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The Tramways of
SALVADOR
Bahia state
Brazil

BY
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The state of Bahia ranks fifth in Brazil in area and fourth in population. It is about the size of France and had 12 million residents in 2002. The Portuguese made Salvador the capital of their new colony in 1549 and Bahia flourished as a hub of the sugar industry and slave trade for the next two hundred years. The seat of the federal government was moved from Salvador to Rio de Janeiro in 1763. Bahia's capital is officially named Salvador, but many people still affectionately (or ignorantly) call the city by its old name, Bahia.

Salvador sprawls strikingly on two levels on the east side of a bay [see [area map](#)]. The old, original settlement, commercial area and railroad line lie in the flat area along the water. The newer residential zones, shopping section and tourist quarters (today) lie at the top of a steep ridge. An elevator and three inclined-plane railways connect the two levels of town. Two distinct tram systems developed on the two levels and, as shown on the [city map](#), even at their maximum extent

connected only at Calçada and Preguiça (and at the latter only for 23 years). Salvador's population was 400,000 as recently as 1965 but approaches 2.5 million today: oil and petrochemicals have replaced sugar and cacao as the city's major exports.

Salvador was the third city in Brazil – after Rio de Janeiro and Recife – to have a steam railroad. It was the third city – after Rio de Janeiro and Porto Alegre – to have a horsedrawn railway on a street. It was the second city in all South America – preceded only by Rio de Janeiro – to have a street railway powered by electricity.

The Estrada de Ferro Bahia ao S. Francisco began operating locomotive-powered passenger trains between Calçada station and Paripe on 28 June 1860 [see [map](#)]. (This 14 km line still runs today, electrified.) The Companhia de Veículos Econômicos opened the city's first horsecar line, in the Lower City, on 12 May 1869. Two tramway systems opened in the Upper City soon after: the Empresa dos Transportes Urbanos inaugurated its first line on 18 December 1969, and the Empresa dos Trilhos Centrais began operation on 1 June 1871. Passenger cars for all the tram lines seem to have come from the John Stephenson Company in New York.

In 1873 Transportes Urbanos founder Antonio Lacerda built an enormous elevator, 63 meters/207 feet high, between the upper and lower cities. The Elevador Lacerda served as the model for similar structures built later in Rio de Janeiro (1883) and Lisboa, Portugal (1901). Another hill structure nearby, the Plano Inclinado Gonçalves, opened in 1889. (There were rumors that the Gonçalves platform transported horsecars at first, but the fact could not be confirmed.)

Lacerda's Transportes Urbanos was reorganized in 1883 as the Companhia Linha Circular, a name that would become famous in Salvador during the next 75 years. And in 1894 the Veículos Econômicos was reformed as the Companhia de Carris Elétricos, even though all tramway operations were still animal-powered.

Two short articles in trade magazines speak of an electric tramway installed in Salvador in 1891 by the Wenstrom Consolidated Dynamo & Motor Company of Baltimore, U.S.A. ["Another Electric Road for Brazil," *Electrical Engineer* (New York), 5/8/1891, 146; "Electric Tramways in Brazil," *Electrical Review* (London), 16/10/1891, 452]. But no confirmation of this installation could be found and it is believed that the line, if built, never operated.

In 1895 the Companhia Carris Elétricos hired the German firm of Siemens & Halske to electrify the tramway system in the Lower City. Siemens began construction in June 1896, built an elaborate power plant near the railroad station at Calçada, relaid track, strung overhead wire and inaugurated the first electric line in Salvador, between the Roma depot and Ribeira de Itapagipe, on 14 March 1897 [see [map](#)]. Track gauge was 1435 mm, the cars carried bow collectors – the first in South America – and the entire 8 km route, from Ribeira to the foot of the Lacerda elevator at Conceição da Praia, opened on 6 June. Salvador became the second city in Brazil to have electric trams. (This was actually the third electric system: Rio de Janeiro already had two systems of different gauges.) Salvador's electric tramway was not only built and operated, but was also entirely owned by Siemens &

Halske.

Builder of the first 10 primitive-looking flat-roof cars is uncertain. Electrical equipment was surely by Siemens, but the bodies may have been assembled in Brazil. Six 8-bench clerestory-roof cars added to the fleet in 1899 were built by Falkenried in Hamburg, Germany, and in 1900 Salvador acquired two open cars second-hand from the tramway in Berlin: these had been built by Böker und Cie, in Lichterfelde, in 1896.

Two new hill structures were dedicated in 1897: the Plano Inclinado Pilar and the Elevador Taboão. Both the latter and the Plano Inclinado Gonçalves were electrified in 1909, the Pilar funicular in 1912. The Elevador Lacerda was electrified in 1907 and completely rebuilt as a larger structure in 1930.

In 1904 the Companhia Linha Circular [see above] acquired the Trilhos Centrais tram system and hired the General Electric Company of New York to install an electric tramway in the Upper City. GE brought four 10-bench cars from J. G. Brill in Philadelphia and inaugurated an electric line between the Praça da Sé and Rio Vermelho on Christmas Day 1905 [see [map](#)]. Track gauge was 1435 mm, as in the Lower City, but the trams in the Upper City carried U.S.-style trolley poles. Linha Circular ordered nearly a hundred more passenger trams from Brill between 1906 and 1912, three meat motors and a motorized ambulance car with a fumigating chamber. There was a tram turntable at the company's shops in Vitória [see [map](#)].

The Linha Circular was controlled by Eduardo Guinle, GE's principal agent in Brazil, who had achieved great renown

with his docks enterprises in Santos. Guinle was frustrated by North American domination of electric utilities in São Paulo and Rio de Janeiro and saw his opportunity in Salvador. A crisis ensued when the Companhia Carris Elétricos, the German tramway in the Lower City, was acquired by North Americans in 1906. The Bahia Tramway, Light & Power Company was incorporated in Portland, Maine, by Percival Farquhar, a New York banker, and Frederick Pearson and James Mitchell, the American engineers who had built the electric tramways in Rio de Janeiro and São Paulo. Farquhar purchased the Siemens tramway and, spiting General Electric, began importing new trams with bow collectors from United Electric Company in Preston, England, in 1907. When he tried to buy the Companhia Linha Circular in 1908, Guinle launched a vicious smear campaign against yankee imperialism. On 5 October 1909, on the eve of the 1910 elections, the Guinle-owned Salvador newspapers reported that a blind man had been run over by one of Farquhar's trams. Riots developed and a mob destroyed 14 tramcars, hundreds of street lamps, the power plant and the gas works. In a subsequent, related incident, the police dynamited city hall and the governor's palace. Farquhar sold Bahia Tramway in 1913 to the Municipality of Bahia and left for Rondônia to build the Madeira-Mamoré Railroad.

Salvador continued to have two distinct tram systems until 1929: the lines of the Municipalidade da Bahia in the Lower City, which used German and English cars with bow collectors; and Guinle's Linha Circular network in the Upper City, which used American cars with trolley poles [see [map](#)]. On 29 May 1929 Guinle sold out and thereafter both systems were operated by the Companhia Linha Circular, part of the

new Companhia de Energia Elétrica da Bahia, which was a subsidiary of the U.S. conglomerate, Electric Bond & Share.

The "CLC" emblem of the Companhia Linha Circular appeared thereafter on trams throughout the city. Bow collectors became standard and the IBGE report for 1932 shows 123 motor trams, 21 trailers and four work cars on 129 km of track. It was the fourth-largest tramway system in Brazil, surpassed only by networks in Rio de Janeiro, São Paulo and Recife.

In 1937 Salvador acquired 10 double-truck closed cars, built by Kuhlman in 1923, from the abandoned streetcar system in Brockton, Massachusetts. Eastern Massachusetts Street Railway repainted and numbered them 1-10 before they left the United States, but they were renumbered 401-410 in Brazil. After World War II Linha Circular also obtained 35 Osgood-Bradley cars of two types from Worcester, Massachusetts (500 and 700 series in Salvador), and built its own 14-window trams.

The tram system returned to the city on 24 October 1955. The Serviço Municipal de Transportes Coletivos replaced trams in the Lower City with Fiat trolleybuses in 1959 and eliminated trams from the commercial area of the Upper City in 1960. A new tram depot was built on Rua J. J. Seabra east of the business district [see [map](#)] and two isolated tram routes, from this terminal to Quintas and Rio Vermelho, continued to operate until September 1961. The Elevador Taboão also closed in 1961, but trolleybus service continued until June 1968.

The Elevador Lacerda and the Gonçalves and Pilar funiculars are still operating today and a new inclined plane railway

opened near Calçada railroad station in 1981. The pioneer steam railroad of 1860 was electrified in 1948 and [suburban trains](#) carry passengers today over the same 14 km between Calçada and Paripe. Track gauge is meter and power collection is by pantograph. Construction began in 2000 of a [rapid transit line](#) in the Upper City.

See illustrations:

[Part A: 1869-1928](#)

[Part B: 1929-1961](#)

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See my index of

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