

Panama Canal: the early years



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Credit: Ferdinand de Lesseps, PT.wikimedia.org

In 1877, Ferdinand de Lesseps was approved by the French government to build a sea-level canal across the Isthmus of Panama.

“A finer body of men has never been gathered by any nation than the men who have done the work of building the Panama Canal; the conditions under which they have lived and have done their work have been better than in any similar work ever undertaken in the tropics; they have all felt an eager pride in their work; and they have made not only America but the whole world their debtors by what they have accomplished.”

– Theodore Roosevelt, 26th US president, 1901-1909

The Panama Canal stands at 77km in length and takes 15 hours to traverse (eight hours are spent waiting in traffic). It is around 40m deep and 150-300m wide and remains integral to worldwide shipping today. If built today, it would cost around US\$33 billion to complete.

The Panama Canal has its origins as part of Colombia’s Province of Panama.



Philippe Bunau-Varilla (commons.wikimedia.org)

Philippe Bunau-Varilla: by 1903, a new treaty was negotiated by French businessman Philippe Bunau-Varilla, giving the US perpetual rights to build a canal across the Isthmus of Panama for an annual payment of US\$250,000.

However, when Colombian authorities rejected US plans to build a canal across the Isthmus of Panama, the US supported a revolution, which led to Panama’s independence in 1903.

The first attempt

In 1875, under Colombian control, a US investigative team comprising 100 men began surveying Panama in search of a practical canal route. The search was deemed to be ill-fated, as the prospect of building a canal across Panama was too expensive.

The second attempt

Two years later, a French team of surveyors completed their own survey, and the French government approved diplomat Ferdinand de Lesseps plan to build a sea-level canal, costing around US\$250 million.



Excavation began in 1882, but was not making sufficient progress. Workers had contracted yellow fever, leading to the death of around 400 people in 1884 – a 226% increase from the previous year.

In the subsequent four years of excavation, work on the canal was not as productive as originally planned. Violent confrontations occurred between Panamanian and Jamaican workers, resulting in a further 25 deaths, and only a few metres (out of the hundreds required to reach sea-level) had been dug



Credit: Property of the Panama Canal Authority (ACP).

Top: Looking North, general view, upper locks (1912); Right: Looking South, general view, lower locks and east chamber (1913).



Credit: Property of the Panama Canal Authority (ACP).



Credit: Property of the Panama Canal Authority (ACP)

Pedro Miguel looking North, East chamber (1911).

out of the canal.

Despite best efforts made by the French, De Lesseps ran out of money to fund the project; his company went bankrupt and the project was abandoned in 1889.

The third attempt

Around the time of Panama's independence in 1903, a new treaty was negotiated by French businessman Philippe Bunau-Varilla, giving the US perpetual rights to build a canal across the Isthmus of Panama for an annual payment of US\$250,000.

Excavation began again in 1904, under

Theodore Roosevelt's new Isthmian Canal Commission (ICC) in order to see through the construction of the Panama Canal.

By November 1904, the workforce had reached 3,500 and malaria had been identified as the cause of 70% of workers' illnesses. Another outbreak of yellow fever hit workers over the next two months, causing labourers to resign and return to the US. As a result, productivity was low, leading to the resignation of chief engineer John Wallace.

July 1905 saw the arrival of the new chief engineer, John Stevens, who called for state-of-the-art equipment to help

with excavation. He realised that, due to a faulty railway line, spoil could not be transported away at the same rate as the canal was being dug. Consequently, the excavation was stopped in order to focus on the repair of the railroad.

By mid-1906, new tracks had been built along the Panama railroad, meaning that more spoil could be transported away from the site. With a workforce of around 22,000, the canal was beginning to make steady progress. This was further augmented by the ICC, which had set up recruiting agencies in order to attract European workers. Around 12,000 contracts had been issued and the work



Credit: Property of the Panama Canal Authority (ACP).

The first transit 'SS Ancon in upper west chamber, Miraflores (1914).

ethic of unskilled Spanish labourers was helping to increase productivity on the project.

With the introduction of a new railroad, Stevens began to feel as though his expertise was no longer needed on the canal. He described the canal as 'a big ditch' in a letter to Roosevelt in February 1907 and this subsequently led to his resignation.

After the appointment in 1907 of a new chief engineer, George Goethals, the workforce totalled 46,000 men. A variety of leisure activities, including the introduction of a YMCA-club had been set up to fuel productivity. These

developments had clearly worked because during January 1908, around two million cubic metres had been excavated – approximately 400,000 cubic metres more than the previous month.

The Panama Canal was finally completed in 1914 and officially opened for trade in the same year. The cost to transport goods was set to 90 cents per cargo ton, and by 1939, annual traffic had surpassed 7,000 ships.

With the arrival of channel lighting in the 1960s, transportation through the canal was available 24 hours a day. Annual traffic had risen continuously during the 40s, 50s and 60s, and by the 1970s,

around 15,000 ships were using the canal every year.

However, in recent years, the canal has not been sufficient to accommodate the larger ships. Currently, the largest ships that can sail through the canal are the Panamax vessels. To increase capacity, work has begun on a canal expansion project. Once this project has been completed, it will allow the passage of larger (12,000-13,000 TEU) 'new-Panamax' ships to sail through the canal.

Sovereignty was handed back to Panama during the late 1970s, and the canal is now managed by the Panama Canal Authority.