The Thai Railway System: A Bleak History and A Bright Future

George Baines Jr*
The Newton Sixth From
E-mail: bainesjr.george@gmail.com

*Corresponding Author

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Abstract

The Thai railway system has played a pivotal role in the country's transportation and economic development since its inception in 1893. This paper explores the historical evolution of Thailand's railways, from its early successes and challenges during the World Wars to its post-war restructuring and modernization. The impact of foreign influence, technological advancements, and wartime occupation are examined, highlighting the resiliency of the Thai people and strategic adaptations that shaped the system. The research also addresses current expansion projects aimed at improving infrastructure and efficiency, with an emphasis on safety innovations such as the Token System. With ongoing investments in double-track railways and increased passenger capacity, Thailand's railway network is poised to become a more reliable and sustainable mode of transportation, paving the way for a brighter future. Enjoy the ride.

Keywords: Thailand Railway History, Paknam Railway, Transportation infrastructure

Introduction

The Thai Railway System: A Bleak History and A Bright Future If you were to look at a map of the railway system here in Thailand, you might notice that the line resembles that of a spinal cord in a skeletal system. This symbolism is not lost on me as the railway truly is the backbone of transportation for the country. Over the years the functionality of the railway has changed significantly, and we will take an in depth look at that evolution process, however there is one thing that has a remained a constant throughout; the railway system of Thailand paved the way to where we are today and those same tracks will continue carrying us towards a brighter future. In the beginning, April 11 th , 1893 to be exact, the first of what would later become thousands of kilometers of track was opened to the public. It was named The Paknam Railway and it marked the birth of Thailand's railway system, connecting the rapidly growing city of Bangkok to the port town of Samut Prakan, formerly known as Paknam. Spanning a distance of 13 miles, this groundbreaking project took two years to complete and was celebrated as an overwhelming success for the nation on multiple fronts. The Paknam Railway served as the foundation of transportation for both people and goods, facilitating economic growth and fostering a pipeline between the port and the city. While relatively small in size compared to the mammoth lines we are familiar with today, we know that the car is not a feasible idea without first the invention of the wheel. Innovation begets innovation and it's no surprise that esteemed dignitaries such as King Rama V were in attendance for the grand opening of this trail blazing project. The sky was the limit now that it was known such

massive undertakings were possible, unfortunately no one knew those skies would soon see some very, very dark days.

The onset of World War I brought unprecedented times and challenges to various parts of the globe, Thailand's railway system was no exception. It is widely stated that Thailand remained neutral during WWI, and while the country did not bear arms during the conflict, they did fire 28 German engineers who had been previously hired to help with the construction of the nation's rail system. In my opinion the expulsion of these engineers showed exactly where the monarchy fell in terms of support for the opposing sides that were involved in the war. King Rama VI could have easily kept those engineers on board for the advancement of the rail system while still claiming "neutrality" in the war, however the principle of the matter superseded all and the Germans were justifiably forced to leave.

The newfound shortage of engineers presented problems for the developing rail system that would quickly need to be rectified to avoid costly delays and cancelled projects. This led to the unification of the Southern and Northern Railway departments in June of 1917, then becoming the Royal Railway Department, which is now formally known as the State Railway of Thailand. This consolidation of resources and expertise laid the groundwork for the continued expansion and development of the Thai railway system, strengthening the nation despite the disruptions caused by the war. Unfortunately, whatever disruptions and dilemmas the country faced during World War I, it was only a drop in the bucket compared to what was to come.

Roughly twenty years after the Treaty of Versailles was signed in 1919, Germany invaded Poland and World War II was underway. This ushered in one of the grimmest eras in the history of the world and certainly the darkest chapter in the history of Thailand. On December 8 th , 1941 Thailand was invaded by Japan, a country which had just carried out one of the most devastating attacks to ever take place on U.S. soil. A country that was also simultaneously attacking Guam, The Philippines, Indonesia, along with other Southeast Asian targets. It can be tough to put yourself in another person's shoes, especially when that person is the King of a nation that is under attack. However, I imagine that King Rama VIII knew that at that time, it was in the best interest of the people of Thailand to temporarily align with the aggressors.

The alliance with Japan transformed the functionality of the Thai railway system so it would meet the needs of wartime operations. The means of meeting these needs led to the construction of the Burma Railway, also unfortunately known as the "Death Railway". Built by prisoners of war and Asian laborers, under the most brutal of conditions, the construction of the Burma Railway claimed the lives of over 100,000 individuals. Violence, disease, heat, and unsafe working conditions all contributed to the loss of these souls. 'Lest we forget', the Thailand-Burma Railway Centre located in Kanchanaburi, Thailand stands in remembrance of the thousands of P.O.W's and Asian laborers who were lost at the site. I can say with first hand experience that it is a beautiful and educational memorial that ensures these men and women will not be forgotten.

One of the many other ways the country continues to honor the legacy of the fallen workers, from the time the war and alliance with Japan ended in 1945, up until today, is with an emphasis on quality control and safety in all aspects of the rail system. One of the most unique and important safety features of the Thai rail system is known as 'The Token'. Created by Mr.Henry Woodhouse of Great Britain in 1849, the Token revolutionized railway signaling, communication, and most importantly safety. Over 3,000 kilometers of railway throughout Thailand is in the form of single track, this means that only one train can pass at a time. The biggest flaw in the single-track design is that if there are two trains heading towards each other, without modern technology, it was impossible to know until it was too late. However, with the Token system, there is an exchange of a physical object, typically a

metal or wooden loop that the conductor can handle with ease, which is passed between the respective parties at designated points along the track. The possession of the Token assures the driver that they have the exclusive right to occupy that particular section of the track, allowing them to advance safely and with confidence.

Advancing safely with confidence has become the norm for the Thai railway system over the years, and there are no signs of slowing in sight. Construction and renovation projects are currently underway all across the land of smiles, which will completely overhaul the infrastructure of the country. As previously mentioned, the current makeup of the railway network includes over 3,000km of single track, as well as 627km of double track and even 107km of triple track for a total of 4,044km. The current expansion plans call for an increase to a total of 4,722km, which at first does not seem significant, but when you factor in an increase from 15.5% to 72% of double track lines you can truly appreciate the magnitude of these ongoing projects. And just how many people will benefit from these upgrades?

Date	Traditiona l Rail	Airport Link	Red Line	Purple Line	Blue Line	BTS	Passenger Total
6/28/2022	67,453	34,900	11,295	19,025	170,652	398,740	702,065
6/29/2022	54,001	43,841	12,053	25,130	225,693	488,033	848,751
6/30/2022	58,448	43,939	14,027	23,931	211,141	458,476	809,962
6/31/2022	68,772	38,133	14,007	20,912	176,547	405,312	723,680
Daily Tota	248,674	160,813	51,379	88,998	784,033	1,750,561	3,084,458

While it is almost impossible to know just how many people will benefit from the upgrades to the rail system, we can see that over 3,000,000 people rode the rails in only a 4 day time span as seen on the table above. Extrapolate that number over weeks or months, with 56.5% more double rail lines available for service than there were in 2022, plus a steadily increasing number of tourists and residents…the number of passengers in Thailand's bright future becomes almost unfathomable, and I look forward to being one of them. Let's ride.

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