

## Steel Wheels over Steel Rails – from Cities to Suburbs

### Kansas City Missouri and Around the World



Walnut Street 1906 – On this day in late winter or early spring, many Kansas City pedestrians were wearing overcoats against the chill. Horse-drawn carriages outnumbered automobiles two to one in this view, which was north along Walnut from 12<sup>th</sup> Street. The next intersection was 11<sup>th</sup> Street, or Petticoat Lane.

Several well-dressed adults and children are crossing the street, possibly headed to or from the Emery, Bird, Thayer Dry Goods Co. on the corner. For years it was one of the city's biggest department stores.



1900 – 1967 Trams & Trolleys

This exhibit demonstrates, through stamps, photographs, and history, the important role street railway vehicles, and the electric trolley, played in the everyday lives of people in Kansas City, and other cities throughout the world.

Horse-drawn Trams, Cable Cars, and Electric Trolleys experienced their greatest popularity from the 1870s through the 1940s. Economics pushed nations to continue these modes of public transportation well into the latter half of the Twentieth Century.

During their heyday (the recovery years following World War I), the electric street railway industry became the fifth largest industry in the United States, employing over 100,000 people nationwide. Like typewriters and the telephone booth, all are gone now, except the sounds and sights fixed firmly in the minds of those who still remember.

Take a few minutes to travel to a time not so long ago, to experience this forgotten technology, and how it moved the people who built modern cities and populated the suburbs. Relax in the sights and sounds of a less hectic time, before automobiles took control.

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Kansas City Public Service Company 1920s Electric Trolley Accommodation Token

**Section 1**

**Horse-drawn Trams**

**Kansas City Missouri and Around the World**

**Horse-drawn Trams Replace Wagons and Buggies**

Someone discovered a horse or mule could pull passengers seated in a coach more quickly and smoothly if it rode on steel wheels along steel rails. The horse-drawn streetcar, or horse-car as it was generally known, became the modern mode of transportation in many cities around the globe.

People who were in a hurry usually traveled by foot or horse-back. For long distances along hilly streets, foot-travel was exhausting, and in bad weather, uncomfortable.

*Barbados*



*1870s Donkey-drawn Tram*

**1971-2001 Horse Trams & Trolleys from Abroad**

Photogravure, Perf. 11½

*Isle of Man*



*1876 First Double-decker Tram*

*Isle of Man*



*1890 Toast-rack Tram*

*Isle of Man*

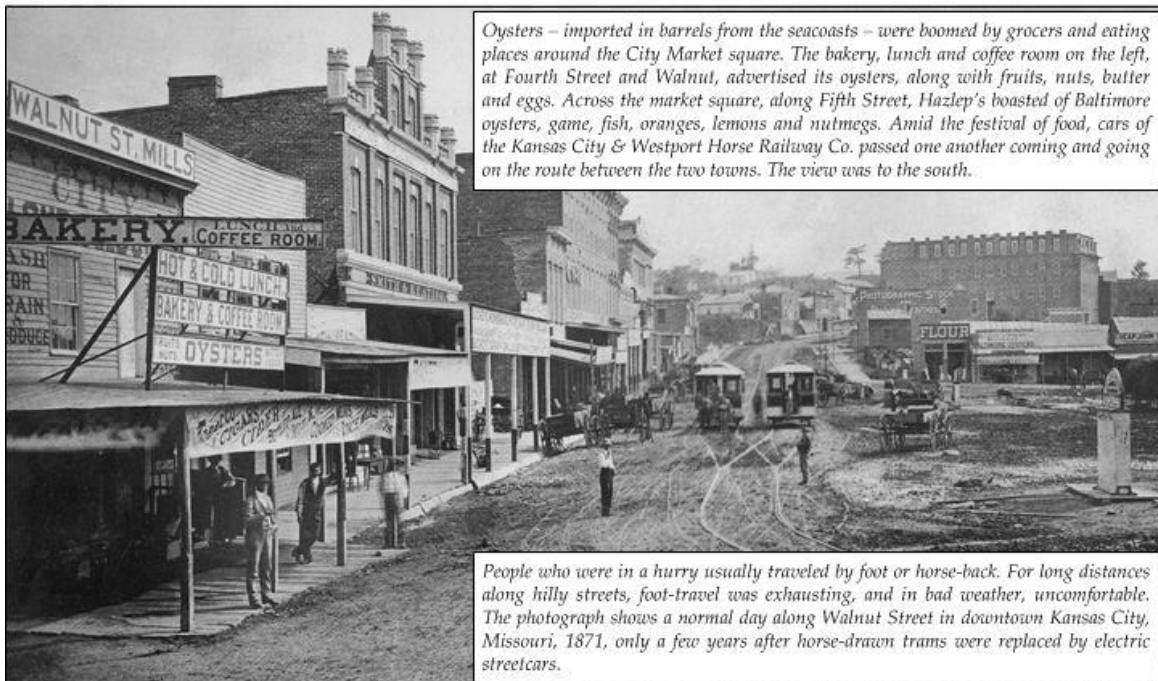


*1895 Horse Bus*

*Isle of Man*



*Decorated Tram with Queen Elizabeth II and Prince Philip*



*Oysters – imported in barrels from the seacoasts – were boomed by grocers and eating places around the City Market square. The bakery, lunch and coffee room on the left, at Fourth Street and Walnut, advertised its oysters, along with fruits, nuts, butter and eggs. Across the market square, along Fifth Street, Hazley’s boasted of Baltimore oysters, game, fish, oranges, lemons and nutmegs. Amid the festival of food, cars of the Kansas City & Westport Horse Railway Co. passed one another coming and going on the route between the two towns. The view was to the south.*

*People who were in a hurry usually traveled by foot or horse-back. For long distances along hilly streets, foot-travel was exhausting, and in bad weather, uncomfortable. The photograph shows a normal day along Walnut Street in downtown Kansas City, Missouri, 1871, only a few years after horse-drawn trams were replaced by electric streetcars.*

## Horse-drawn Trams

### Kansas City Missouri and Around the World

#### 1971-2001 Horse Trams & Trolleys from Abroad

Lithographed, Perf. 13½, 13½x14, 14¼x14, 14, 15x14



1887 Galway Horse



Mail Delivery Car



1862 Nelson Horse Tram



1878 Adelaide

#### “4-legged” Horse Power Cost versus Effect

Due to heavy and constant passenger loads, horses and mules could only be used a few hours at a time. As a result, 8 to 10 animals had to be available for every coach to provide service from early morning until late evening. You can imagine some of the problems caused by animals clopping along busy city streets, not to mention sickness and disease.

Horses and mules required multiple stabling facilities within city limits. Handlers refueled and resting the animals. Overhead expenses were unattractive to business owners, and increased costs were passed along to passengers.

This 1874 view is south from Ninth Street along the west side of Kansas City’s Main Street. The horse-tram is located in the bottom left portion of the photo, heading away from the photographer.

As commercial development marched south from the Missouri River, the hot new address became the corner where Ninth Street met Main and Delaware streets. The intersection, where several streetcar lines eventually met, would become know as “The Junction”. Here were businesses with goods and services typical for a growing town – stoves and hardware; pumps, plumbing and steam fitting; house and sign painting; livery and feed. One of the new horse-drawn streetcars rolled uphill on tracks laid in the middle of the dirt street.



**Section 2**

**Cable Cars & Steam Trams**  
**Kansas City Missouri and Around the World**

**Steel Cables Replace Horses...  
An Advancement in Technology**

An ancestor to Cable Car technology was demonstrated by the London and Blackwall Railway in 1840. The system used an iron claw and rope that was susceptible to constant wear. Due to maintenance costs, the system was abandoned after eight years of service.

Shortly after America's second war for independence, cable powered railway systems became the "rage". The first successful Cable Car system was the West Side and Yonkers Patent Railway in New York City, which operated from 1868 to 1870.

There were many problems with the early prototypes. Naysayers predicted the horse would prevail. Shortly after 1870, mechanics were perfected, and most major cities in many nations put the technology into motion. Coach owners quickly converted to this more economical transportation system.

**1971-1989 Cable Cars & Steam Trams from Home & Abroad**

Lithographed Perf. 13½x14, Litho/Engraved Perf. 11, Photogravure Perf. 11½

Australia

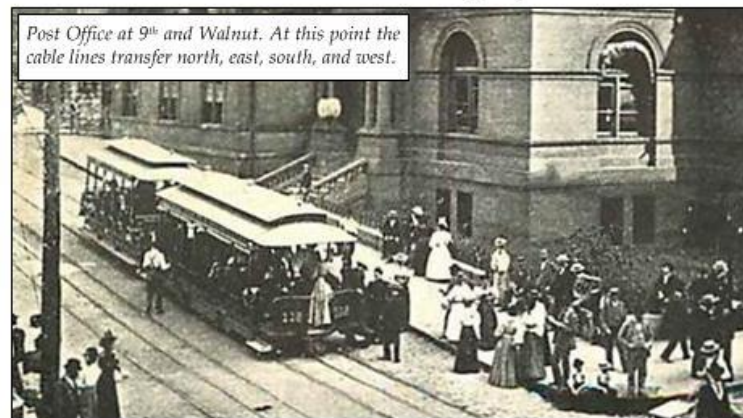


1886 Melbourne Cable Tram

Australia



1884 Sydney Steam Tram



Another wave of investment swept through the American west in the 1880s, and Kansas City was a big beneficiary. New businesses and jobs drew tens of thousands of new residents, and that attracted people with ideas for moving those people from place to place. Engineer Robert Gillham devised a cable car system that connected Union Depot in the West Bottoms with the city atop the bluffs. After a thrilling – some said harrowing – ride up a steep trestle to Quality Hill, cable car passengers had this view of the young city as they rode east on Ninth Street. To their right was the powerhouse for the moving underground cable.



United States



San Francisco Cable Car

Bailiwick of Guernsey



1879 Steam Tram

## Cable Cars & Steam Trams

### Kansas City Missouri and Around the World

#### 1985-1992 Cable Cars & Steam Trams from Home & Abroad

Lithographed, Perf. 13½, 13½x14, 10 Vert.

*Isle of Man*



*Douglas Head Incline Railway*

*Isle of Man*



*Douglas Cable Car*

*Bailiwick of Guernsey*



*1879 First Steam Tram*

*New Zealand*



*1881 Dunedin Cable Car*

*United States*

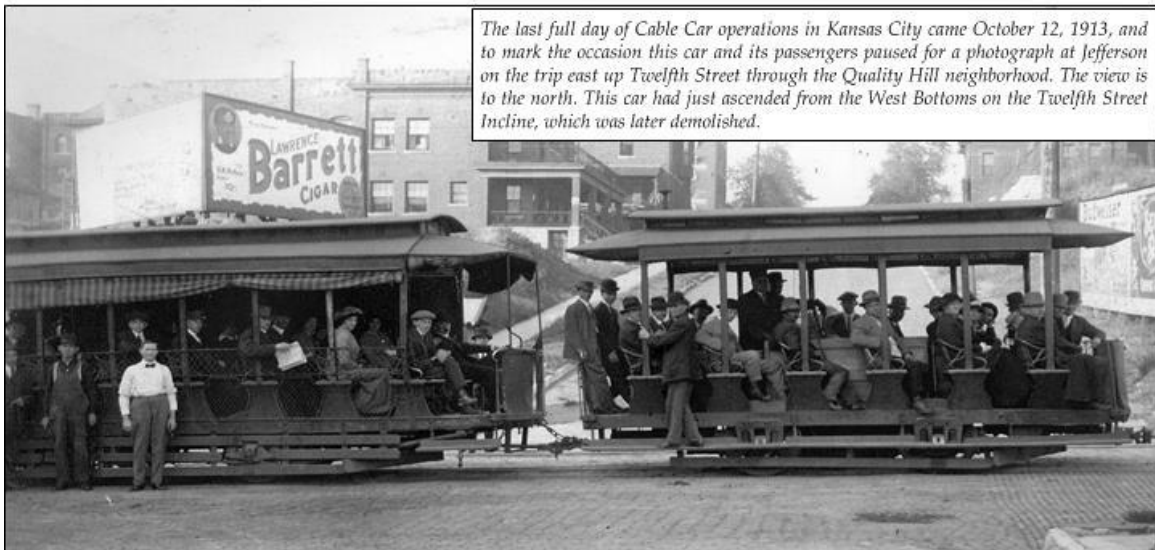


*1880 Cable Cars, Coil Strip x5, Plate 1*

#### The Mechanics & System Operation

Cable Cars pulled themselves along a continuous cable that moved at a constant speed. The cable was buried a few inches below the surface of the street, in a slot between the steel rails. Giant winding wheels and a system of pulleys created a network of machines housed inside a cable barn located at one end of the cable's track. The cable barn received its energy from a powerhouse, usually generated from a series of coal-fired boilers.

The operator, called a "Gripman", moved one of several large grips to control movement. One grip attached the vehicle to the cable under the street. When the car moved forward, the Gripman pulled back on a grip, which caused a device under the car to grab the moving cable. To stop the car, the grip was pushed forward, which released the vehicle from the cable. To bring the car to a stop, another grip was pulled backward which was attached to a mechanical handbrake.



*The last full day of Cable Car operations in Kansas City came October 12, 1913, and to mark the occasion this car and its passengers paused for a photograph at Jefferson on the trip east up Twelfth Street through the Quality Hill neighborhood. The view is to the north. This car had just ascended from the West Bottoms on the Twelfth Street Incline, which was later demolished.*

**Section 3**

**Electric Trolleys**

**Kansas City Missouri and Around the World**

**1988-1996 Electric Trolleys from Abroad**

Lithographed, Perf. 11½, 13½, 13½x14, Photogravure 11½

*Isle of Man*



1895 Snaefell Mountain #5

*Isle of Man*



Marine Drive, Port Soderick #3

*Isle of Man*



1893 Manx Electric Railway

*Australia*



1893 Hobart Double-deck Tram

*Australia*



1901 Brisbane Combination Tram

*Russia*



1896 Electric Tram at Putilovsky

*Bosnia Herzegovina (Muslim Govt.)*



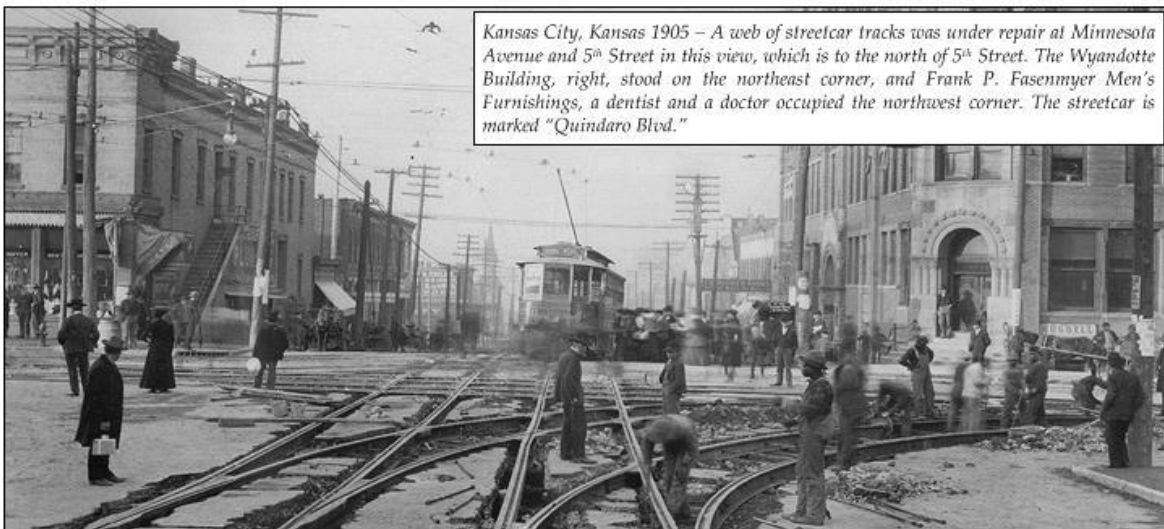
1805 Electric Tram at Sarajevo

**Living Beyond the City Limits  
Populating the Suburbs**

During the late 1880's electric motor technology was perfected. The street railway industry immediately seized this new source of power as a way to solve the many problems associated with operating horse cars.

The first successful American electric street railway installation was in 1887. Almost overnight, horse car lines in North America became a technology of the past. The electric trolleys and trams became so popular the street railway industry experienced explosive growth in ridership.

New trolley lines were built in every direction, and original lines extended beyond city limits. This sparked a major housing boom in the suburbs. Trolleys allowed people, for the first time, to live outside the confines of their cities, and commute to their jobs for a reasonable price. Automobiles were too expensive for middle class Americans.



*Kansas City, Kansas 1905 – A web of streetcar tracks was under repair at Minnesota Avenue and 5<sup>th</sup> Street in this view, which is to the north of 5<sup>th</sup> Street. The Wyandotte Building, right, stood on the northeast corner, and Frank P. Fasnmyer Men's Furnishings, a dentist and a doctor occupied the northwest corner. The streetcar is marked "Quindaro Blvd."*

## Electric Trolleys

### Kansas City Missouri and Around the World

#### 1987-2004 Electric Trolleys from Abroad

Lithographed, Perf. 12¾, 15x14

Ireland



Cork Electric Tram

Ireland



Dublin Standard Tram

Cuba



Electric Tram, Santiago de Cuba

Cuba



Electric Tram, Matanzas

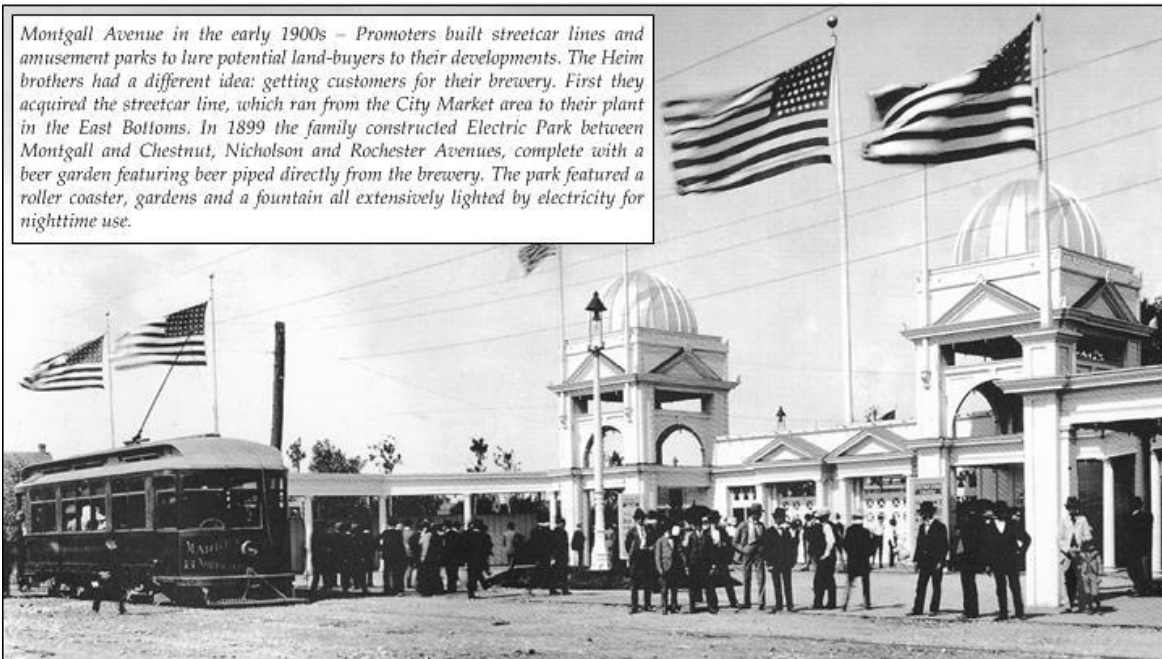
#### Electric Power – No End in Sight Automobiles Not Affordable to All

By the time World War I exploded, the trolley transportation was the fifth largest industry in the U.S., employing over 100,000 people nationwide.

How did the name “trolley” evolve? The shoe, or wheel at the very end of the trolley pole, the part that actually touches and runs along the underside of the overhead wire, is called the trolley. The trolley is attached to the trolley pole, which is attached to the trolley car – any questions?

Early electric trolleys were small and not powerful. During warm weather months, many trolley companies operated open cars, which became known as “breezers” to the people who rode them. They were open on all four sides, providing a cool breeze on warm summer days. They also had wet seats on windy, rainy days.

Montgall Avenue in the early 1900s – Promoters built streetcar lines and amusement parks to lure potential land-buyers to their developments. The Heim brothers had a different idea: getting customers for their brewery. First they acquired the streetcar line, which ran from the City Market area to their plant in the East Bottoms. In 1899 the family constructed Electric Park between Montgall and Chestnut, Nicholson and Rochester Avenues, complete with a beer garden featuring beer piped directly from the brewery. The park featured a roller coaster, gardens and a fountain all extensively lighted by electricity for nighttime use.



**Section 4**

**Special Service Trolleys**

**Kansas City Missouri and Around the World**

**Maintenance Cars Served the Trolley Network  
Keeping the Lines Open and the Mail Delivered**

Photos and information supporting the purpose of maintenance trolleys is difficult to obtain. These photos, along with their captions, tell all that is known.

In brief, some trolley cars were adapted to perform work to keep the system of rails operating, while other cars were converted to serve special functions long after they became obsolete.



*Kansas City Public Service Trolley #17  
Snow Sweeper, 1943*



*Kansas City Public Service Trolley #041  
Open-center Wooden Work Car, 1947*



*Kansas City Public Service Trolley #007  
Gravel Car, 1940s*



*Kansas City Public Service Trolley #0023  
Dump Car, 1951*

**1985-1993 Electric Trolleys from Abroad**

Lithographed, Perf. 13½, Photo/Engraved Perf. 14

*Luxembourg*



*Electric Tram at Luxembourg Bus Museum*

*New Zealand*



*1902 Auckland-Electric*

*New Zealand*



*1904 Wellington-Electric*

*New Zealand*



*1905 Christchurch-Electric*

*Union Avenue about 1900 – As the 19<sup>th</sup> century turned into the 20<sup>th</sup>, the West Bottoms were at the height of their importance to the Kansas City economy. The stockyards were booming, and distributors were shipping goods to all parts of the country. C.A. Murdock made roasted coffees, baking powder and flavoring extracts, and Fairbanks, Morse shipped scales and engines. Faxon Drugs, left, was a drug wholesaler. Down the street, Union Depot was bursting at the seams, and the city was longing for a replacement. A U.S. Mail Trolley No. 3 heads down the street!*





**Addendum**

**Technology Continues**  
**Kansas City Missouri and Around the World**

**Competition & Overcrowded Cities**  
**The “Jitneys” Capture Trolley Revenues**

As competition from automobiles and buses increased, many trolley companies were forced to take drastic cost cutting measures. Many trolley lines dissolved the conductor’s job, and converted their trolleys for one man operations. And, almost all trolley companies ended the open sided cars. The 1920s and 1930s saw a rapid decline. Many trolley builders went out of business.

At the beginning of the 20<sup>th</sup> century a serious problem developed – the rush hour! There were so many trolleys converging into downtown areas, trolley traffic jams became a common sight. The solution to this problem was to build rapid transit subways under city streets, or elevated railways above streets.

Soon after Henry Ford’s Model-T became available to the average American, some began competing against trolley lines by using their “Tin Lizzies” to pick up passengers who were waiting for trolleys and offering them rides downtown, for a penny or two; trolley fares were five cents. These folks were called Jitneys, who were uninsured private citizens who provided a service that developed into taxi cab companies.

*Russia*



1993 Rail Bus, Model 71-608K

**1988-1996 Electric Rail Buses from Abroad**

Photogravure, Perf. 11½, 13½x14

*Austria*



Vienna Local Railway, Electric Train Josephsplatz

Next came PCC (President’s Conference Committee) cars, trackless electric busses, subways, and LRVs (Light Rail Vehicles), all before electric public service vehicles were replaced with inter-city buses on rubber wheels.



48<sup>th</sup> and Harrison Streets early 1940s – Various vintages of streetcars, lines of trolley buses and even one of the new streamlined PCC cars waited in the yards at Kansas City Public Service Co.’s streetcar barn. Maintenance took place inside the barn. The complex of tracks and shops stretched from 48<sup>th</sup> Street south to Brush Creek and from Harrison east to Troost, which crossed the scene at center-right.