

ADEQUATE
TRANSPORTATION FACILITIES

The BASIS of INDUSTRIAL
and SOCIAL PROGRESS

*Telling the Public
the Facts*



ADEQUATE
TRANSPORTATION FACILITIES
THE BASIS FOR
INDUSTRIAL AND SOCIAL PROGRESS

Telling the Public the Facts



SPECIAL PUBLICATION 1720

FEBRUARY 1925

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.

EAST PITTSBURGH, PENNA.

FOREWORD

ALL industrial and social progress in this land of ours today is dependent in large measure upon our transportation facilities. This has ever been true and doubtless will always remain so.

If our steam and electric railways are permitted and encouraged to expand and develop to keep pace with the constantly enlarged demands of our rapidly increasing population, in just such measure will our industrial and social life expand and advance. No nation, no state, no city, no community can be great and prosperous without adequate transportation service and alert and prosperous public utilities.

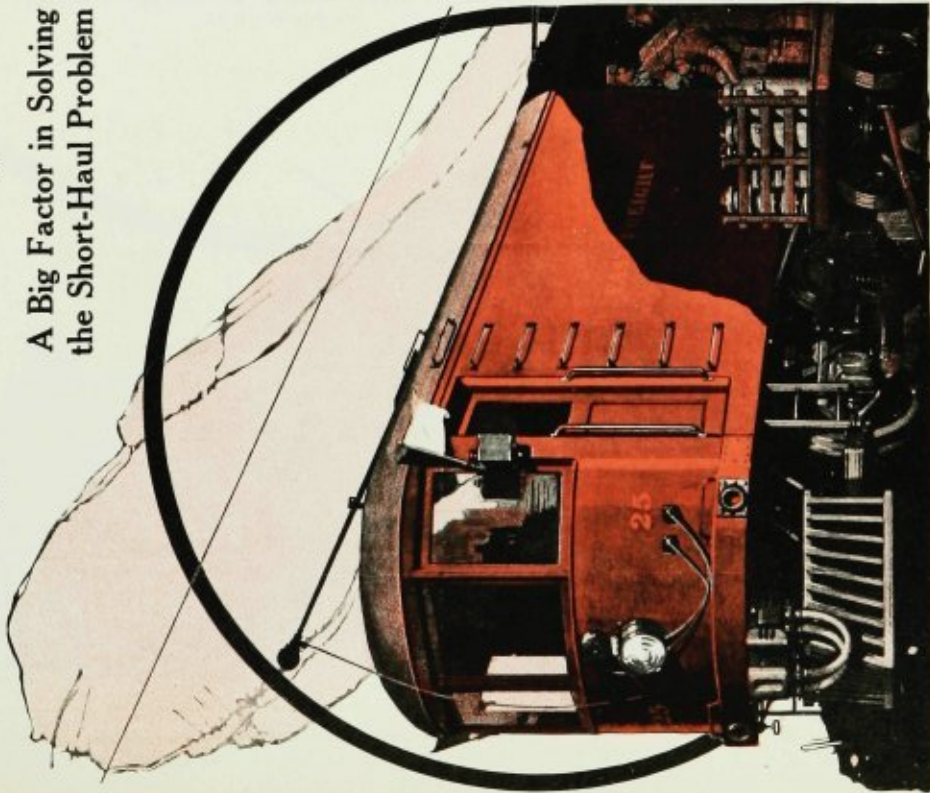
We believe ample facilities are available if the great transportation industries are given the proper public support and encouragement to develop these facilities, enlarge the service and perfect their operation. It is this firm conviction and our faith in these industries that has led the Westinghouse Company during past years to bespeak, through the leading popular media, the sincere interest and support of the great body public for a better understanding of utility problems.

It is our hope that what we are doing may in some measure be beneficial to the keystone industry of our Nation. The many expressions of appreciation which we have received indicate that this is so and strengthen our resolve to continue this work.

To crystalize the past endeavor, we present in the following pages reproductions of a few of the typical messages we have placed in such popular media as *Forbes*, *The Literary Digest*, *Scientific American*, *Colliers*, *The Nations Business* and *Saturday Evening Post*.

Trolley Transport

A Big Factor in Solving
the Short-Haul Problem



Westinghouse

ELECTRIC LOCOMOTIVES, LINE
AND POWER PLANT EQUIPMENT

IN time of peace, adequate transportation is essential to national prosperity. In time of war, it is vital to national safety.

With the steam roads struggling under a heavy burden of maintenance, electric interurban railways of the country are proving a transportation factor of incalculable value through their quick economic handling of an immense volume of short-haul freight.

By helping to solve the short-haul problem, they are going far to relieve steam-road congestion and thus enable through traffic to be handled with greater speed and efficiency.

Because of "trolley transport" the flow of equipment, material and fuel to the nation's industries is far larger than it would be if it were limited to the slow, unproductive hauling of the hour—the vital necessity of the hour—is increased.

Vast quantities of perishable food-stuffs are being saved and feeding the nation made less difficult.

Fuel is conserved through the use of electric power.

Agricultural and manufacturing development is being stimulated.

The transportation of freight over electric trolley lines has assumed such

proportions that at one terminal—that of the Detroit, United, Railway—108 cars a day are loaded out, equivalent to from 300 to 500 steam-road cars, since many are motor cars and make a large average daily mileage. The time-honored interurban center, Indianapolis, is just completing the most extensive electric railway system in the United States, and it would be a credit to many an important steam road.

On a number of electric roads, traffic is being handled more efficiently. The Waterloo, Cedar Falls and Northern Railway, an Iowa line, for example, handles 70 per cent of the switching entering Waterloo over three steam roads. In a typical month, this electric line hauled more than 2,000 cars and transported approximately 85,000 tons of freight.

Extensive as is the hauling of freight by electric railways today, however, the possibilities of trolley transport have only begun to be realized. With one-seventh as much mileage as all the country's steam roads, and a capitalization of approximately \$5,000,000,000, the electric lines of the country point the way towards a solution of one of the nation's most important and perplexing problems—a problem of peace-times as well as war-times.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
East Pittsburgh, Pa.





Westinghouse

POWER AND LINE EQUIPMENT FOR ELECTRIC RAILWAYS

Why Cities Expand

The cities of our western world, in their steady onward march, move to the beat of the motorman's gong.

Since those days scarcely more than a quarter-century ago, when first in Cleveland, then Kansas City, then St. Joseph, then Richmond, the hum of the railway motor replaced the clatter of horses' hoofs, the electric street car has largely shaped and stimulated America's urban growth.

Thirteen electric railways in 1888—three hundred and ten in the three years that followed—thus the new thought in transportation gathered momentum, until no city worthy of the name is today without its electric street car system.

Congestion of population has given way to expansion. The center of home life has moved farther and farther away from the center of business and factory life. What would otherwise have been

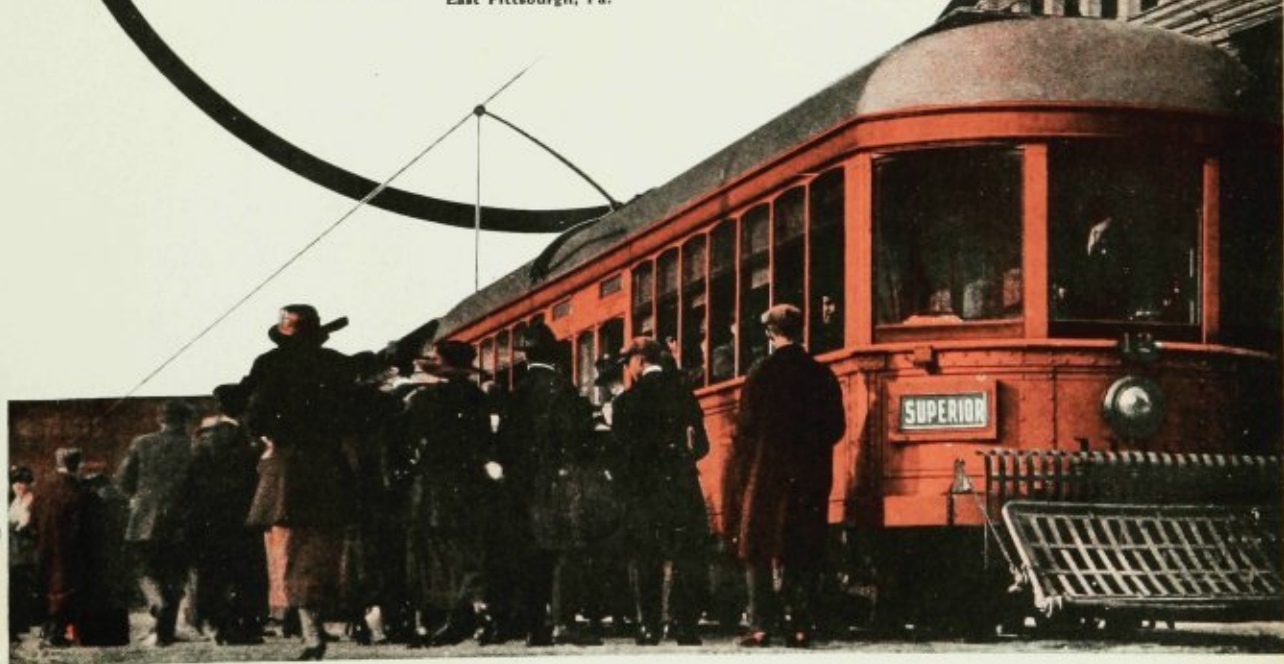
today but vast open spaces surrounding closely-built centers of intermingled shops, stores and dwellings now are cities in themselves—cities of beautiful homes, broad lawns, trees, flowers and fresh air.

The name Westinghouse is associated with the development of almost every piece of apparatus from the giant turbines in the power house to the motor that finally changes the mysterious current into effective pulling power. Switchboards, meters, line material, rail bonds, motor, controller and even the air compressor that empowers the brakes—are products in the development of which Westinghouse skill, initiative and organization have played an important part.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
East Pittsburgh, Pa.

W

WESTINGHOUSE
ELECTRIC



Advt. appearing in Saturday Evening Post, December 7; Literary Digest, December 14; and Leslie's Weekly, November 25

Every Evening at 5.30

**W**

WESTINGHOUSE
ELECTRIC

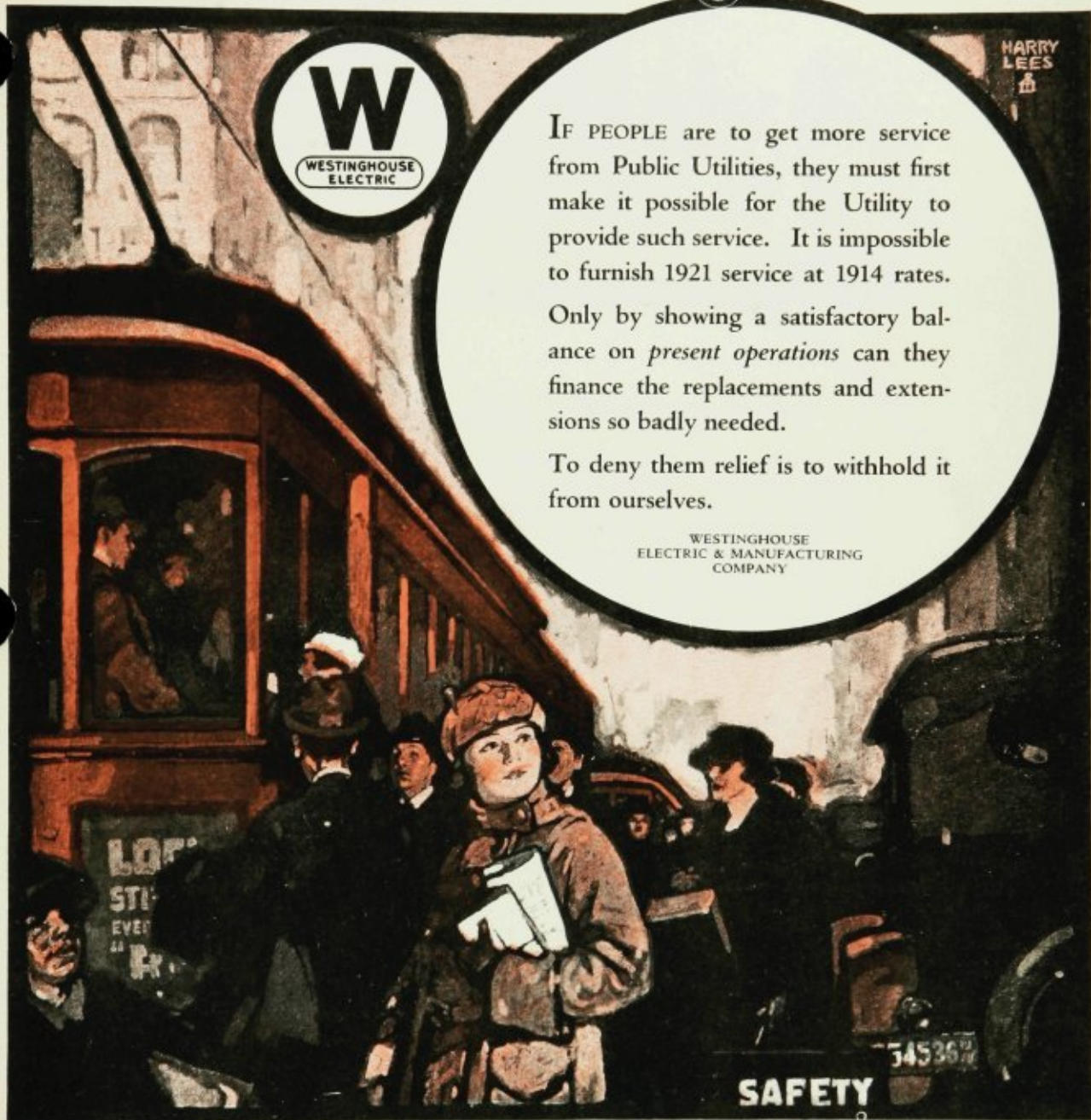
HARRY
LEES
ARTIST

IF PEOPLE are to get more service from Public Utilities, they must first make it possible for the Utility to provide such service. It is impossible to furnish 1921 service at 1914 rates.

Only by showing a satisfactory balance on *present operations* can they finance the replacements and extensions so badly needed.

To deny them relief is to withhold it from ourselves.

WESTINGHOUSE
ELECTRIC & MANUFACTURING
COMPANY



Westinghouse

RAILWAY MOTORS AND CONTROL APPARATUS

Advt. appearing in Nation's Business, February 1920
and Forbes, February 1920



Community Development

Adequate transportation facilities are positively essential to the growth and development of every community. You, and all good citizens, are vitally interested in the constructive development of your Street Railway Company. It serves the people who deal with you, who work with or for you; it serves your friends, your neighbors, your fellow citizens. Your success and your good pleasure depend, in no small degree, on the ability of your Electric Railway Company to serve those who live and work in your community. Familiarize yourself with the problems your local Electric Railway Company is trying to solve. They cannot be solved without your constructive help and interest.

The common aim of your Street Railway Company and you is to make it possible for your city to grow, not in size alone but in resources and attractiveness; to make for better living, cleaner living, *higher* living for every one. For it is Electric Traction that, first of all, brings a community into real progressive existence and that makes its expansion a possibility.

It is good business for you to take a financial interest in this question. Every home served by an Electric Railway should own one of its bonds or a share of stock. The truth is that the Street Railway should really be

owned by the individuals who make up the public. Traction securities, backed up by community interest and support, should be, and are, a good investment.

The resources of the Westinghouse Electric & Manufacturing Company, which have made possible the wonderful developments in electric power, the steam turbine, the transformer, the rotary converter, railway motors and thousands of other electric improvements, stand as a mighty insurance for the continued development and progress of the Electric Railway.

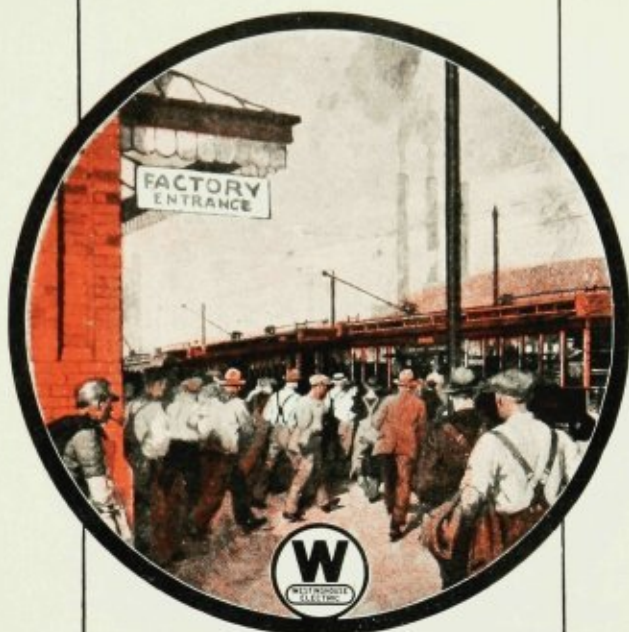
WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
Offices in all Principal Cities • Representatives Everywhere



Westinghouse

Advt. appearing in Nation's Business, May 1922 and Forbes, May 13, 1922

Where the Whistles Blow Loudest



A ten million dollar plant stands idle in one of our large cities, and why? *Because no street railway runs within a mile of it!*

A great corporation builds one of its plants eight hundred miles from the home office—and why? *It found a place where street railway and other transportation service was exceptionally good!*

It is high time that the good influence of local transportation got the credit it deserves, for it has been proved again and again that one of the prime requisites to industrial and civic development is that ordinary but absolutely essential service that we call the street railway, so that it seems fair and wise to say that no community is going to get its legitimate growth without it.

Any intelligent citizen grants without argument the truth of the general proposition that adequate transportation is a vital necessity. But the need is for a great body of opinion that will not only admit this general truth, but that will also work for and approve of its specific application to its own local situations.

As a country, and as individual civic groups, we cannot temporize with this situation much longer. The time is here for every good and sincere citizen to take a real interest in his local street railway problem.

Probably his bank, his insurance company, and his neighbor are already stockholders in the street railway company that serves him and his business every day. Perhaps he, too, will conclude that such securities are worth owning. And, at any rate, he will find that an effort to understand the problems and difficulties with which his street railway is contending will be well worth while, both for his own good, and for that of the civic and industrial growth of his community.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
Offices in all Principal Cities Representatives Everywhere

Westinghouse

© W. E. & M. Co. 1922

Advt. appearing in Collier's, July 15, 1922



The Electric Railways Carry the Public to Business



The Chicago Municipal Pier where the American Electric Railway Association Convention will be held October 2nd to 6th.

The great bulk of people in our cities ride to business and back home again in street cars. But so much is it a part of everyday routine that few realize how much of the industrial and business success of their community depends on the transportation facilities offered.

As the city grows and expands, its business partner, the electric railway, keeps pace with it. The electric railway creates wider markets for business. It provides the opportunity for industrial expansion. It makes attractive home sites available to the home builder.

Executives and operators of electric railways from cities in every part of the country meet yearly to plan, build up and improve the service under their direction. And it is to solve these problems of serving the public that the American Electric Railway Association is meeting in Chicago next week.

Dependable and uninterrupted transportation service is a utility that every progressive city must have. Nearly a half Century of accumulated engineering knowledge and experience of the Westinghouse Electric & Manufacturing Co. is at the disposal of these Electric Railway Operators, the men who are making this service possible.

WESTINGHOUSE
ELECTRIC & MANUFACTURING COMPANY
Offices in All Principal Cities • Representatives Everywhere

Westinghouse



© W. E. & M. Co., 1922

Advt. appearing in Collier's, September 30, 1922

How Cities Grow Tall



Why Cities Expand

Transportation is the great problem of the city, just as it is also the agency that makes the city possible. For there will be, and can be, no city unless there are railways—on the streets or below or above them—that adequately meet the needs and the purse of the average every-day citizen.

But what of the thousands who pour, every day, into those sections of the city where the most of its business is transacted? How shall room be made for them, and where shall they find a place in which to do their work?

Cities grow tall in answer to these questions, and in so growing create another transportation problem.

The electric elevator, the skyward railway, has become as important as the street car. Take the number of people who travel every day on street railways in your own city, and double it, and you have an extremely conservative estimate of the daily traffic your elevators handle. In New York City, for instance, twenty-five thousand elevators carry over eight million passengers every day!

It is transportation—transportation electrified—that makes it possible for cities to expand and to grow tall.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
Offices in all Principal Cities Representatives Everywhere

Westinghouse

Electrify!

© W. E. & M. Co. 1922



Co-operation—Builder of Cities

Here is a thought for the thoughtful—for men who would like to see their community develop in size and influence and resources, and as a place in which to live and to be in business:

The transportation requirements of each community—and the problems involved in meeting these requirements—deserve consideration by the people of a community, as well as by the company that must provide them. For the problem of the carrier and the carried is a *common problem—and only co-operative thinking and working will solve it.*

Few realize how much community development

depends on adequate transportation, nor do they give due credit to the Electric Street Railway for its contribution to local well-being and prosperity. Fewer still recognize the importance of co-operation in fostering and strengthening existing transportation facilities.

Co-operating in the solution of the technical problems involved is a corps of Westinghouse Engineers, whose goal is the development of Electric Street Railway Equipment that will do a real job for companies, and for communities, that are to meet their transportation needs with the greatest possible measure of reliability—and economy.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY

Offices in all Principal Cities

Representatives Everywhere

Westinghouse

© 1922 by the Westinghouse Electric & Manufacturing Company

Advt. No. 2237 appearing in Scientific American, December, Nation's Business, December, and Forbes, December 9, 1922.

Business Men and Community Development



Do the progressive business associations in your community, your Chamber of Commerce, Board of Trade, Rotary Club, and the others, take an active interest in the development of your street railway service? Do they fully realize that co-operation with the Street Railway Company is necessary to help solve your common transportation problems?

Sometimes the business men who drive to their offices every day lose sight of the fact that regardless of the congested traffic conditions that the automobile has produced, regardless of the fact that the street car carries them infrequently, it is still the indispensable servant of the great majority of the people, and Community Life, and Community Development, are absolutely dependent upon it. *And the business man who overlooks or ignores this fact is simply neglecting his own interests.*

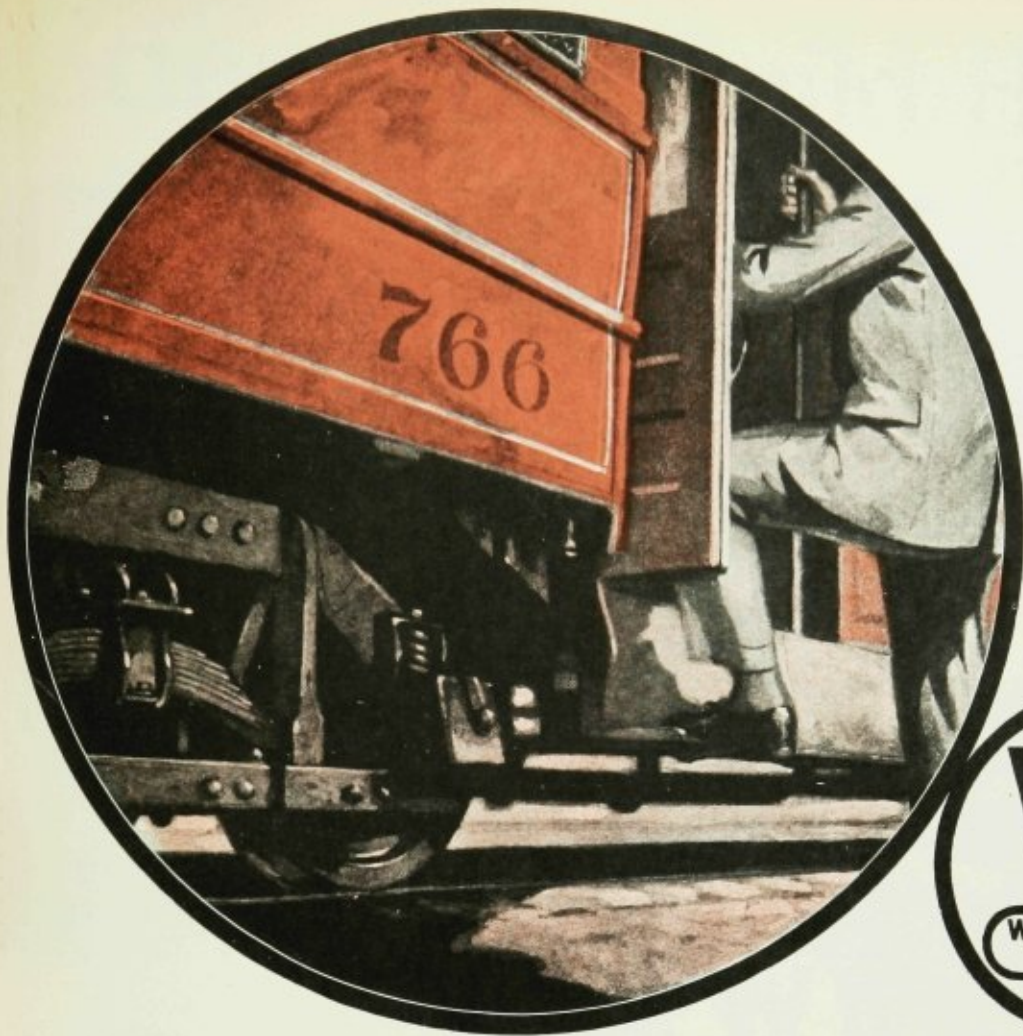
Westinghouse has had contact with this whole problem for a great many years. Westinghouse engineering has designed and built the modern and efficient electrical street railway apparatus now in use in most progressive cities.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
Offices in all Principal Cities Representatives Everywhere

Westinghouse

© W. E. & M. Co. 1923

Advt. No. 2216 appearing in Literary Digest,
February 3, 1923.



The Wheels of Progress Are Under Your Street Cars

Progress follows the street car. Community-growth and development depend upon it. It is difficult for the individual to advance in a community that is not making progress.

Individuals, industries, and communities all thrive where there is adequate and reasonably profitable street car service—but not otherwise.

No matter where you live or what you

do, efficient street car service vitally concerns you. For if the electric street railway in your community is not getting treatment that is fair and right, it will sooner or later hamper your town's progress and your prosperity.

Westinghouse Engineers have developed apparatus that makes the street railway car the most economical, the most reliable and the safest of all mass transport mediums.

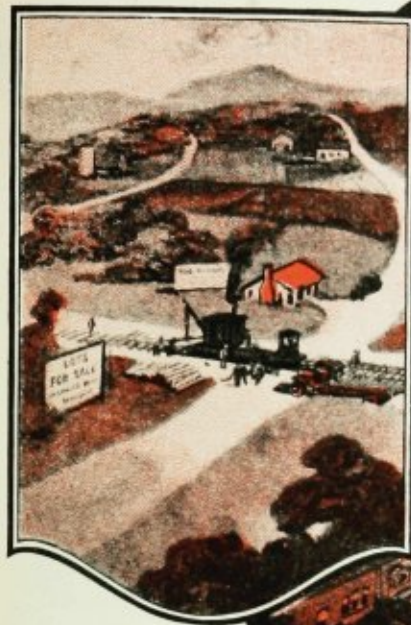
WESTINGHOUSE ELECTRIC & MANUFACTURING CO. • Offices in all Principal Cities • Representatives Everywhere

Westinghouse

©1923 by the Westinghouse
Electric & Manufacturing Company

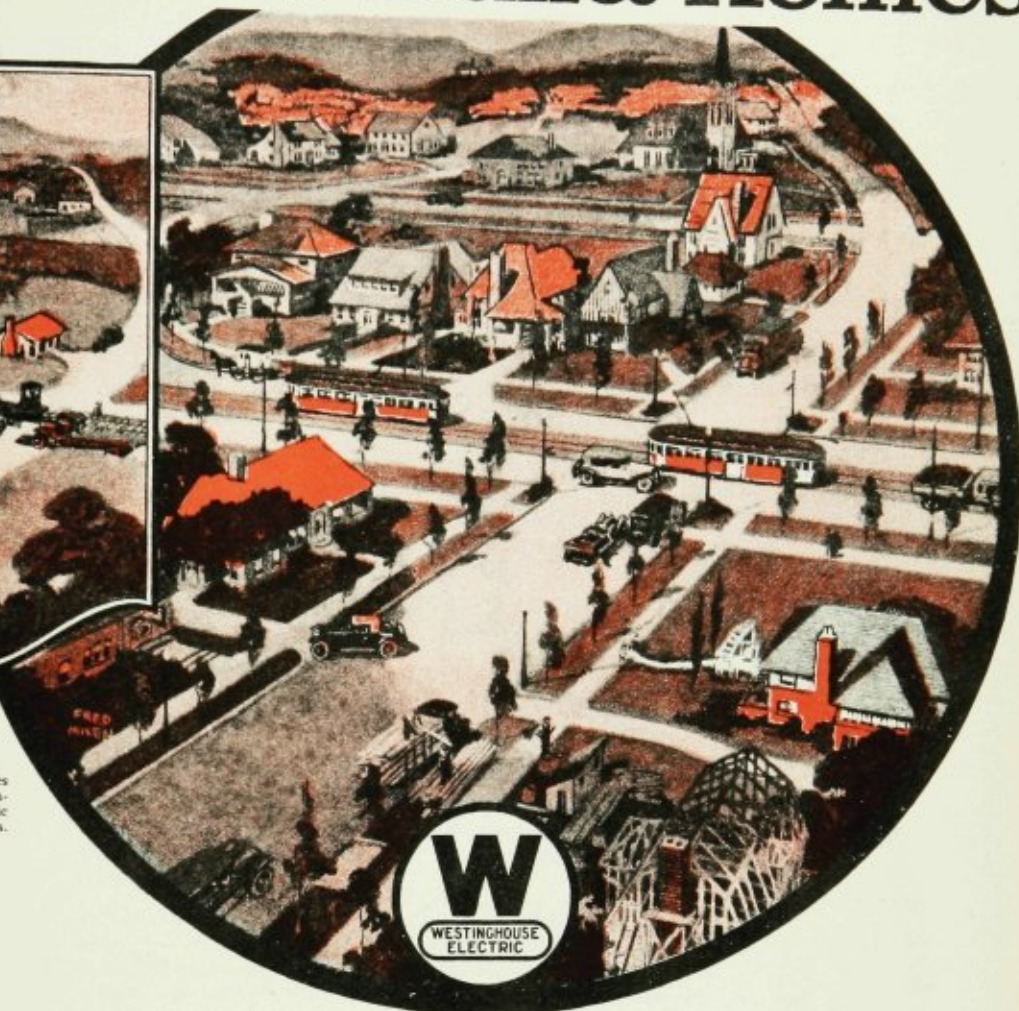
Advt. appearing in Scientific American, October, 1923; Literary Digest, October 6, 1923; Forbes, October 13, 1923; and Nation's Business, October, 1923

Street Cars Build Homes



Transportation Brings Transformation

Thousands of American communities date their real growth and expansion from the day when the electric railway joined suburb to business.



AWAY from the dust and heat and congestion—*street cars* build homes! Even those who can and do afford automobiles, build their homes near the car line.

Adequate, progressive economical street car service is the thing your community *must* have for social and industrial growth.

Your street railway company may need *your* help, and that of all your neighbors, before it will be possible for you to have the transportation your community needs. It is to your interest to see that taxation, paving costs and other burdens are not so

inequitable as to prevent development and progress.

If you encourage efficient management, and help provide the right incentive, then the right kind of service, at the right cost, will be available for every one to build homes in desirable places.

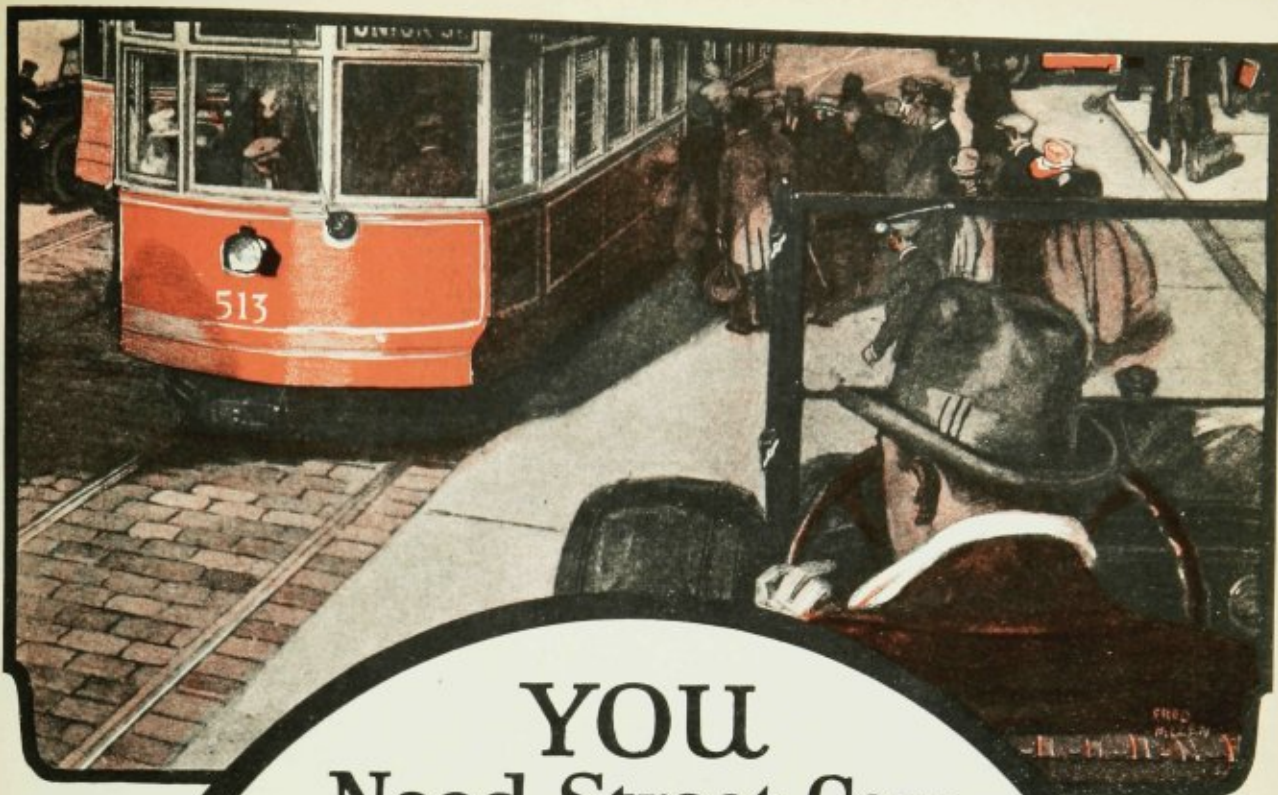
Westinghouse engineers have developed the apparatus that makes street railway operation possible and are constantly developing and perfecting devices to make such operation more economical, reliable and safe—all of which has real significance, because after all, street cars do build homes.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO. • Offices in all Principal Cities • Representatives Everywhere

Westinghouse

© 1924 W. E. & M. Co.

Advt. No. 2309 appearing in two colors in The Saturday Evening Post, January 5, 1924; also as No. 2326 in one color in Scientific American, February; Nation's Business, February; Forbes, February 2; and Literary Digest, February 9.



YOU Need Street Cars

How do you suppose the great bulk of the people in your town get about on their errands of business and pleasure? You may go in your automobile — *but most people ride in street cars!* Street cars are the links in the endless chain of transportation that binds your community together for business, social and industrial growth.



Given a square deal, (which is all it asks), your electric street railway company will be a tremendous factor in the growth, progress and prosperity of your community, whether it is large or small. You and all other citizens will act in your own interests if you make sure that your street railway company always has a fair chance to provide the kind of service your community needs.

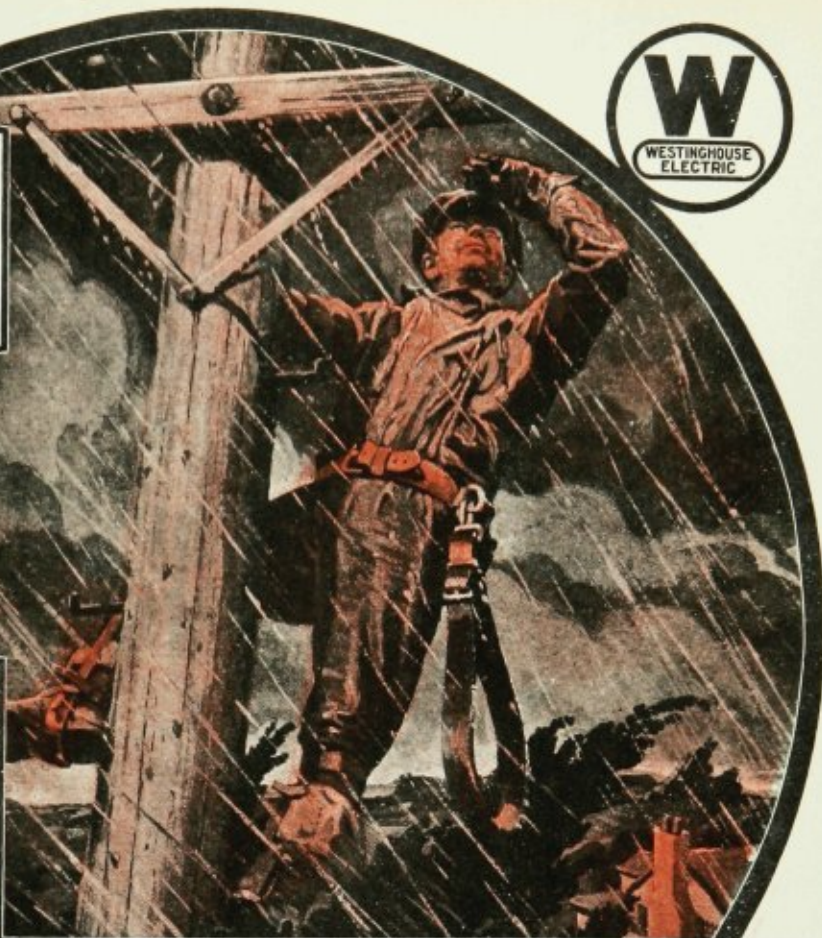
Many of the technical problems that have surrounded the development of street cars to their present state of efficiency have been solved by Westinghouse Engineering. Many more problems, apparently insurmountable today will be solved by them in the future. With your interest and helpful cooperation — and that of other citizens as well — it will always be possible for your community to enjoy the resulting economy and the increasing efficiency of the street car.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
Offices in all Principal Cities Representatives Everywhere

Westinghouse

© 1924 by the Westinghouse
Electric & Manufacturing Company

There Is No
True Service
Without
Hardship



OUR ELECTRIFIED CIVILIZATION

**Your Electric Light
and Power Company
Serves Every Minute
of the Day and Night**

The lineman's work is done promptly and loyally whatever the season or the weather. On the hottest of summer days, on the coldest winter nights, in sleet, rain or snow he is on the job for you.

The one slogan of every electric power company is "Uninterrupted Service"—to your home or business, and to the street cars that carry you to work or recreation.

The keenest electrical minds in the public utility companies serving you, co-operating with the engineering and

research departments of the manufacturers, are constantly seeking to create better devices to reduce factors of human error, and to render better electrical service. The big generators in the power house must be ever in motion. Every piece of apparatus in the long chain from Central Station to user must be in working order.

And all these things are done in order that you may always have light, power or heat by the pressing of a button or the closing of a switch.

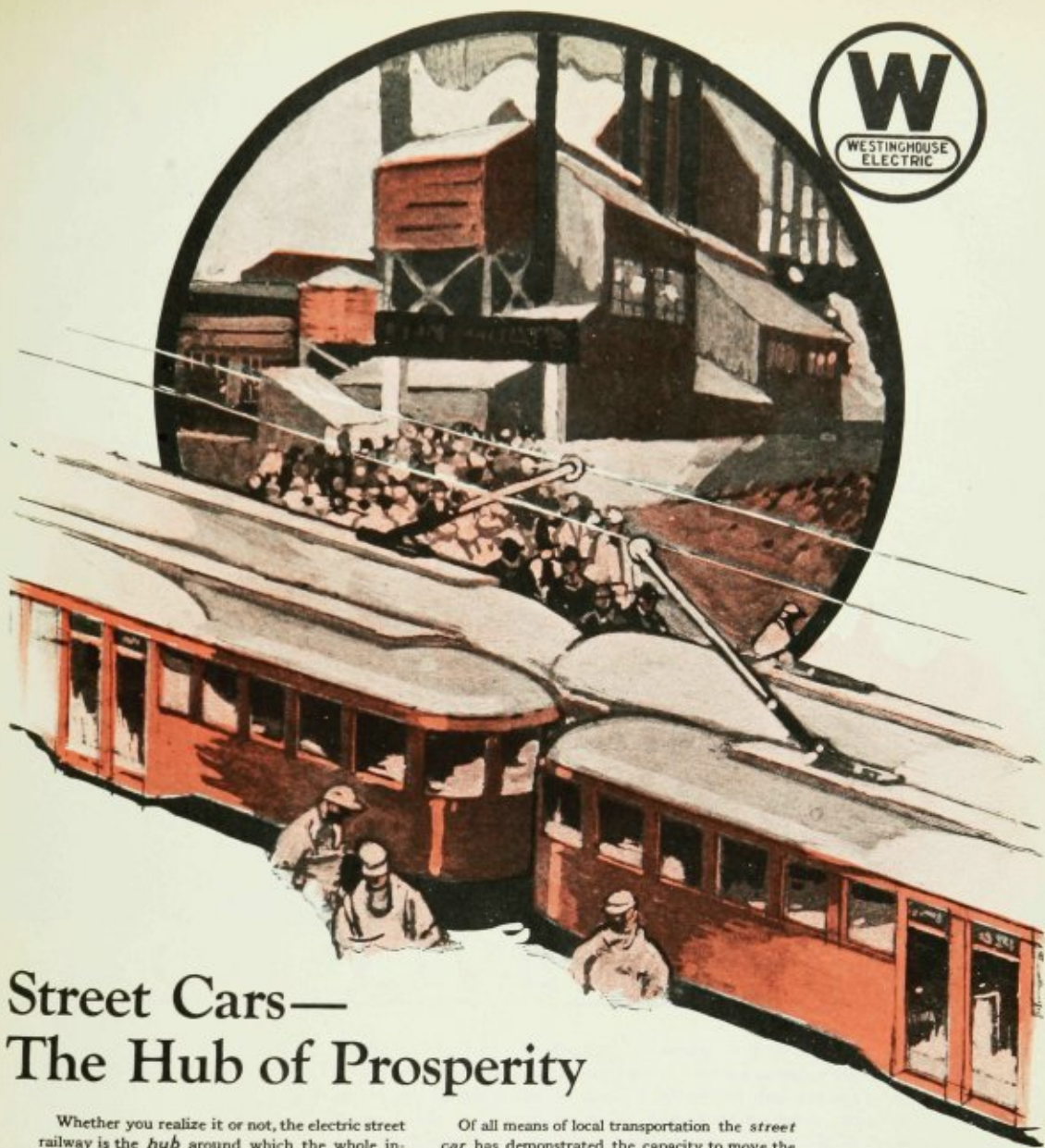
Westinghouse is proud of its long and intimate association in service with the electric light and power companies of the whole world.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY • Offices in all Principal Cities • Representatives Everywhere

Westinghouse

© 1924, W. E. & M. Co.

Advt. No. 2402 appearing in The Saturday Evening Post, May 17; Nation's Business, June; Forbes, May 24; and Literary Digest, June 7, 1924.



Street Cars— The Hub of Prosperity

Whether you realize it or not, the electric street railway is the *hub* around which the whole industrial development of your community revolves.

To keep down manufacturing costs and speed up selling operations, it is necessary to move tremendous masses of human beings from their homes to factories, or business concerns and back again. Thus it is a subject that concerns the present and future prosperity of every single individual as well as the community as a whole.

Of all means of local transportation the *street car* has demonstrated the capacity to move the largest number of persons with the greatest speed, at the lowest cost. It not only performs this fundamental service to the community, but it *gives back most of what it earns*, for no other industry pays out as much in wages, in proportion to its total earnings.

When you boost your local transportation company you are boosting your own prosperity.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
Offices in all Principal Cities Representatives Everywhere
Tune in sometime with KDKA—KYW—WBZ—KFKX

Westinghouse

© 1924, W. E. & M. Co.

Advt. No. 2407 appearing in Literary Digest, July 19, and Forbes, July 19, 1924.



YOU LIVE BY RAIL

OUR ELECTRIFIED CIVILIZATION

If you live in a dense traffic area, now being served by steam railroads, you doubtless desire the advantages of electrified service. You may not be aware that the railroads desire this even more than you do. It is estimated that there are at present 70,000 route miles in this country of sufficient traffic density to repay electrification, yet more than 96 per cent are without it—the result of hampering conditions. As evidence, however, that the railroads are making real progress, we, who have already furnished most of the equipment for the electrification of railroads in the United States, publish these statements.

❑ The fuel you burn—the clothing you wear—most of the very food you eat—come to you by rail. You yourself may never set foot inside a passenger coach; the railroads are of vital service to you just the same. In a very real sense you *live* by rail. It follows, therefore, that you live *better* as the railroads become better. And how much better they are becoming, recent achievements eloquently show. ❑ The railroads handled last year the largest traffic in history—almost without your knowing it. ❑ The railroads spent more to equip themselves for better service than in any year since before the war. ❑ The railroads are continuing the same expenditures this year. ❑ Despite average earnings of barely 5% on the valuation of their property, the railroads are nevertheless setting new standards of service and efficiency. Let's keep the path to further progress clear.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
Offices in all Principal Cities Representatives Everywhere
Tune in sometime with KDKA — KYW — WBZ — KFKX

Westinghouse

© 1924 by the Westinghouse Electric & Manufacturing Company

Advt. No. 2406 appearing in The Saturday Evening Post, June 14, 1924.

Jammed!



TRAFFIC CONGESTION IS YOUR PROBLEM

STREET cars, motor cars, busses, trucks, taxis, pedestrians—all struggling through the same narrow street. Subways years distant. Street widening impractical. Immediate relief demanded. What is the answer?

First, *get the right point of view.* Traffic congestion is a public problem. It will be solved, not by favoring one type of vehicle at the expense of another, but by utilizing all types—street cars, motor cars, busses, taxis, trucks—each where most useful to the public.

Take street cars as one illustration. The more congested the area, the more efficient street cars become—*provided free from interference by other vehicles.*

In the Loop district of Chicago, for example, street cars form 2 per cent of a day's traffic, yet haul 74 per cent of the passengers; in down-town Baltimore they form 14 per cent of rush-hour traffic, yet haul 89 per cent of the passengers; in down-town Los Angeles, they form 4 per cent of rush-hour traffic, yet haul 66 per cent of the passengers.

Such being the case, it's an obvious betterment to restrict parking on crowded car lines, and to segregate or reroute vehicles so as to facilitate car movements. Such improvements speed up vehicles. They shorten street car and motor coach schedules, make runs more regular, bring greater comfort, speed, and safety to the public.

Everybody depends on street cars—a large percentage directly, as the above figures show; the balance indirectly. Give the street car and the regular motor coach room to give you better service.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY • Offices in All Principal Cities • Representatives Everywhere
Tune in sometime with KDKA—KYW—WBZ—RFX

Westinghouse

© 1924, by the Westinghouse Electric & Manufacturing Company

Advt. No. 2405 appearing in two colors in The Saturday Evening Post, September 13; also appearing in one color in Forbes, October 1, and Nations Business, October, 1924.



Cities Improve as Their Masses Can Move

YOUR city has a "Greater City Movement." Perhaps you don't realize how much its success depends on the street cars.

When tomorrow dawns, you arise to greet it; thousands of others arise with you. Eight o'clock and you all surge to work. Five o'clock and you surge home again. The more people, the more factories, stores and office buildings there are in your city—the more massive these surges.

Street cars move people en masse. Street cars are pre-eminently vehicles of mass transportation. In Chicago the electric railways must haul every day more people than live in the city. Every year the electric railways of the United States must handle 160 times more men, women and children than there are in the United States.

Street car officials are working in your interest when they remind you that your support of plans for a prosperous, growing city, and support of plans for a prosperous, expanding street car system go hand in hand.

Westinghouse engineers are co-operating with all interested in the development of better transportation.

WESTINGHOUSE ELECTRIC & MFG. CO.
Offices in all Principal Cities · Representatives Everywhere
Tune in with KDKA — KYW — WBZ — KFKX

Westinghouse

Advertisement 2410, appearing in
Literary Digest, February 14, 1925.



Towering Testimonials to ELECTRIC RAILWAYS

SEEN from above this narrow canyon, street cars look tiny. They appear as incidental as does the Colorado river when glimpsed from the brim of its majestic gorge.

Yet Electric Railways helped build this canyon. By moving multitudes—by transporting you and millions of others from home to office, store, or factory in a few minutes, at trifling cost, street cars make possible that concentration of business, industry, people and life we term "a city."

Many people do not understand the economic service of the Electric Railway. This is always

worth remembering: a city's millions live as a unit. They arise *en masse*, go to work *en masse*, return home *en masse*, play, shop, lunch *en masse*. Street cars move people *en masse*. They are pre-eminently vehicles of mass transportation.

Evidence: in 1923 this country registered 13,457,214 passenger automobiles, far outstripping previous records; yet in the very same year, the total number of riders of street cars also outstripped all previous records. Westinghouse Engineering response and contribution to the transportation art has been very marked.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY

Offices in All Principal Cities. Representatives Everywhere

Tune in with KDKA—KYW—WBZ—KFKX

Westinghouse

© 1925, W. E. & M. Co.

Advertisement 2470, appearing in Forbes Magazine, February 15, 1925.

THE MESSAGES INCLUDED

Title	Page
Trolley Transport	3
Why Cities Expand	5
Every Evening at 5:30	7
Community Development	9
Where the Whistles Blow Loudest	11
The Electric Railways Carry the Public to Business	13
How Cities Grow Tall	15
Co-operation Builder of Cities	17
Business Men and Community Development	19
The Wheels of Progress are Under Your Street Cars	21
Street Cars Build Homes	23
You Need Street Cars	25
Our Electrified Civilization	27
Street Cars—The Hub of Prosperity	29
You Live By Rail	31
Jammed!	33
Cities Improve As Their Masses Can Move	35
Towering Testimonials to Electric Railways	37

Westinghouse Electric & Manufacturing Company

East Pittsburgh, Pa.

WESTINGHOUSE SALES OFFICES

ALBANY, N. Y., Journal Bldg.
ATLANTA, GA., Westinghouse Elec. Bldg., 426 Marietta St.
BAKERSFIELD, CAL., 2224 San Emedeo St.
BALTIMORE, MD., Westinghouse Elec. Bldg., 121 E. Baltimore St.
BIRMINGHAM, ALA., Brown-Mark Bldg., 2000 First Ave.
BLUEFIELD, W. VA., The Commercial Bank Bldg., Federal & Commerce Sts.
BOSTON, MASS., Rice Bldg., 10 High St.
BRIDGEPORT, CONN., Bruce & Seymour Streets.
BUFFALO, N. Y., Ellicott Square Bldg., Ellicott Square.
BURLINGTON, IOWA, 315 North Third St.
BUTTE, MONT., Montana Electric Co. Bldg., 52 East Broadway.
CANTON, OHIO, (Box 292-Mail and Telegrams)
CASPER, WYO., Turner Coffman Bldg., 124 W. 2nd Ave.
CEDAR RAPIDS, IOWA, 1616 Fifth Ave., (Mail P.O. Box 1067)
CHARLESTON, W. VA., Kanawha National Bank Bldg., Capitol and Virginia Sts.
CHARLOTTE, N. C., Commercial Bank Bldg., 200 S. Tryon St.
CHATTANOOGA, TENN., Tenn. Elec. Power Co. Bldg., Market and 6th Sts.
CHICAGO, ILL., Conway Bldg., 111 W. Washington Street.
CINCINNATI, OHIO, Westinghouse Elec. Bldg., Third and Elm Sts.
CLEVELAND, OHIO, Station "B", Westinghouse Electric Bldg., 2209 Ashland Rd. S. E.
COLUMBUS, O., Interurban Terminal Bldg., Third and Rich Sts.
DALLAS, TEX., Magnolia Bldg., Alard and Commerce Streets.
DAYTON, O., Reibold Bldg., 14 West Fourth Street.
DENVER, COLO., Gas & Electric Bldg., 910 Fifteenth St.
DES MOINES, IOWA, Equitable Bldg., W. 6th & Locust Streets.
DETROIT, MICH., Westinghouse Elec. Bldg., 1535 Sixth St.
DULUTH, MINN., 511 Alworth Bldg., 306 West Superior St.
ELMIRA, N. Y., Hulett Bldg., 338-342 E. Water St.
EL PASO, TEX., Mills Bldg., Oregon and Mills St.
FORT WAYNE, IND., 1010 Packard Ave.
FRESNO, CAL., Griffith-McKenzie Bldg., J and Mariposa Sts.
GRAND RAPIDS, MICH., 422 Kelsey Bldg., Pearl & Ottawa Sts.
HAMMOND, IND., (Mail-P.O. Box 238; Telegrams-1238 Jackson St.)
HARTFORD, CONN., 220 Market St.
HOUSTON, TEX., Union National Bank Bldg., Main St. and Congress Ave.
HUNTINGTON, W. VA., Westinghouse Electric Bldg., Cor. Second Ave. and Ninth St.
INDIANAPOLIS, IND., Westinghouse Elec. Bldg., 820 N. Senate Ave.
ISHPEMING, MICH., 507 N. 5th St.
JACKSON, MICH., 704 Peoples National Bank Bldg.
JACKSONVILLE, FLA., Union Terminal Building, East Union and Ionia Sts.
KANSAS CITY, MO., 2126 Wyandotte St., Gateway Station.
KNOXVILLE, TENN., 413 Bankers Trust Bldg.
LITTLE ROCK, ARK., 2311 State Street.
LOUISVILLE, KY., Marion E. Taylor Bldg., 312 Fourth Ave.
LOS ANGELES, CAL., Westinghouse Elec. Bldg., 420 S. San Pedro St.
MADISON, WIS., 315 First Central Bldg.
MEMPHIS, TENN., Exchange Bldg., 130 Madison Ave.
MIDDLESBORO, KY., (P.O. Box 518)
MILWAUKEE, WIS., First National Bank Bldg., 425 E. Water St.
MINNEAPOLIS, MINN., Northwestern Terminal, 2303 Kennedy St. N. E.
NEWARK, N. J., 38-40 Clinton St.
NEW HAVEN, CONN., Liberty Bldg., 152 Temple St.
NEW ORLEANS, LA., Maison Blanche Bldg., 921 Canal St.
NEW YORK, N. Y., 150 Broadway.
NIAGARA FALLS, N. Y., Gluck Bldg., 205 Falls Street.
NORFOLK, VA., 1122 National Bank of Commerce Bldg., 300 Main St.
OKLAHOMA CITY, OKLA., Tradesman's National Bank Bldg., Main & Broadway Sts.
OMAHA, NEB., 1102 Woodman of the World Bldg., 1319 Farnam St.
PEORIA, ILL., 417 Peoria Life Bldg., 214 Cooper St.
PHILADELPHIA, PA., West. Elec. & Mfg. Bldg., 30th & Walnut Sts.
PITTSBURGH, PA., Chamber of Commerce, 7th & Smithfield Sts.
PORTLAND, MAINE, 61 Deering St.
PORTLAND, ORE., Porter Bldg., Sixth and Oak Sts.
PROVIDENCE, R. I., 393 Harris Ave.
RALEIGH, N. C., 803 N. Person St.
RICHMOND, VA., Room 912 Virginia Rwy. and Pr. Bldg., Seventh and Franklin Sts.
ROCHESTER, N. Y., Chamber of Commerce Bldg., 119 E. Main Street.
ROCK ISLAND, ILL., 2319 Third Avenue.
SACO, MAINE, R. F. D. No. 2.
ST. LOUIS, MO., Westinghouse Elec. Bldg., 717 So. Twelfth St.
SALT LAKE CITY, UTAH, Interurban Terminal Bldg., W. Temple and S. Temple Sts.
SAN ANTONIO, TEXAS, 1105 Denver Blvd.
SAN FRANCISCO, CAL., First National Bank Bldg., 1 Montgomery St.
SEATTLE, WASH., Westinghouse Elec. Bldg., 3451 E. Marginal Way.
SHREVEPORT, LA., 432 Robinson Place.
SPOKANE, WASH., Old National Bank Bldg., Riverside & Stevens Sts.
SPRINGFIELD, ILL., Public Service Bldg., 130 S. Sixth St.
SPRINGFIELD, MASS., 82 Worthington Street.
SYRACUSE, N. Y., University Bldg., S. Warren and E. Wash. Sts.
TACOMA, WASH., W. R. Rust Bldg., S. 11th and Commerce Sts.
TERRE HAUTE, IND., 320 Terre Haute Trust Bldg., 735 Maple Av.
TOLEDO, O., Ohio Bldg., Madison Avenue and Superior Street.
TUCSON, ARIZ., Immigration Bldg., 90 Church Street.
TULSA, OKLAHOMA, Mid. Continent Bldg., 5th & Boston Ave.
UTICA, N. Y., 408 Pine St.
WASHINGTON, D. C., Hibbs Bldg., 723 Fifteenth St., N. W.
WATERTOWN, N. Y., 254 Woolworth Bldg., Public Square.
WICHITA, KANSAS, 3809 East English St.
WILKES-BARRE, PA., Miner's Bank Bldg., W. Market and Franklin Sts.
WORCESTER, MASS., Park Bldg., 507 Main Street.
YOUNGSTOWN, O., Home Savings and Loan Bldg., Federal & Chestnut Sts.
Hunt-Mirk & Company, San Francisco, Cal., 141 Second St., Marine Dept., Special Pacific Coast Representatives.
The Hawaiian Electric Company, Ltd., Honolulu, T. H.—Agent

WESTINGHOUSE AGENT-JOBBERS

ATLANTA, GA., Gilham-Schoen Electric Co.
BALTIMORE, MD., H. C. Roberts Electric Supply Co.
BIRMINGHAM, ALA., Moore-Handley Hardware Co.
BLUEFIELD, WEST VIRGINIA, Superior Supply Co.
BUFFALO, N. Y., McCarthy Bros. & Ford
BUTTE, MONTANA, The Montana Electric Co.
CHICAGO, ILL., Illinois Electric Co.
CHARLOTTE, N. C., Carolina States Electric Co.
CLEVELAND, OHIO, The Erner Electric Co.
COLUMBIA, S. C., Mann Electric and Supply Co., Inc.
DENVER, COLO., The Mine & Smelter Supply Co.
DETROIT, MICH., Commercial Electric Supply Co.
EL PASO, TEXAS, The Mine & Smelter Supply Co.
ERIE, PA., Staf Electrical Co.
EVANSVILLE, IND., The Varney Electrical Supply Co.
HOUSTON, TEXAS, Tel-Electric Co.
HUNTINGTON, WEST VIRGINIA, Banks Supply Co.
INDIANAPOLIS, IND., The Varney Electrical Supply Co.
JACKSONVILLE, FLA., Pierce Electric Co.
KANSAS CITY, MO., Columbian Electrical Co.
LOS ANGELES, CAL., Illinois Electric Co.
LOUISVILLE, KY., Tafel Electric Co.
MEMPHIS, TENN., The Riechman-Crosby Co.
MILWAUKEE, WIS., Julius Andrae & Sons Co.
MINNEAPOLIS, MINN., R. M. Laird Electric Co.
NEW HAVEN, CONN., The Hessel & Hoppen Co.
NEW ORLEANS, LA., Electrical Supply Co.
NEW YORK, N. Y., Alpha Electric Co.
OMAHA, NEB., The McGraw Co.
PHILADELPHIA, PA., H. C. Roberts Electric Supply Co.
PITTSBURGH, PA., Robbins Electric Co.
PORTLAND, ORE., Fobes Supply Co.
RICHMOND, VA., Tower-Binford Electric & Mfg. Co.
ROCHESTER, N. Y., Rochester Electrical Supply Co.
SALT LAKE CITY, UTAH, Inter-Mountain Electric Co.
SAN FRANCISCO, CAL., Fobes Supply Co.
SCANTON, PA., Fobes Electrical Engineering Co.
SEATTLE, WASH., Fobes Supply Co.
SIOUX CITY, IOWA, The McGraw Co.
SPOKANE, WASH., The Washington Electric Supply Co.
ST. LOUIS, MO., The McGraw Company.
ST. PAUL, MINN., St. Paul Electric Co.
SYRACUSE, N. Y., H. C. Roberts Electric Supply Co.
TAMPA, FLA., Pierce Electric Co.
WASHINGTON, D. C., H. C. Roberts Electric Supply Co.

WESTINGHOUSE SERVICE SHOPS

ATLANTA, GA., 426 Marietta Street
BALTIMORE, MD., 501 East Preston Street
BOSTON, MASS., 12 Farnsworth Street
BRIDGEPORT, CONN., Bruce Ave. and Seymour Street
BUFFALO, N. Y., 141-157 Milton Street
CHICAGO, ILL., 2201 W. Pershing Road
CINCINNATI, OHIO, Third and Elm Streets
CLEVELAND, OHIO, 2209 Ashland Rd. S. E.
DENVER, COLO., 1909-11-13-15 Blake Street
DETROIT, MICH., 1535 Sixth Street
HARTFORD, CONN., 220 Market Street
HUNTINGTON, W. VA., 9th Street & Second Ave.
INDIANAPOLIS, IND., 814-820 N. Senate Ave.
JOHNSTOWN, PA., 47 Messenger Street
KANSAS CITY, KANSAS, 2126 Wyandotte Street
LOS ANGELES, CAL., 420 S. San Pedro Street
MINNEAPOLIS, MINN., 2303 Kennedy St., N. E.
NEW YORK, N. Y., 467 Tenth Avenue
PHILADELPHIA, PA., 30th and Walnut Streets
PITTSBURGH, PA., 6905 Susquehanna Street
PROVIDENCE, R. I., 393 Harris Ave.
ST. LOUIS, MO., 717 South Twelfth Street
SALT LAKE CITY, UTAH, 573 W. Second South Street
SAN FRANCISCO, CAL., 1400 Fourth Street
SEATTLE, WASH., 3451 East Marginal Way
UTICA, N. Y., 408 Pine Street

WESTINGHOUSE MARINE SERVICE PORT ENGINEERS

BALTIMORE, 501 E. Preston Street
NEW ORLEANS, 1028 South Rampart Street
NEW YORK, 467 Tenth Ave.
PHILADELPHIA, 30th & Walnut St.
SAN FRANCISCO, 1400 Fourth Street
SEATTLE, 3451 E. Marginal Way

CANADIAN COMPANY

CANADIAN WESTINGHOUSE COMPANY, LTD., Hamilton, Ontario

WESTINGHOUSE ELECTRIC INTERNATIONAL COMPANY

150 BROADWAY, NEW YORK, U. S. A.

PRINTED IN U. S. A.
NATIONAL PROCESS COMPANY, INC.
NEW YORK, N. Y.





3 1812 04050 0309

