

1. RAILWAY PASSENGER TRAFFIC VOLUME

2. TIME OF ARRIVAL BY RAILWAY

TIME OF ARRIVAL FROM SAPPORO STATION.

TIME OF ARRIVAL FROM TŌKYŌ STATION.

TIME OF ARRIVAL FROM ŌSAKA STATION.

TIME OF ARRIVAL FROM HAKATA STATION

1. Railway Passenger Traffic Volume

The passenger train lines in operation as of March 31, 1971, totaled 26,551 km, including 20,520 km for the national railways and 6,031 km for the railways under private management. The passenger stations on these lines consisted of 2,688 for the national railways and 5,082 for the private railways.

The passenger transport volume in the one-year period from April 1970 to March 1971 included 6,534,000,000 persons for the national railways and 9,850,000,000 persons for the private railways. The passenger-kilometerage (distance transported × persons transported) stood at 190,000,000,000 for the national railways and 98,800,000,000 for the private railways. The average number of persons transported per kilometer of railway line was 320,000 for the national railways and 1,600,000 for the private railways.

Of all the railway passengers, the ratio of commutation passengers to others passengers stands at 7 : 3 for the national railways and 6 : 4 for the private railways. The role private railways assume in transporting passengers is very great in major cities. The ratio of the number of passengers transported by private railways to that of passenger transported by national railways is 6:4 in the Metropolitan Tōkyō Area (areas within a radius of 50 km from Tōkyō Station), 8 : 2 in the Tyūkyō Area (areas within a radius of 40 km from Nagoya Station), and 7 : 3 in the Keihansin Area (areas within a radius of 50 km from Ōsaka Station).

Streetcars played an important role as a means of intra-city transport up until recently, but most of the tracks were removed by 1970. To take their place, subway lines have been actively constructed since the 1950's.

The passenger transport volume of the Japan National Railways' Sinkansen bullet train line opened between Tōkyō and Sin'ōsaka in 1964 has been on the rise. In the one-year period from April 1970 to March 1971, 85,000,000 people were transported.

The Sinkansen Line's passenger services were extended from Sin'ōsaka to Okayama in March 1973 and extended further from Okayama to Hakata in March 1975.

Salient Points of the Legend and Map Compilation

In this map, the railway passengers transported (number of passengers passing between stations) per day in 1970 was indicated in a belt-shaped pattern, whereas the number of passengers per station a day is shown with a

circular symbol.

The railway passenger transport volume was indicated for railway lines more than 10 km in total length. The transport volume is the total of passengers making round trips between stations.

The varied widths of the belt-shaped pattern represent varied brackets of the transport volume. They are in proportion to the square root of their respective median.

The number of passengers carried to and from their destination per day is the total of passengers getting on and off trains. The varied diameters of the circular symbols represent graded brackets of the number of passengers carried to and from their destination per day. They are in proportion to the square root of their respective median. In cases where the number of passengers carried to and from their destination per day exceeds 1,000,000, however, they are proportionate to the square root of their respective actual number.

In principle, the stations for which the number of passengers carried to and from their destination per day indicated in this map are those recording more than 5,000 boarding and alighting passengers per day in the case of the main lines and those registering more than 2,500 boarding and alighting passengers a day in the case of other lines.

With respect to the stations located in the Government ordinance designated cities, the number of boarding passengers and that of alighting passengers was added and their total was drawn with a circular symbol, instead of indicating the number of passengers for each station.

Sources

1. Japan National Railways, Statistical Yearbook of the Japanese National Railways, No. 1 (Supplement), 1970.
2. Ministry of Transport, Statistical Yearbook of Private Railways, 1970.
3. Ministry of Transport, General Statistical Survey of Land Transport, 1972.
4. Ministry of Transport, Survey on Regional Flow of Passengers, 1970.

2. Time of Arrival by Railway
(Time of Arrival from Sapporo Station).
(Time of Arrival from Tōkyō Station).
(Time of Arrival from Ōsaka Station).
(Time of Arrival from Hakata Station)

With the Japanese National Railways as the mainstay, a nationwide network of railway lines has been developed in Japan. The speeds of railway trains have become faster from year to year due to the electrification of lines, double tracking, route shortening and the improvement of rails, trains, etc.

The scheduled speed (gained by dividing the distance between the starting and terminal stations by the hours required) in the case of the Japanese National Railways' Tōkaidō Honsen was 30.1 km/h in 1889 but rose to 68.2 km/h by special express train.

With the outbreak of World War II, the availability of energy worsened, resulting in the suspension of special express and express train services. The scheduled speed dropped to 39.9 km/h in 1947. The special express services were resumed in 1949.

In 1958, the electrification of the Tōkaidō Honsen was completed, the scheduled speed reaching 81.8 km/h. The standard-gauge Tōkaidō Sinkansen was opened with the scheduled speed reaching 162.8 km/h. The hours required for a trip between Tōkyō and Ōsaka were about one-sixth of those registered at the time of opening of the Tōkaidō Honsen.

The Japan National Railways' other lines also have remarkably increased speed. The hours required were reduced to about two-thirds of those recorded in or about 1949.

Completion of a nationwide network of Sinkansen, the construction of which has been started in part, would greatly reduce the hours of transit between major cities throughout the nation.

Salient Points of the Legend and Map Compilation

This map shows the time of arrival from Sapporo, Tōkyō, Ōsaka and Hakata Stations to stations throughout the nation.

The time of arrival was computed on the assumption that the fastest trains available had been utilized from the departure station to the destination. It does not include the time required for changing trains.

Consequently, the time of arrival as shown in this map is somewhat shorter than the actual time required in some instances. In regard to the time of arrival at a station where special express train nor express train stops, only one of the changes required was actually counted. Also when a passenger goes beyond this destination and returns to his destination by another train is not shown.

Sources

1. Japan Travel Bureau, Timetable, April 1973.
2. Various data from the Japan National Railways.





