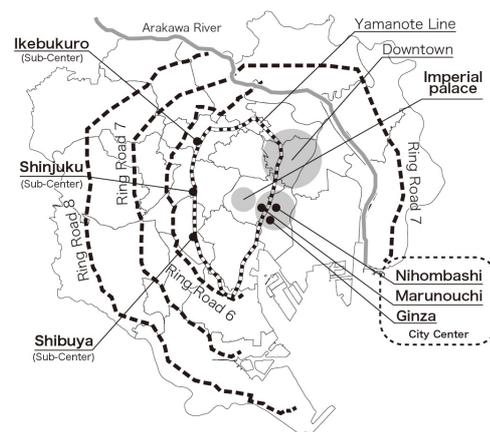


Figure 1. The 23 special-ward area

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located on the east side, and the major sub-center (Shinjuku, Shibuya, and Ikebukuro) is located on the west side.

We analyze (1) what kind of city the Tokyo Metropolitan Government intended to create under the FAR zoning regulation (city vision), (2) efforts to create new regulation (land use regulation), (3) what type of city space use has been implemented (real city space), and (4) the relationship between these three factors. By doing so, we gain knowledge about the formation of urban space under the FAR zoning system while considering urban planning revisions in accordance with the region's actual situation.

2. History of Tokyo's city vision after 1970's

We will now clarify the transition of the City Vision, which had been consistent in Tokyo up to this point. The Tokyo Metropolitan Government aimed to shift Tokyo from a "population concentration" city to a "multi-center" city. However, they set a high value on the Tama area (located in the western area of the 23 special wards, and administered by the Tokyo Metropolitan Government), and only three cities (Shinjuku, Shibuya, and Ikebukuro, which are also situated in the western area of the 23 special wards) were initially designated to compose "the sub-center." As a result, Tokyo's city vision continued to focus on areas west of the Imperial Palace.

3. The FAR zoning regulation of 1973

We will now analyze the creation of the FAR zoning regulation of 1973. Criteria for designation were tailored to regional characteristics on the basis of a "multi-center"

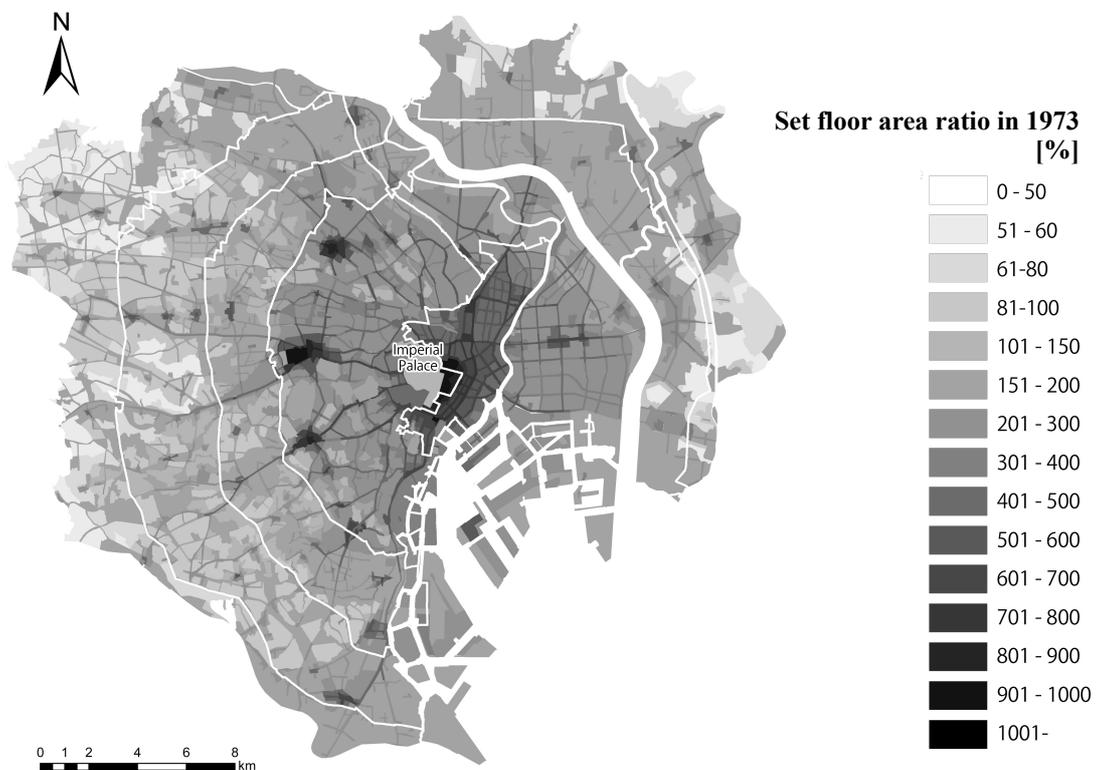


Figure 1. FAR zoning (1973)

city vision; however, there were considerations for buildings built under absolute height limits zoning. According to criteria for designation, there were three features to FAR in 1973: (1) suppression of FAR at the city’s center and specifying a high FAR at the sub-center to orientate to a multi-center urban structure, (2) set a 200–300% FAR in the surrounding area by Ring Road 6 and the Arakawa river; considered likely to become a high density residential area in the future, and (3) specify a higher FAR when considering buildings built under absolute height limit zoning. Therefore, the existing high-density downtown area was set as a high FAR zone. This area was concentrated east of the Imperial Palace, and the FAR zoning was not necessarily set under the city vision of the time.

4. The FAR in real space of 2006

We will now analyze the FAR in real space calculated from the existing 2006 GIS land use data of the 23 special wards area. There are high rates of FAR in real space districts, including the Imperial Palace, “the sub-center” on Tokyo’s west side, and the downtown area of the readjusted land within the Yamanote Line. It is lower in the areas



Figure 2. FAR in real space (2006)

outside the Yamanote Line.

5. Fill rate of set FAR

We will now clarify the impact of the FAR system in 1973 by the calculated “fill rate of set FAR” (here defined as FAR in real space in 2006, per the FAR regulation set in 1973). We do not find a clear correspondence between the utilization volume distribution and the rate setting status of the specified FAR rate. In addition, the west side area outside of the Yamanote Line (this area is set at almost the lowest rate of FAR

zoning) shows a high “fill rate of set FAR.”

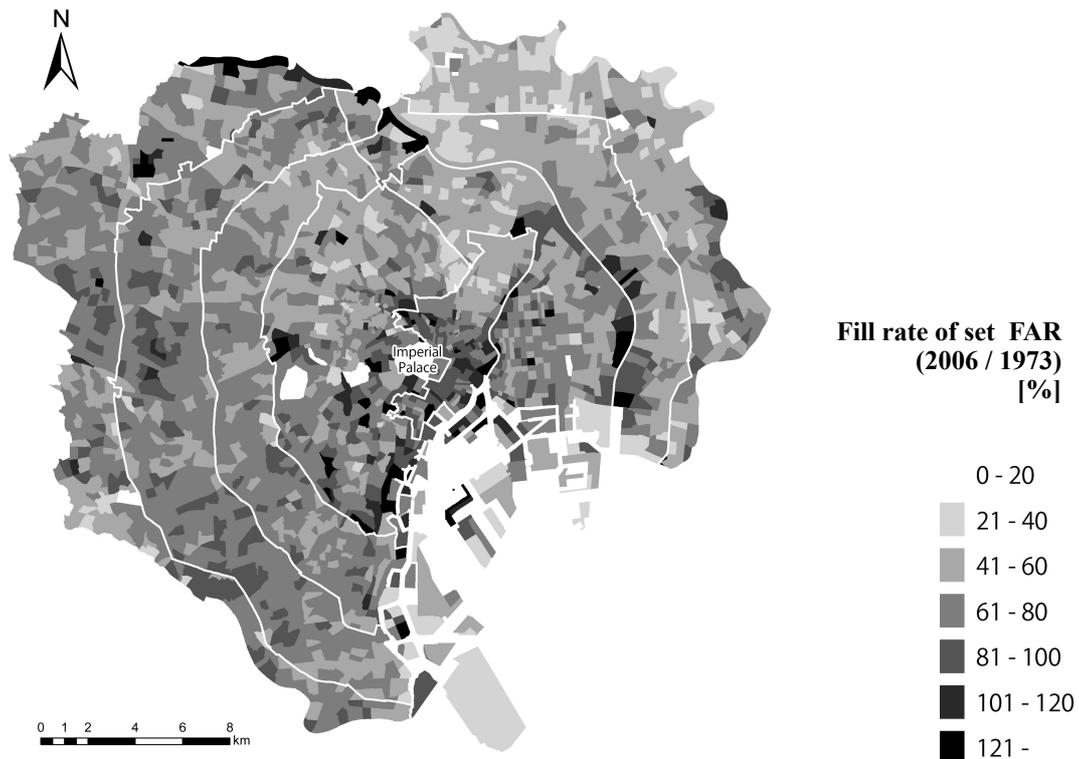


Figure 3. Fill rate of set FAR (2006/1973)

6. Conclusion

In conclusion, the present study demonstrates that (1) the FAR zoning system plays no role in inducing building volume accumulation in city space, (2) the FAR system inhibits building volume accumulation in excess of each region’s capacity, and (3) FAR zoning is responsible for the conservation of comfortable urban space.

The city planning that included the FAR zoning system aimed at inducing the balanced development of the urban space; nevertheless, judging by the FAR zoning system in the 23 special wards area and its “fill rate of set FAR,” there is a development imbalance between the east side and west side. The frame of Tokyo's city planning shifted from multi-center oriented to urban renaissance, and the FAR zoning system spanning 30 years caused that imbalance. We need to recognize that this city planning that oriented urban renaissance was started under a situation of disproportion between the east and west sides.

Keywords: City planning in Tokyo, Floor area ratio, Zoning regulation, City vision

Reference:

- 1) Horiuchi, T., “City planning and zoning regulation”. NishidaShoten. 1978. (In Japanese)
- 2) Togo, H., “Tracks of urban reform project”. Soshiete. 1992. (In Japanese)
- 3) Tokyo Metropolitan Government. “City Planning of Tokyo”. Tokyo Metropolitan Government. 1973. (In Japanese)