

# 06 Commuting congestion and the five-direction strategy

In the decade from 1955 to 1965, there was about a six-fold increase in rent in Tokyo, which greatly surpassed the increase in wages. As land prices in residential areas soared, the distance between home and workplace grew greater, and people from the Tama area or other prefectures commuting into the Tokyo ward area for work or school also increased by 830,000 during that period. With the home and workplace growing further apart, the number of passengers on Japanese National Railways and private railway trains during the morning and evening commute hours far exceeded passenger capacity.

In order to meet this increasing demand for commuter

transport, the railway companies took measures to increase transportation capacity during peak hours, such as operating more trains and increasing the number of cars. Japan National Railways, projecting a further increase in transportation demand, raised the aim of fundamentally increasing transportation capacity by increasing railway lines, and in 1965, formulated the Third Long-Term Plan with the main goal of boosting commuter transportation capacity and transportation capacity of the main lines. This plan included the “five-direction strategy,” which was implemented as a way to dramatically increase commuter transportation capacity in the Greater Tokyo Area.



### Commuter congestion

In 1965, the congestion rate (number of passengers/car capacity) on the most highly congested sections of the Japan National Railways lines, starting with the 307 percent of the Yokosuka Line at the top, was nearly 300 percent on all the main lines, reaching the physical limits of congestion. Terminal stations such as Shinjuku, Ikebukuro and Shibuya, which must deal with this super congestion, hired a large number of students to work part-time in the morning to push the passengers into the crowded cars so that the doors could close. Sources: (left) Tokyo Metropolitan Government official photo archives; (right) Bureau of Transportation, Tokyo Metropolitan Government.

### Five-direction strategy for commuting

#### Tokaido Main Line

Work was undertaken to increase lines between Tokyo and Odawara (83.9km), separate the Tokaido Main Line and Yokosuka Line between Tokyo and Ofuna, and separate passenger trains and cargo trains between Ofuna and Odawara. In 1976, lines were increased between Tokyo and Shinagawa (new underground line), in 1979, line increase between Tokyo and Odawara (line separation between Tsurumi and Totsuka) was completed, and in 1980, separation of the Tokaido Main Line and Yokosuka Line was realized.

#### Tohoku Main Line

Lines were increased (sextuple track) between Akabane and Omiya (17.1km) to separate operations of middle-distance passenger trains and local trains, with this work completed in 1968.

#### Joban Line

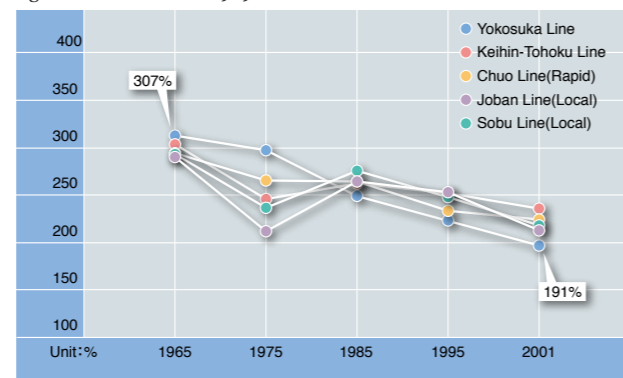
Lines were increased (quadruple tracks) between Ayase and Toride (32.2km) to separate operations of middle- and long-distance passenger trains and local trains. Express trains were newly introduced, and mutual direct operations between the Chiyoda subway line and local trains were also implemented. Lines were increased between Ayase and Abiko in 1972, and between Abiko and Toride in 1982.

#### Sobu Main Line

Lines were increased between Tokyo and Chiba (39.2km) (line separation between Tokyo and Kinshicho). Express trains were newly introduced, and along with this, mutual direct operations with the Yokosuka Line was implemented (1980). Lines were increased between Tokyo and Tsudanuma in 1972, and between Tsudanuma and Chiba in 1981.

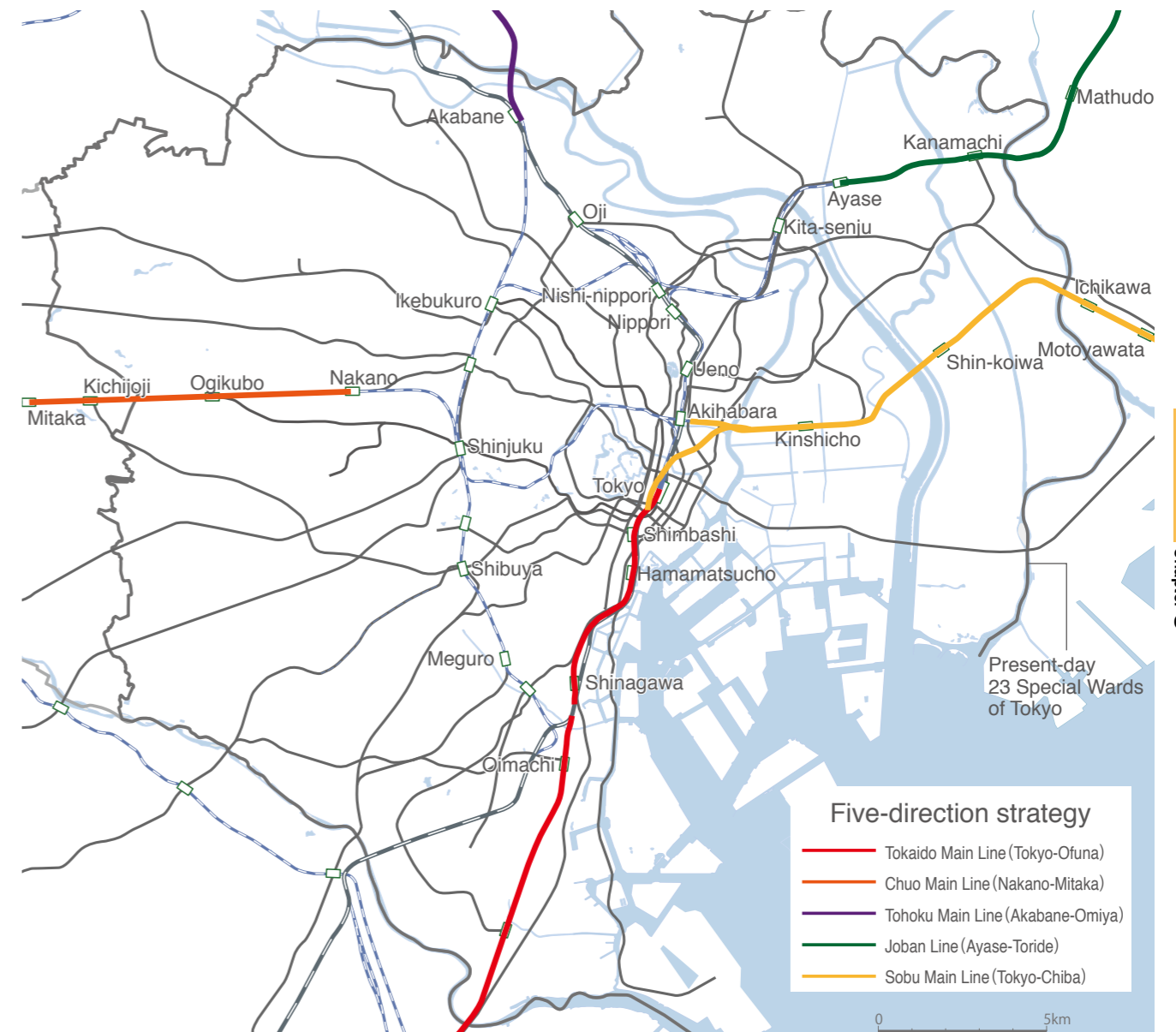
#### Chuo Main Line

Lines were increased (quadruple tracks) between Nakano and Mitaka (9.4km), local train operations were extended to cover longer distances, and mutual direct operations with the Tozai subway line were introduced. In 1966, lines were increased between Nakano and Ogikubo, and between Ogikubo and Mitaka in 1969.



#### Congestion rate before and after the five-direction strategy

There was a line where the congestion rate dropped from the maximum of 307 percent to under 200 percent due to the five-direction strategy. Prepared from *Kankei shiryō: Tekkido shūyo kukan no peak ji konzatsuritsu (Tokyo ken)* (Related documents: Peak congestion rate in major railway sections (Greater Tokyo Area)). Ministry of Land, Infrastructure, Transport and Tourism.



### Railway map around 1975

\*The shoreline in the map is as of the end of the Showa era (1989). Prepared from *Tokyo-to Kotsukyoku 60 nen shi* (60-year history of the Bureau of Transportation, Tokyo Metropolitan Government). Bureau of Transportation, Tokyo Metropolitan Government, and *Tokyo-ko no henshen* (Changes in Tokyo Port). Kanto Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism.

### Continuous railway-road grade separation

- The number of owned vehicles in Tokyo increased rapidly from the late 1960s to early 70s. At that time, there were about 1,400 grade crossings in the city, and the growing amount of time these crossings remained closed due to the increased operations of trains was one of the causes of traffic congestion and accidents. To address this issue, large-scale grade separation projects were advanced to remove these crossings.
- These continuous grade separation projects elevate or lower railways underground over a certain distance to separate roads and tracks, removing numerous crossings or creating grade separation at new intersecting roads. By eliminating “crossings that do not open,” and making road traffic smoother, they resolve the issue of communities split by railways.



Continuous grade separation project of Seibu Ikebukuro Line Source: Bureau of Construction, Tokyo Metropolitan Government.