## The Details on the Construction of Railways

# **During the "First Five-Year Plan"**

Jiafeng Liu, Remote Research Assistant

## Introduction

China's Five-Year Plans are a series of social and economic development. Consider the First Five-Year Plans, in order to restored a viable economic base, PRC government organised plenty of programs to promote industries and economy. For this purpose the government applied the Soviet economic model and Soviet promised to help the PRC at the beginning.

The key tasks highlighted in the Plan were to concentrate efforts on the construction of 694 large and medium-sized industrial projects, including 156 with the aid of the Soviet Union, so as to lay that the primary foundations for China's socialist industrialization; to develop agricultural producers' cooperatives to help in the socialist transformation of the agriculture and handicraft industries; to put capitalist industry and commerce on the track of state capitalism so as to facilitate the socialist transformation of private industry and commerce.<sup>1</sup>

During the "First Five-Year Plan", the PRC government paid too much attention on heavy industries, which took up 58.2% of the total investment budget (24.85 billion). Railways construction were one of the most important tasks. This paper shows us the development of construction of railways during the "First Five-Year Plan" (1953-1957). Following graphs illustrate the huge changes vividly.

#### Data collection and results

We firstly skimmed the relevant information from *Statistical Yearbook* in various province during the period. Then collected the related data in the following aspects,

## **Graph 1. Indicators of the data spreadsheet:**

	Province Yea	Railway	Road Mileage	Volume of Passenger	Volume of Freight
	Province Year	Mileage		Travel	Traffic

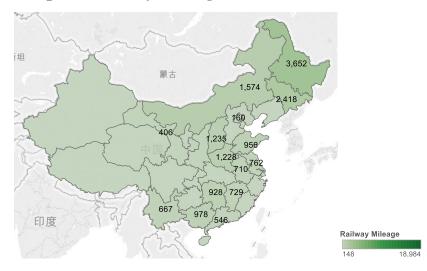
In order to illustrate the changes in traffic, we found the data in Railway/Road Mileage, Volume of Passenger Travel/ Freight Traffic in various province in "First Five-Year Plans". In the next stage, we drew some graphs based on these data.

Graph 2~6 showed us the Railway Mileage from 1953 to 1957, Colour shows the Railway Mileage, dark green means high figure. The certain quantity has already labelled on each province.<sup>2</sup>

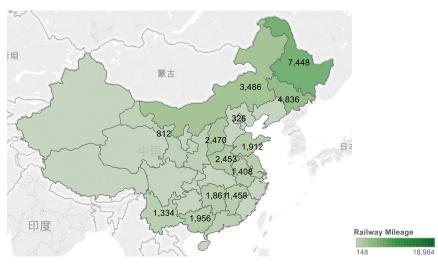
<sup>&</sup>lt;sup>1</sup> Find more details on the site: (https://www.loc.gov/collections/country-studies/about-this-collection/) Library and Congress Country Studies and Wikipidia

<sup>&</sup>lt;sup>2</sup> Use the software *Tableau* 

Graph 2. Railway Mileage in 1953



**Graph 3. Railway Mileage in 1954** 



**Graph 4. Railway Mileage in 1955** 



Graph 5. Railway Mileage in 1956



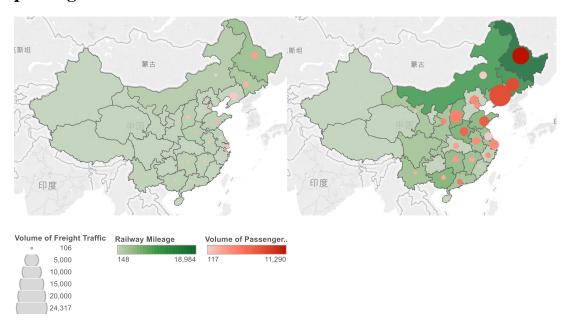
Graph 6. Railway Mileage in 1957



Generally speaking, the map became darker and darker which represent China had more and more railway mileage in this period. However, we can also easily find that the most railway were constructed in Northeast China, then north and south of China, a few in Southwest China. After the First Five Plan, we still cannot take train to Xinjiang, Xizang and Qinghai province.

Next step we compared the volume of freight traffic and passenger travel by railway in 1953 and 1957.

Graph 7. Compare Railway Mileage, volume of freight traffic and passenger travel in 1953 and 1957



Colour shows *Railway Mileage*, darker larger; Colour of the circle indicates the *Volume of passenger*, dark red means more passagers; Size of the circle stands for the *Volume of Freight Traffic*, bigger circle means more goods were transported.

As for the left hand graph, which indicates the situation in 1957, we can see freight traffic and passenger concentrated on northeast of China, then some were in North China, few in South China and here's no railway in Xinjiang, Xizang and Qinghai.

### **Conclusion**

In First Five-Year Plan(1953-1957), most China industries were located in northeast of China. Materials need to be transported there and product need to be delivered to the whole country, so government constructed more railways in this area to make sure the supply of goods.

With the development of industries in North China, more workers came from north of China, I think this cause this high volume of passengers in North China and Northeast China.

#### Reference

- [1] "China The First Five-Year Plan, 1953–57". Library of Congress.
- [2] 国家统计局国民经济综合统计司. 新中国五十年统计资料汇编[M], 中国统计出版社
- [3] http://dangshi.people.com.cn/GB/151935/204121/204122/12924999.html [OL]

# **Appendix**

- 1. Graph2-7 were generated by the software *Tableau*, a powerful data analysis tool, which help us see and understand data.
- 2. Some useful figures



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Railway Mileage. Size shows sum of Volume of Freight Traffic. Details are shown for Province. The data is filtered on Year, which keeps 1953.

Figure A.2.1: Volume of traffic and Railway Mileage in 1953

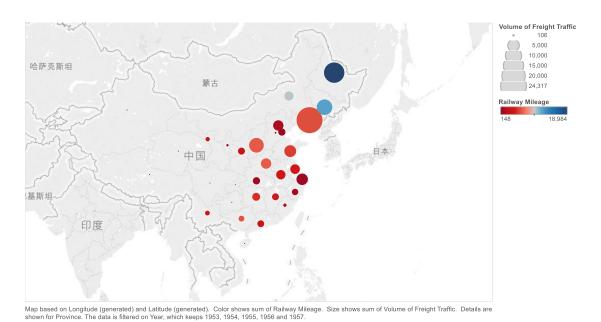


Figure A.2.1: Volume of traffic and Railway Mileage in 1957