

Increase in fare never brings a proportional increase in revenue. It is also apparent that high fares lessen the value of a street railway system to a community for when fares restrict riding the street railway system ceases to perform its proper function. When fares exceed what the average car rider can conveniently afford to pay, the man who uses the cars as a convenience ceases to ride and only the necessity patron remains.

Even the necessity patron seeks an alternative method of transportation. Failing in that, employment is sought within walking distance of his employment. Less frequent trips are made to the business section of the city to make purchases, to attend places of amusement or to make use of educational facilities of the city, and fewer trips are made to visit friends. The result is detrimental not only to the company and the individual citizen, but to the business institutions of the city and to the civic and economic welfare of the municipality as a whole. We are still at the point where the prospective car rider can still be saved as a revenue producer. We are, however, rapidly approaching a condition when these people will be earnestly and determinately seeking other methods of transportation or so situating themselves that they will not need to ride the cars."

ELECTRIFICATION OF STEAM ROADS WILL SAVE 122 MILLION TONS OF COAL

In a paper read before the convention of the National Electric Light Association, Mr. Frank M. Kerr, of the Montana Power Company, called attention to the immense saving in coal which the electrification of all steam roads would bring about.

"If all the steam railroads in the country were electrified with power furnished from large steam generating electric stations, the total fuel required would be equivalent to 53,500,000 tons of coal, as against the actual figure for railroad coal used during the year 1918, of 175,000,000 tons. Thus, by electrification of the railroads, 122,500,000 tons of coal would have been saved. Even if power necessary to run the railroads were furnished from electric generating stations using coal for fuel and with a large part of the power supplied from water-power plants, the saving would be considerably increased."

"In my view the experimental stage of railway electrification is past. The Chicago, Milwaukee & St. Paul Railway and the Montana Power Company have demonstrated in Montana the entire practicability and great superiority of electric power for the operation of a heavy trunk-line railway by more than four years of 100 per cent operation. Four-thousand-ton trains go up and down heavy mountain grades under perfect control, at speeds never known before and with a regularity which is phenomenal. The demonstration of electric operation in the Northwest has been so satisfactory that the question of its application to other roads is a matter only of securing the necessary capital to make the application possible."

"The change from steam to electric operation means more than a mere change in type of locomotive used. It means a change in the entire conception of the art of railroad transportation. In short, by adopting electrification, the railroad company is relieved entirely of the business of generating power, and is enabled to concentrate on its main business of transportation. The energy required for railroad electrification can best be supplied by the power companies of the country. Those who have made the production and application of electric energy their business should take up its application to transportation with the same vision and energy which they have used in applying electric power in other industries. There seems to be no doubt that the energy for railroad electrification can best be supplied by the power companies on more favorable terms than can be obtained by the railroad in

any other way. The power companies have had years of experience in the application of electric power and understand its capabilities to a much greater extent than do the steam railroads. For this reason, it seems to me that the power companies should take the initiative in bringing before the railroads the fact that electric power, which during the last quarter-century has been gradually superseding other forms of power, now stands ready to take one more step in its line of progress and relieve the transportation system from the burden of maintaining the obsolescent reciprocating steam engine."

"The higher speed at which cars can be hauled over a road with electric operation allows the same amount of freight to be handled with a considerably smaller number of cars. This is such an important item that it is safe to say that if all the roads in the country were electrically operated at the present time there would be no car shortage. Perhaps the most important item of all is that of labor. With the size and speed of trains increased by electric operation, the item of train labor is reduced. Roundhouse and shop labor is reduced even a greater extent and all these reductions apply to the largest single item of expense which the railroads have to meet. The cost of purchasing electric energy is in some cases given undue prominence by roads considering electrification. That this is not necessarily a controlling item is indicated by the following figures: The total yearly cost of operation on the C. M. & St. P. Railway averages about \$11,000 per mile for the entire system of 10,000 miles. The cost of electric energy purchased for this road's mountain division is \$1,600 per mile, or less than 15 per cent of the average total cost for the system.

"At the present time construction costs are high and interest rates are high. At the same time, the cost of operating the railroads by steam is so excessive that I believe that there are many instances where if the roads can purchase electric power at a reasonable figure, it will pay them to start on a program of electrification immediately, and the savings effected will be sufficient to amortize in a very few years that part of the investment which is regarded as excessive, leaving only a very moderate investment upon which to make a fair return during the following years when perhaps prices will have reached a level which we are accustomed to call normal."

Service Suspended In Akron, Ohio

The following is a statement issued to the people of Akron, Ohio, giving the reasons for suspension of service in Akron: Under a contract with the motormen and conductors operating on the city system, a scale of wages was in effect from May 1, 1919, to May 1, 1920. The contract provided that the question of wages which the company should pay after May 1, 1920, in case of disagreement, was to be submitted to arbitration. The question was submitted to arbitration, the company selecting one arbitrator, the employes selecting one arbitrator, and the governor named the third. The board of arbitrators convened and organized in the city of Akron on May 20, 1920. Its hearings were public and a complete record was made of their proceedings. The arbitrators found that the employes were underpaid and recommended an increase in wages contingent upon an increase in fares to be allowed by the cities of Akron, Canton and Massillon. The cities of Canton and Massillon have taken steps to provide an increase in fares, and there is no interruption of service in these cities, but nothing has been done by the city of Akron. Following the award by the board of arbitration the employes served notice on the city of Akron that unless favorable action was taken by the city, they would resign from the service on July 4. Such action has been taken by the employes, but the company is willing to resume operations and has at all times, and will continue to abide by the award of the board of arbitration.