

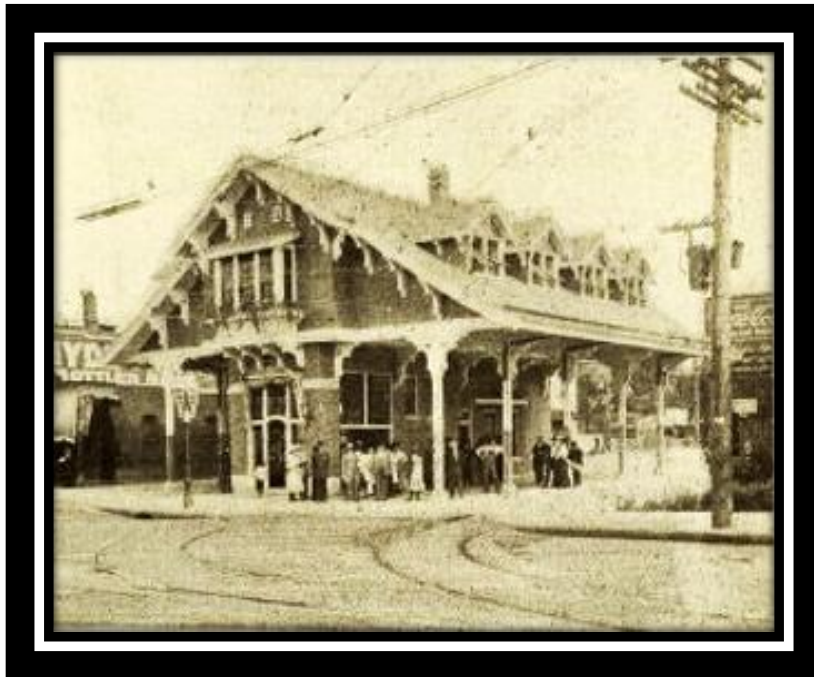


AROUND THE LOOP

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Trolley Volunteers

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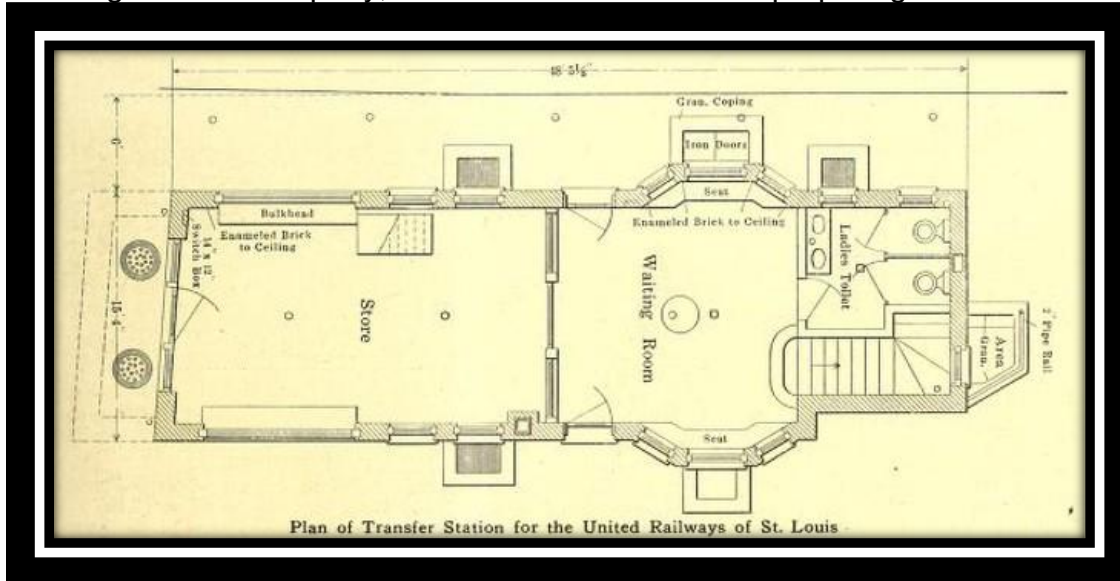
AN ARTISTIC TRANSFER STATION IN ST. LOUIS (A.K.A – THE WELLSTON LOOP)



The United Railways Company, of St. Louis, has recently completed a transfer station at the corner of Hodiament and Easton (*now-Dr. Martin Luther King, Jr Drive*) Avenues – the junction of two city-lines, one cross town line and three suburban lines. The new building is not only interesting for the compactness of its design, due to the limited area available at the junction, but also for architectural treatment which marks a distinct advance in American city buildings for like purposes. As shown in the accompanying half-tone illustration, the striking artistic appearance of the building has been obtained by employing the long, sloping ornamental roof so characteristic of the Swiss chalet. This kind of roof lends itself admirably to the protection of large areas. In this case efficient protection for passengers who are transferring in rainy weather is furnished by having the eaves project over the two sets of tracks along each side of the building.

The building line proper is embraced in an area only 48 ft. 5-1/8th in. long by about 15ft. 4 in. wide. The exterior of the street floor is of brick with stone trimmings and the interior is of enameled brick except for some glazed brick in the store; the upper floor is of wood treated in the Swiss fashion, as already mentioned. The lower portions of the roof are carried over the rails on 8 in. x 8 in. yellow pine posts, which are set on concrete piers between each pair of tracks. Although small, the building serves for other operating purposes besides the transfer of passengers. The basement contains a storage

room, a heating plant, bins for coke, sand and salt, and a men's toilet. The ground floor which is shown in the illustrated floor plan, has a store in the front part, the remainder being divided into a waiting room and women's toilet. The upper floor is used as a division headquarters for one of the suburban lines ending at this location. Acknowledgements are due to Richard McCulloch, vice-president and assistant general manager of the company, for courtesies extended in preparing this article.



(The above article and illustrations appeared in the Electric Railway Journal Vol. XXXVI of October 8, 1910.)

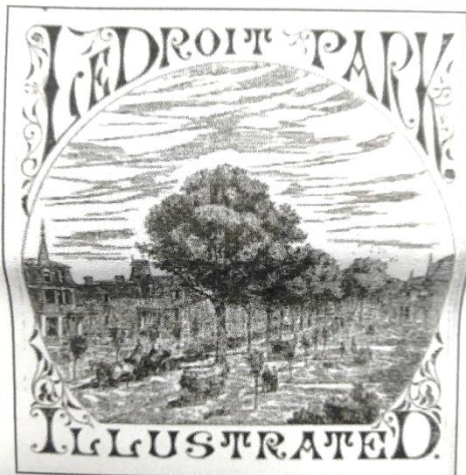
A STREETCAR CITY –
Growth of the Capital's Suburbs.

In the 19th century, some American's began to live in a new kind of community, suburbs, where they enjoyed pastoral surroundings but could commute to the city for jobs and shopping. Suburbs were made possible by railroads, horsecars, cable cars, and electric streetcars. Some suburbanites left the city to get away from poor immigrants and migrants. Others believed that a quiet, less-congested area was better for health and family. In 19th



century cities, people of different races and incomes lived in close proximity. With the rise of suburbs, communities became more sharply divided by race, wealth and ethnicity.

Early Washington Suburbs – Suburban development began slowly in the 1850's around the City of Washington. Land speculators established suburban sites like Uniontown (later known as Anacostia), Mount Pleasant, Le Droit Park, and Takoma Park near roads, street rail lines, and railroads that led into the city. Uniontown was laid out across the Anacostia River from Washington in 1854. The developer hoped to attract Navy Yard employees who could walk across this bridge to work.



- In 1873, speculators turned farmland into La Droit Park, an exclusive, fenced-in subdivision located near a horse-drawn streetcar line that carried residents downtown.

Moving to the suburbs changed people's lifestyles. Homeowners now had the responsibility of maintaining the home and a yard. And women were more isolated from the once easy walk to the market, shops, and friends.

Electric Streetcar Suburb: - The Chevy Chase, 1890s Sensing profit in the public's need for transit and housing, businessmen established streetcar lines to open up new areas of development. The Chevy Chase Land Company developed more than 1,700 acres that straddled the Maryland-District Line. The Rock Creek Railway connected Chevy Chase to the city. Chevy Chase grew slowly until World War 1, when the automobile made suburban living more and more convenient. To get potential buyers to Chevy Chase, the development company extended Connecticut Avenue and built bridges, an electric streetcar line, and an amusement park. In 1900, a streetcar ride from Chevy Chase to downtown Washington took 36 minutes.

Next month: What Happened to the Streetcars?

THE REAL STORY BEHIND THE DEMISE OF AMERICA'S ONCE-MIGHTY STREETCARS



Left: A Los Angeles streetcar in the 1930s

ack in the 1920s, most American city-dwellers took public transportation to work every day.

There were [17,000 miles](#) of streetcar lines across the country, running through virtually every major American city. That included cities we don't think of as hubs for mass transit today: [Atlanta](#), [Raleigh](#), and [Los Angeles](#).

Nowadays, by contrast, just [5 percent or so](#) of workers commute via public transit, and they're disproportionately clustered in

a handful of dense cities like New York, Boston, and Chicago. Just a handful of cities still have extensive streetcar systems — and several others are now spending millions trying to build new, smaller ones.

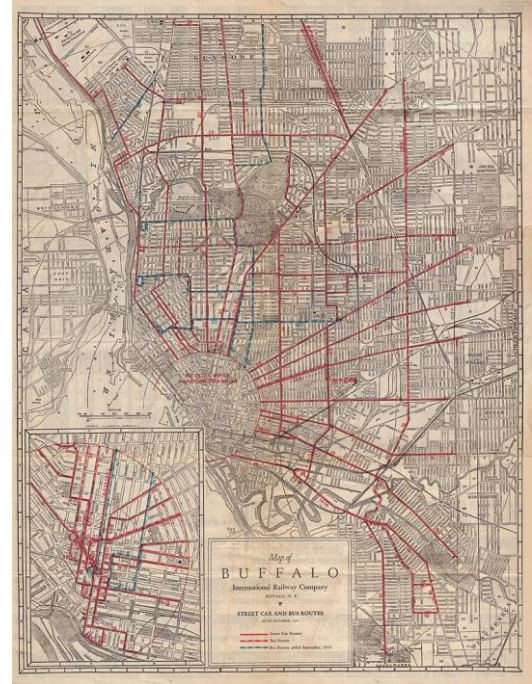
So whatever happened to all those streetcars?

"There's this [widespread conspiracy theory](#) that the streetcars were bought up by a company National City Lines, which was effectively controlled by GM, so that they could be torn up and converted into bus lines," says Peter Norton, a historian at the University of Virginia and author of [Fighting Traffic: The Dawn of the Motor Age in the American City](#).

But that's not actually the full story, he says. "By the time National City Lines was buying up these streetcar companies, they were already in bankruptcy."

Surprisingly, though, streetcars didn't solely go bankrupt because people chose cars over rail. The real reasons for the streetcar's demise are much less nefarious than a GM-driven conspiracy — they include gridlock and city rules that kept fares artificially low — but they're fascinating in their own right, and if you're a transit fan, they're even more frustrating.

Left: Buffalo's extensive streetcar system in 1935. ([International Railway Company](#))



THE GOLDEN AGE OF THE STREETCAR



Left: Electrified streetcars in Grand Rapids, Michigan. ([Grand Rapids Historical Society](#))

During the 1800s, animal-drawn streetcar lines were built in cities across the United States. Starting in the 1880s, they were replaced by electrified streetcars, which quickly became the dominant mode of transportation in many cities.

Running streetcars was a very profitable business. Cities expanded, and people who found themselves living too far from work to walk depended on them. (Some real-estate developers [built nearby suburbs](#) around streetcar lines.) Over time, the businessmen who ran the streetcars, called "[traction magnates](#)," consolidated ownership of multiple lines, establishing powerful, oftentimes corrupt monopolies in many cities.

Eventually, many of them contracted with city governments for the explicit right to operate as a monopoly in that city. In exchange, they agreed to all sorts of conditions. "Eager to receive guarantees on their large up-front investments, streetcar operators agreed to contract provisions that held fares constant at five cents and mandated that rail line owners maintain the pavement around their tracks," writes Stephen Smith at Market Urbanism.

Until the start of World War I, these conditions weren't a huge problem. But soon afterward, they became excessively onerous — because even though these companies were making sacrifices to act as monopolies, they were no longer operating as them.

WHAT REALLY KILLED THE STREETCAR: GRIDLOCK AND ARTIFICIALLY LOW FARES

The decline of the streetcar after World War I — when cars began to arrive on city streets — is often cast as a simple choice made by consumers. As a [Smithsonian exhibition puts it](#), "Americans chose another alternative — the automobile. The car became the commuter option of choice for those who could afford it, and more people could do so."

But the reality is more complicated. "People weren't choosing to ride or not ride in some perfect universe — they were making it in a messy, real-world environment," Norton says.

The real problem was that once cars appeared on the road, they could drive on streetcar tracks — and the streetcars could no longer operate efficiently. "Once just 10 percent or so of people were driving, the tracks were so crowded that [the streetcars] weren't making their schedules," Norton says.

In some places, like Chicago, streetcars retained dedicated rights of way, and they survived. Pretty much anywhere else, they were doomed. "With 160,000 cars cramming onto Los Angeles streets in the 1920s, mass-transit riders complained of massive traffic jams and hourlong delays," writes [Cecilia Rasmussen at the Los Angeles Times](#).

What's more, in many cities the streetcars' contracts required them to keep the pavement on the roads surrounding the tracks in good shape. This meant that the companies were effectively subsidizing automobile travel even as it cannibalized their business.

And paying for this maintenance got more and more difficult for one key reason: many contracts had permanently locked companies into a 5-cent fare, which wasn't indexed to inflation.

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Especially after World War I, the value of 5 cents plummeted, but streetcars had to get approval from municipal commissions for any fare hikes — and the idea of the 5-cent fare had become ingrained as something of a birthright among many members of the public. "Nobody on these commissions would approve fare increases to cover costs, because that would get them in trouble with their constituents," Norton says.

The public had little sympathy for the traction magnates who'd entered into these contracts. Today, many progressives and urbanists are boosters of streetcars, but back then they were often seen as a bastion of corruption — especially because of their owners' history of [violent strike-breaking](#).

THE QUIET DEATH OF THE STREETCAR

Because of these factors, some streetcar companies began going into bankruptcy as early as the 1920s, when they were still their cities' dominant mode of transportation. Huge costs and the falling value of fares forced them to cut back on service, steadily pushing people to the convenient, increasingly affordable automobile.



As they fought to stay alive during the Great Depression, many companies invested in buses, which were cheaper and more flexible. Initially they operated mainly as feeder systems to bring commuters to the end of lines, but as time went on, they began to replace some lines entirely.

That wasn't enough to save most of these companies, especially as city, state, and federal governments pumped more and more money into roads. "By the '50s, planners put a priority on bringing cars into cities with new urban highways," Norton says. "That really made streetcars truly impractical to get around on."

By the 1950s, virtually all streetcar companies were in terrible shape. Some were taken over by new municipal bus companies, while a total of [46 transit networks](#) were bought up by National City Lines — the holding company linked to GM, as well as oil and tire companies, that's at the center of all the conspiracy theories.

While it's true that National City continued ripping up lines and replacing them with buses — and that, long-term, GM benefited from the decline of mass transit — it's very hard to argue that National City killed the streetcar on its own. Streetcar systems went bankrupt and were dismantled in virtually every metro area in the United States, and National City was only involved in [about 10 percent](#) of cases.

It's also not exactly right to say the streetcar died because Americans chose the car. In an alternate world where government subsidized each mode equally, it's easy to imagine things playing out quite differently.

So what killed the streetcar? The simplest answer is that it couldn't compete with the car — on an extremely uneven playing field.

The **Jewett Car Company** was an early 20th-century American industrial company that manufactured streetcars and interurban cars.

The company was founded in 1893 in Jewett, Ohio, where its first factory was located. In 1904, the company relocated from Jewett to a 10-acre (40,000 m²) site along South Williams Street in Newark, Ohio, but maintained the original name. The facility soon expanded to become one of Newark's largest employers. Among its customers was the city of San Francisco, California, which purchased several street cars from Jewett. The company produced more than 2,000 wood-and-steel street cars, shipping them to 26 states and Canada. The Jewett Car Company went out of business in 1919 when the automobile began replacing mass transit.^[1]

The most notable Jewett-built cars that are still running today are:

- San Francisco Municipal Railway streetcars 130 and Car 162, which were built in 1914.
- London and Port Stanley Railway interurban car 8, built in 1915, is operational at the Halton County Radial Railway in Milton, Ontario.
- Chicago North Shore and Milwaukee interurban car 251 built in 1917, is operated regularly at the Illinois Railway Museum in Union, Illinois.
- Chicago Aurora and Elgin interurban car 319, built in 1914, is operated at the Illinois Railway Museum in Union, Illinois.
- Chicago Aurora and Elgin interurban car 320, built in 1914, is operated at the Midwest Electric Railway in Mount Pleasant, Iowa.
- Brooklyn Rapid Transit streetcar 4547, built in 1906, sees regular operation at the Seashore Trolley Museum in Kennebunkport, Maine.
- Connecticut Company suburban car 775, built in 1904, is restored and operational at the Shore Line Trolley Museum in East Haven, Connecticut.
- Pacific Electric interurban 1001, built in 1913, operates occasionally at the Orange Empire Railway Museum in Perris, California.

Additional non-operational Jewett cars are preserved at the Canadian Railway Museum, Connecticut Trolley Museum, Electric City Trolley Museum, Elgin County Railway Museum, Fox River Trolley Museum, Museum of Transportation, New York Museum of Transportation, New York Transit Museum, Northern Ohio Railway Museum, Pennsylvania Trolley Museum, The Works and the Western Railway Museum.

Street scene showing the Kansas City Public Service Company Building (also known as the Kansas City Railway Company or K.C. Rys. Co. from 1914-1925) on the left. This building was located on the south side of 15th Street (now Truman Road) between Grand Avenue (now Grand Boulevard) and Walnut Street. It was razed in 1932 by the Atlas Wrecking and Lumber Corporation. Pictured right at the northwest corner of Grand Avenue and 15th Street is a building with an advertisement for Blue Moon Dance



FRANK JULIAN SPRAGUE

Frank Julian Sprague (1857-1934), American electrical engineer and inventor, successfully used electricity to power vehicles and is known today as the father of electric traction. His electric motor-driven streetcar revolutionized urban transportation.

Frank Sprague was born in Milford, Conn., on July 25, 1857, but lived with relatives in North Adams, Mass., after 1866. Demonstrating an aptitude for science and mathematics, Sprague secured an appointment to the U.S. Naval Academy in 1874. After graduation in 1878 and 2 years at sea, he pursued his electrical studies relentlessly.

in 1883 Sprague joined Thomas Edison's staff, but he soon withdrew to form the Sprague Electric Railway and Motor Company. He soon marketed a "constant speed" motor for industrial use but subcontracted its manufacture so he could devote himself to electric traction development. In 1887 he contracted to electrify a new street railway in Richmond, Va. Despite having to devise the entire system from scratch, he completed the installation of a 12-mile, 40-car system in 1888.

By 1890 over 200 electric street railways were in operation or under construction; half of these used Sprague equipment, and 90 percent of them were based on his patents. In 1890 the Edison General Electric Company acquired Sprague's business, but Sprague left to establish the Sprague Electric Elevator Company. He developed and installed electric elevators in several New York buildings before selling out to the Otis Elevator Company.

Having worked out a system of multiple-unit control for elevators, Sprague sought to apply it to railways. He realized that trains made up of individually motorized cars controlled by a single operator had enormous advantages. His multiple-unit system, installed in Chicago in 1897-1898, was adopted generally for subway, elevated, and suburban service. Thus the basis for the modern rapid transit system was complete. Sprague continued to advance the application of electrical engineering. He worked on automatic railroad signaling and elevator control systems, and during World War I he served on the Naval Consulting Board.

Sprague was energetic and resourceful. He was an enthusiastic gardener and enjoyed art and music. Twice married, he was the father of four children. He received many professional honors before his death on Oct. 25, 1934.

Further Reading

Sources on Sprague's life are limited; Harold C. Passer's biographical sketch in William Miller, ed., *Men in Business* (1952), is the best available. Accounts of the development of electric traction can be found in the popularly written book by John Anderson Miller, *Fares, Please!* (1941), and the scholarly book by George W. Hilton and John F. Due, *The Electric Interurban Railways in America* (1960; rev. ed. 1969). □

