

# A Brief History of Japanese Railroads and Their Impact on Urban Planning

by Fran Levy, 2011

## Introduction

As the world entered the industrial age, railroad technology supported the development of entire economies. As an isolationist nation, however, Japan did not benefit from this technology for many years. Following the forced opening of Japan to trade with the West in the mid-1850's, Japan gained exposure to many new technologies (Asia for Educators, 2009). By 1869, the Japanese government officially declared its intention to usher Japan into the modern era with a nationwide railroad network.

## Railroads Come to Japan

Like many industries, Japan's railroads were created, owned, and operated by the government in their infancy. The Japanese government felt

obligated to promote this new technology upon its official introduction in 1869; the unfamiliarity of railroad technology, its tremendous capital costs, its technical complexity, and its large-scale management requirements rendered initial private investment unlikely. (Ericson, 1996)

Political concerns also played a part in the government's decision to build and operate railroads itself. Firstly, the new Meiji government hoped that the railroad network would help strengthen their power by centralizing the administration. Additionally, the government faced international concerns: Upon officially welcoming railroads to Japan in 1869, American and British nationals began requesting railroad concessions from the government. Politicians realized that if Japan wished to maintain independence from foreign influences, the government would need to construct railways

itself while the domestic private sector caught up with this new technology. (Ericson, 1996)

Constructed by the government, the first Japanese railroad opened in May of 1872. This 15-mile route from Yokohama to Shinagawa, while under government management, was not funded solely by the government. In order to complete this project, the state took loans from domestic private investors, which was considered preferable to foreign debt or foreign ownership. (Free, 2008)

Railroad development proceeded rapidly after this project, and by 1881, the first private railway company, Nippon Railway, entered the market. Nippon Railway's major investors were Japanese nobility, but the company credited its success to an unusually broad and equitable investment base comprising people from all social classes. Where private investment was insufficient, Nippon Railway received technical and financial support from the government, as the company furthered the national policy of railroad expansion (Ericson, 1996; Free, 2008).

In 1883, Nippon Railway opened its first 38 miles of track, between Ueno Station in Tokyo and Kumagaya Station in Kumagaya, Saitama. As time passed and more railroad companies sprung up around the nation, Nippon Railway complemented its track construction with the acquisitions of smaller companies; by 1906, Nippon operated nearly 861 miles of track. Other large private companies throughout the nation followed this example. (Watarai, 1915; Free, 2008)

## Railway's role in freight transportation

The relationship between Japanese railways and freight differs from that of the West due to Japan's unique geography. As an island nation with myriad gulfs, harbors, and canals, Japan's freight (and passenger) transportation has been historically oriented towards the water. The mountain chain cutting across the center of the country has enforced that relationship by further isolating regions from one another and orienting their development towards the coasts. (Watarai, 1915)



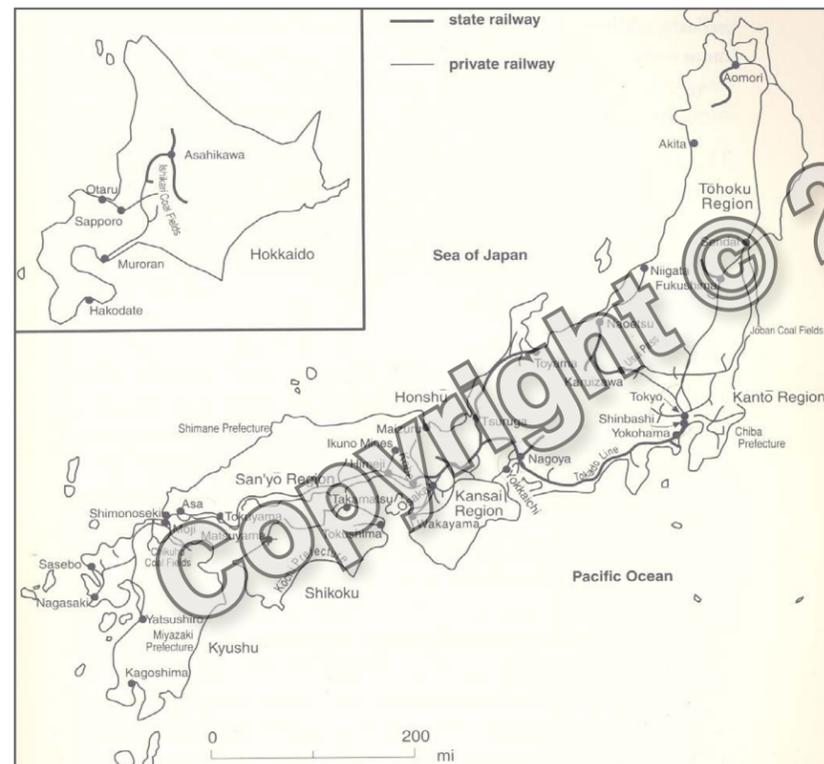
Topological map of Japan. Source: FreeWorldMaps.net, 2011.

As a result of water transportation's convenience, Japanese railways struggled to compete for freight for many years. Even today, Japanese railroads still focus more on passenger traffic than freight. For public and private railroads along the coasts, competition with water transport remained fierce well into the 20th century. Even on land, railroads had to compete with recent progress in the building of local dirt roads and the supplanting of porters and packhorses by rickshaws and horse-carts. (Ericson, 1996)

After nationalization, railroads were better integrated into coal shipping routes, complementing the long-distance water transport with short overland connections from coalfields or to major commercial areas. Eventually, rail also supplanted water transportation of rice, the nation's staple crop, as the government built branch and feeder lines that private railways could not afford to construct. (Ericson, 1996)

## Railway Nationalization

With the dawn of the 20th century, new private railway companies continued to emerge throughout Japan. However, on November 1, 1906, the Japanese government purchased and subsequently dissolved 17 railway companies,



Japan's Railway Network in 1906. Source: Ericson, 1996.