

ROCHESTER HISTORY

Edited by Joseph W. Barnes, *City Historian*

Vol. XXXVI

April, 1974

No. 2

The Rochester Subway EXPERIMENT IN MUNICIPAL RAPID TRANSIT By Andrew David Lipman

The completion of the Barge Canal bypassing Rochester to the south made the old Erie Canal obsolete after the navigation year of 1919-1920. The question of what should be done with the Erie Canal bed and its adjacent land was, however, the subject of considerable discussion in the public press and among members of civic-minded organizations for at least a decade before the canal was formally abandoned.

The Germination Of The Idea 1908-1921

As early as 1908 State Senator George F. Argetsinger of Rochester, at first an ardent proponent of subway development, sponsored a bill in the legislature that would have required the state to turn abandoned canal lands over to municipalities. The bill failed, but three years later Senator Argetsinger, with the aid of Assemblyman Frank A. Waters, obtained legislation which compelled the state to give cities first opportunity to purchase abandoned canal lands at a price to be fixed by the State Board of Canals after appraisal. ¹

ROCHESTER HISTORY, published quarterly by the Rochester Public Library, distributed free at the Library, by mail 50 cents per year. Address correspondence to City Historian, Rochester Public Library, 115 South Ave., Rochester, N.Y. 14604

Later that year the Rochester Civic Improvement Committee, acting under the auspices of the Chamber of Commerce, employed Messrs. Arnold W. Brunner, Fredrick Law Olmsted, and Bion J. Arnold, three of the country's leading urban planners, to prepare a city plan for Rochester. Their specific plan for Rochester's street structure featured the use of the old canal bed as an express highway through the center of town. The planners realized that if this project became a part of the State Highway Plan, the state would pay all the construction costs and half the land acquisition cost, which would greatly facilitate implementation.²

The suggested roadway was generally considered impractical or wild dreaming. In 1911 there were only slightly more than 3,000 automobiles in Monroe County.³ Few outside the planning profession predicted the rising importance of the automobile or associated problems of parking and traffic congestion. The interurban trolleys and the steam railroads posed the transportation problems of the day and foreseeable future, for it wasn't until the mid twenties that the automobile became an important means of mass transportation.⁴

It appeared that all levels of government were in favor of some sort of subway in the canal bed. Even while the city administration was negotiating with the state over the actual purchase, the Common Council passed an ordinance appropriating \$1,800,000 to build a subway and an overhead street decking the old Erie Canal aqueduct.⁵ The report of the Law Committee accompanying this ordinance mentioned two public hearings "at which the sentiment was unanimously in favor of the acquisition of the canal lands by the city." The Chamber of Commerce also passed resolutions in approval of abandonment and purchase.⁶

The outbreak of war in Europe diverted attention from many civic projects while the city government was absorbed in home defense and war-related activities. Although plans to construct the subway were postponed during World War I, within two weeks of the opening of the Versailles Peace

Conference Mayor Hiram H. Edgerton, with full co-operation from the Common Council, took advantage of Senator Argetsinger's earlier legislation and had the canal lands appraised by the Land Board of the State of New York. ⁷ The estimated cost for the canal beds through Rochester was set at about \$1,500,000. Edgerton's aggressiveness in promoting the subway was consistent with his ability to meet new challenges as they arose and his energy to keep Rochester "in the van of progress." ⁸

Before attempting any construction the city in 1920 hired George F. Swain, retired Professor of Civil Engineering at Harvard University, to conduct a study to determine the subway's feasibility and potential effect on traffic congestion. Swain felt that subways were superior to both elevated railroads and the construction of new streets. The subway's major advantage was that it didn't damage adjoining property, but, according to close studies, increased its value. Using the examples of Paris, Berlin, London Budapest, Boston, Philadelphia and New York, Swain claimed that subways don't obstruct the light and air or make any noise that is perceptible above ground. ⁹

Swain, whose subway designs had been previously refused by Providence, Rhode Island, was for this reason personally concerned about putting his ideas into action. His primary contribution to the building of the subway was to show how easily it could be constructed. The consulting engineer underscored his position in favor of a Rochester subway with five specific arguments:

- (1) There are no grade crossings of streets from one end of the line to the other;
- (2) Since many areas of the subway are open on the top there is no great problem of ventilation;
- (3) The number of pipe and sewer changes is small;
- (4) There is little excavation needed;
- (5) There will be practically no interference with traffic during construction. ¹⁰

The location of the old canal was ideal for the proposals Swain and others made in favor of a subway. Yet, had the canal not existed, it would undoubtedly have been beyond the ability of the city to finance an undertaking of such magnitude.¹¹ As the proposed line extended eight and a half miles (one and a half underground) from southeast to northwest, the valuable 100 foot right-of-way passed through the industrial and business centers and either crossed or came in contact with every steam railroad which entered the city.

Rochester during the early 1920s was a relatively compact city. The business, geographical, and population centers were very close together. The city had grown along a central axis, Main Street, which contained a very large proportion of retail stores, hotels and office buildings located in a narrow strip three-quarters of a mile long.¹² The subway, zig-zagging through downtown, would serve nearly all the business section. In addition, there were about 45 manufacturing plants located along the proposed route on approximately 270 acres of industrial land.¹³

During the first three decades of the twentieth century, the northwest section of Rochester underwent rapid development. According to planner Bion Arnold, nearly half of the city's industrial workers were employed in the northwest quadrant and a high percentage of the city's population resided there.¹⁴ At the time, however, there were no crosstown buses (or car lines matching the route of the subway) and those people living and working in the heavily populated northwestern section, but who did not happen to live on the same radial street, often found it impossible to ride between outlying factories and residences in the same division without going to the central district and back.¹⁵

Although the southeast quadrant had the smallest distribution of industrial workers, general population, and rate of building construction, it was just beginning to develop and room for housing was important. The range of hills extending from near Winton Road and East Avenue to the Mt.

Hope Cemetery presented a barrier to growth in this direction, although outlets through the hills were available through both the Monroe and South Avenue lines.¹⁶ Altogether, it was estimated that there were within walking distance of the subway 80,000 persons, constituting a tremendous potential traffic, when the subway began operation.¹⁷ And it was hoped the subway would free more land for development. This large population and the tremendous concentration of business and industries along the subway's route downtown and within the northwest quadrant destroys the myth that the subway went from nowhere to nowhere.

On November 9, 1921, only one and a half years after the canal was abandoned, Mayor Edgerton transmitted to the council an ordinance providing for the work required in the construction of the subway. The ordinance called for construction of a railroad in the abandoned Erie Canal lands from Griffith Street to a point 800 feet west of Oak Street and widening the roadway of South Avenue from the intersection of a new street (Broad Street) to Court Street. The ordinance was unanimously adopted by the Common Council.¹⁸ Although much planning was done on how the subway should be built, one of the weakest elements in the planning was the failure at this time to determine how the completed subway should be administered. The argument over operations finally became serious only several months before the subway was completed!

Reasons For A Subway

In addition to the relief of traffic congestion, the subway's proponents offered two other major justifications for its construction. First, the subway was to provide interconnections for the five railroads which entered the city: the New York Central; Erie; Lehigh Valley; Buffalo, Rochester & Pittsburgh; and Pennsylvania. A second major purpose of the

subway, frequently expressed, was to get the interurbans off the street. The hope of interconnecting the city's steam railroads had nineteenth century antecedents, yet little was done because of the New York Central's dominance and refusal to share its business. However, in an endeavor to meet the challenge of competing carriers, the New York Central and the other railroads made an effort in 1910 to form a belt line. The attempt soon collapsed, partly because of public opposition to the creation of a new set of street-level crossings on the city's outskirts. One of the major advantages of the subway was that it would permit railroad interconnection without the creation of new grade crossings.

Rochester was a factory city in the early twenties. According to the *Times-Union*, of the 300,000 people within the city limits in 1923, 80,000 worked in 1,700 factories -- one factory to every twelve acres of city land.¹⁹ Despite the importance of manufacturing, prior to the building of the subway, the five railroad lines were only partially connected. A business concern might have occupied a siding on the New York Central, but if it wanted to ship over the Lehigh, the goods had to be trucked to the Lehigh freight station and loaded there.

The subway railroad was planned to connect all these roads. The two southerly tracks of the subway would connect all the steam lines entering the city so that freight could be shipped in carload lots from any point on the canal by steam line, and also from one steam line to another.²⁰ By removing the handicap of the still-end terminal, direct and convenient contact between rail lines and factories and distribution warehouses would both stimulate industry and trade and encourage new enterprises.

The advantage for large industries such as Eastman Kodak and Bausch and Lomb would be invaluable. But even a small shipper in Rochester would annually stand to save from \$500 to \$3,000 or more, on switching costs along. According to the *Times-Union*, the belt line would transport at least 20,000 cars

of freight annually with a savings in switching costs of at least \$15 a car.²¹ Finally, the belt line would relieve congestion at public team tracks by increasing the number of private sidings.

The other major reason for the construction of the subway was to get the interurban cars off the streets where they were a fruitful source of traffic congestion and accidents. The interurban cars were too heavy for the light trolley tracks of Rochester Railways and were constantly jumping tracks, particularly on curves. According to Dr. Blake McKelvey, the incidence of street accidents mounted steadily as the trolleys and automobiles increased in number. Main Street, where their battle for the right of way was most intense, won the title "Aisle of Death" in 1912. Rochester's accidents jumped to a new high that year, second only to Brooklyn, with the fatalities rising to 19.²²

Among the interurban lines were the Rochester & Syracuse, Rochester, Lockport & Buffalo, Rochester & Eastern, and the Rochester Sodus, all built between 1900 and 1910. The large size and bulk of the trains or single cars made them a very considerable burden to the city streets and fearful challenge to other traffic, including pedestrians. The city tracks were designed for a lighter weight electric car. Interurban cars differed from the city cars in that they weighed several tons more and had a larger wheel flange, and in fact were designed for a completely different type of rail.²³

The interurbans came lickety split from Syracuse and Buffalo (times comparable to modern Thruway) then crowded into the city, through Monroe Avenue and West Main Street. On April 5, 1922, one of the interurbans jumped its track at the intersection of Main and Clinton Streets. Six people were injured and an eighteen year old boy was killed.

While similar accidents had previously resulted in mild protests and minor restrictions placed on the interurbans, this accident brought protests to an unprecedented level. Protestors signed petitions and placed anti-interurban

banners on their automobiles. But city merchants predicted a drop in trade if interurbans were denied entrance to the city. Yet due to intense public pressure, the Common Council ordered the interurban cars off the streets of Rochester. On the day before subway construction began, the interurban lines countered this move with a court injunction stopping the city from banning their cars. In view of the fact that the subway was under construction, the city administration decided to forego the attempt to block surface operation by law, and to hasten subway construction instead.²⁴

According to the Rochester city plan current during the first year of subway construction, traffic relief would be one of the subway's primary functions.²⁵ With as many as 339 trolleys an hour entering downtown during the peak rush hours,²⁶ the practice of using the streets themselves as stations for switching cars constituted a serious interference with both street and local traffic. The old Erie Canal bed would provide an adequate interurban entrance and terminal facilities, thus clearing the Main Street Bridge area and the adjacent business district. Furthermore, the subway would eliminate trucking of freight in the streets by providing a greater number of private sidings.

It was also realized that the roof of the subway could be utilized, thus providing a parallel street (Broad Street) to relieve Main Street's traffic congestion. The opening of a parallel street had been proposed as early as 1896 by then City Engineer J.Y. McClintock.²⁷ And the parallel street idea was continuously urged in all the City Planning Reports prior to World War I. It was further expected that this parallel street would extend the area of high real estate values then found only on a limited portion of Main Street.²⁸

It should be pointed out that consideration of the subway for use as a means of expediting *intra*-urban transportation was at best minimal. The *Times-Union* stated in 1936 that rapid transit was hardly considered when the argument for building the subway was under way. Rapid transit was merely

incidental. "If there was to be a subway, the theory that it might as well contain a rapid transit was reasonable."²⁹ This minor importance of rapid transportation, thought by some later editorial writers as the primary reason for the subway, is again reflected in its laconic mention in the City Planning Bureau's report:

. . . in addition to handling the passengers of interurban lines, it is certain that some of the city lines of the Rochester trolley service will be diverted to its tracks. Already we have seen one possibility for bringing the Park Avenue line into it, at James and Chestnut streets.³⁰

The early twenties were an era of great optimism, speculation and city-boosterism. According to the *Book of Industrial Rochester* published by the Chamber of Commerce in 1919:

Rochester doesn't need a pedestal in order to obtain recognition. It is a city that in the eyes of the knowing part of the world is set on a hill. Neither does Rochester desire to inherit the earth. It wants the earth to inherit Rochester.³¹

It was generally assumed at the time that a great city must be a large city and Rochester around the turn of the century was trying hard to encourage growth. An increase in population from 144,834 in 1892 to 248,465 in 1915 had a considerable impact on Rochester's self confidence. Like many cities interested in commerce and real estate, Rochester was so eager for expansion that a disposition to welcome newcomers, regardless of origin, was strengthened.³²

Given the growth rate of Rochester from 1890-1920, it was sensible to anticipate that Rochester's population would suddenly "take off" in a fashion similar to the twentieth century growth of Detroit and Los Angeles. While the City Engineer's office predicted that Rochester would follow a slightly tapering off growth rate of .35 per decade, thus giving the city a population of 600,000 by 1950,³³ its optimism was outdone by the *Post Express* (generally a progressive Republican paper read by the "better class" of news readers) which claimed to see transportation facilities for a city of 2,000,000 population in the plans for the rapid subway system.

The enclosed facilities of rapid transportation are looked to do for Rochester what the underground accomplished for New York City, converting Westchester and Bronx farms into thickly populated apartment house districts.³⁴

The community's growth brought new responsibilities and the subway was planned with a considerable geographic expansion of population in mind.

Furthermore, the first three decades of the twentieth century increased the city's wealth and raised the city's tax base, which enabled municipal authorities to expand public services.³⁵ Yet while the city could now afford a subway, its construction sidetracked other pressing civic needs. Despite the municipal prosperity, the allocation of city funds for the subway diverted money from other needed municipal projects such as a new city hall and central library.

The early twenties was also a time when the annexation of suburbs by large cities was still common. In 1918, Rochester annexed Kodak Park and adjacent residential tracts and the industrial and residential suburb known as Lincoln Park. Several years later, there were cries to annex the entire towns of Brighton and Irondequoit and some felt that the construction of the subway would help achieve this objective. The subway would bring the towns closer to Rochester by cutting in half the traveling time, thus making the towns more dependent on the city. Also, since the city was now limited by the state legislature in acquiring only that land in Brighton and Greece that would facilitate subway construction,³⁶ it was felt that this "foot in the door" would eventually give Rochester the justification it needed to annex the entire town.

This spirit for using the subway as a tool for annexation and sense of city paternalism toward the growing suburban towns is seen most clearly in the City Plan of 1918-1922:

Rochester's subway, to be of largest value, must not merely serve the city, within its corporate limits, but, as suggested, the entire valley of the Genesee. Similarly, the problems of the towns of the valley are in no small measure the problems of Rochester. Rochester should seek to make them her problems; by suggestion,

or advice, or even definite help should aid in this solution -- in her own selfish interest, if for no finer motives.³⁷

Finally, among persons conscious of Rochester's history it was felt that since the Erie Canal was so beneficial to Rochester, a subway built in its bed would also prove to be of great advantage to the city. This psycho-historical rationale for the subway was best expressed in a pamphlet commemorating the Erie Canal centennial:

One hundred years ago, on October 27, the people of the City of Rochester celebrated in an elaborate fashion the opening of the Erie Canal . . . The occasion was a notable one for the young city and marked the beginning of an era of growth and prosperity for our people. A century later we find ourselves celebrating at the same point an event of no less importance to the city. We are dedicating anew the old canal and the old aqueduct to a continuation of their function as an instrument of transportation and commerce.³⁸

Construction And Early Operation 1921-1931

Quite in the temper of the times for Rochester there was complete unanimity over the subway's initial construction. All four local newspapers, the entire Common Council, the Chamber of Commerce, and the labor unions vigorously supported the project. In fact, a *Times-Union* headline of the time read, "Complete Unanimity of Opinion in Support of the City's Plan for Construction of the Subway."³⁹

A contract providing for the excavation of the subway and a new street (Broad Street) parallel to Main to be constructed on the roof of the subway as it passed through the central portions of the city was awarded to the lowest bidder, Scott Brothers of Rome, New York, late in 1921. And in early 1922, Mayor Clarence Van Zandt wielding a silver spade launched the construction.

The construction of the subway was slow and much unforseen blasting had to be done. According to Lloyd Kos, local subway expert, one million cubic yards of earth were excavated, 154,000 cubic yards of concrete were poured, and 15 miles of sewer pipes were laid. An examination of the

payments made to Scott Brothers, I.M. Ludington, and Seneca Engineering show that there were so many additions to the contract that the total price of the subway was twice that of the preliminary estimates. (In fact, by the time the city finished paying for subway extensions and interest on bonds in 1960, the subway had cost the taxpayers \$19,240,425 in capital charges alone.)

Although a tremendous amount of optimism was still expressed in the community concerning the subway, some of the initial unanimity was lost over alleged charges of extravagance advanced by the out-party Democrats and their candidate for Mayor in 1925 -- Leroy E. Snyder. The Hearst paper also began showing signs of displeasure. A 1925 *Journal* editorial characterized the subway as something between "the grandest achievement of Republican Administration in Rochester and . . . the most colossal mistake in history." ⁴⁰ However, at the time this view was quite the exception.

The issue of greatest concern during the construction phase was how the subway would be operated. It was evidence of poor planning that the city was finally attending to this important question well after construction was under way. Two proposals merited serious attention. Some persons argued that the city should maintain direct control, as in the case of the Newark subway in the Morris Canal. Others felt that the same company that operated the surface transit, New York State Railways, should be given control of the subway operations.

The general arguments against municipal operation were that municipal operation elsewhere had usually proven to be financially disastrous, that the legislature must grant additional charter powers which were difficult to get, and that -- since city operation meant political patronage -- the subway could become a political football.

Several prominent citizens such as Milton R. Lum, president of the Real Estate Board of Rochester, wanted control of the subway to rest within the city government. ⁴¹

The opinions of the five railroad companies providing service to Rochester were predictable. The Pennsylvania, the Erie, Lehigh Valley, and Buffalo, Rochester & Pittsburgh Railroads categorically opposed the subway's being operated by only one company. The New York Central was in favor of the plan, but it must be remembered that the New York State Railways was a subsidiary organization of the New York Central Railroad which was organized in 1909 to "facilitate the management" of interurbans and street railways throughout New York -- including three of the five interurbans which entered Rochester and the surface cars of the Rochester Railway Company.⁴²

Consequently the latter form of management was finally chosen. If New York State Railways operated the new subway, universal transfer privileges could be arranged and the maximum use of rush hour surface cars through the subway would be possible. The deficit, if any, would be absorbed by the railroad company in the general fund of the service-at-cost contract.⁴³ In effect, the contract was simply an agreement on the part of the railroads to provide such service as the city might demand or require at a compensation governed by the rate of fare (a rate of compensation normally at 6%). Furthermore, service at cost arrangements were working well in the "subway trolleys" of Cleveland, Cincinnati and Montreal. The New York State Railways also said they would not run their street and interurban cars in the subway unless they were permitted to operate the entire subway system. Many, however, felt this was an empty threat.

After long construction delays the Rochester subway was finally completed on December 1, 1927. The inauguration of the subway brought with it an immediate increase in the rates on bus and trolley service in the city. But the editorials in all four papers ranged from best wishes from Hearst to the exaltation by the *Times Union*:

[There is] every indication that the greatest municipal

undertaking in Rochester would prove successful and of invaluable benefit to the community.

By April 1928, it appeared that the subway would be a big success. One hundred twenty-five cars entered the subway at Winton Road every day. To this number should be added 24 Rochester, Lockport & Buffalo cars which were routed through the subway from Lyell Avenue to Court Street.⁴⁵ This early progress served as the impetus for the construction of the second part of the subway -- an extension south to the Rochester & Eastern interurbans crossing in the town of Brighton. The contract was again awarded to Scott Brothers at an estimated cost of \$3,600,000.

The first use of the subway for surface line intra-city rapid transit cars occurred in 1929 (the same year conversion from trolleys to buses began) when the Dewey Avenue street cars were diverted into the subway to improve and speed up transportation service to Kodak Park, not directly on the subway line but indirectly connected by the surface car lines.⁴⁶ It is quite ironic that the intra-city transportation, merely a second thought in the development of the subway, became its mainstay in later years.

The Changing Effect Of The Thirties

The number of automobiles multiplied in Rochester during the late twenties and better roads and an increased number of gasoline stations soon made the interurbans obsolete. Between the time the subway was proposed for Rochester in 1910, and 1930, the number of automobiles increased over 30 times!⁴⁷ Although the subway offered the fastest trip downtown, its patronage dwindled as even those riders who lived near it turned to the comfort and flexibility of the automobile. From the standpoint of trackage, 1918 was the peak year of electric railroad development. Nationally, the number of electric railroad passengers began to decline after 1923 as more and more companies adopted the motor-bus or the electric trolley bus as a substitute for the trolley car.⁴⁸ Also, the financial pressures of the depression pushed the already faltering companies to bankruptcy.

After three years of profitable operation, by 1930 the big electrics for which the Rochester subway was chiefly designed began to fold. The Rochester & Eastern, competing with heavy motor traffic out East Avenue to Pittsford and Canandaigua, folded on July 31, 1930. The Rochester, Lockport & Buffalo switched over to buses several months later while the Rochester & Syracuse line finally quit on June 30, 1931. Fortunately the subway's freight transfer facilities, a subsidiary service, attracted increased business.⁴⁹ After the New York State Railways went bankrupt in the mid-thirties, the city was forced to hand over operation of the subway to the Rochester Transit Corporation, which used cars acquired from the old Sodus lines. With the RTC in control and the folding of the interurbans, much more emphasis was placed on rapid transit intraurban transportation.

By 1932 positive opinion for the subway was at one of its lowest levels. The more than one million dollars the subway lost in 1932 approximated the city's annual cost of its health, playground and park bureaus. Even the usually encouraging *Times-Union* and *Democrat and Chronicle* both suggested converting the subway to a road leaving only one track for trolley use.⁵⁰ Hearst's *Sunday Journal American* stated in a front page editorial entitled "White Elephant"

. . . the 12 million dollar subway, built while trolley cars were steadily giving way to other means of transportation is perhaps the most monumental example of LACK of foresight in local history.⁵¹

Was the subway really an example of poor planning? When the subway was first planned in 1910 it appeared to be an excellent idea. The annual passenger load of the trolleys had trebled during the first eight years of the century,⁵² while automobiles were still a novelty. It was also estimated in the 1920s that 9,000 people entered and departed from Rochester every day over the city railroads.⁵³ Yet when construction of the subway began in 1922 the number of automobiles had already increased from 3,000 in 1910 to 40,481 and when the

subway was completed five years later, to 103,312.⁵⁴ By the time construction had started it should have been obvious to city planners that automobiles would soon make the interurban obsolete. Perhaps the city's optimism blended them to this fact.

Not long after construction began on the subway, many of Rochester's new leaders like Frank Gannett began stressing other standards besides population growth. The desire for the increase of immigrants simply to increase the population became less prevalent and Rochester preferred rather to stabilize her population. Contributing to this population stabilization was an exodus to the suburbs after World War I. The necessity of building a subway to serve a population of 500,000 or 2,000,000 was seen to be wildly optimistic even in 1925, time enough for the city to order changes in construction if it so desired.

The subway soon diminished as a major issue in the public consciousness. Part of this decline in public concern can be traced to the general demise of high spirits caused by the depression, but more importantly, the passenger service seemed to be incidental and generally considered just another link in the street railway system.⁵⁵ This lack of enthusiasm in the subway can be noted by the brief mention given to it in later years in Chamber of Commerce pamphlets.

Rochester is generally a round-shaped city with the principal streets laid out radially like the spokes of a wheel. Most of the bus or trolley lines followed these "spokes" all intersecting for transfer purposes at Main and Clinton. In addition, there were several crosstown buses intersecting some of the radial lines about two and a half miles from the center. Running from southeast to northwest, the subway could be classed as a radial, but insofar as it did not intersect any of the radial lines at the business center but rather crossed 10 of them at distances varying from three blocks to three miles from the center it could also have qualified as a crosstown. From the viewpoint of location, the subway as a

transit line was as practical as a typical bus route.⁵⁶ The average distance between the subway and the nearest bus line was just about the same as the average distance between all bus lines. Furthermore, the subway was also average in respect to the density of population in the area it served. The service area was generally regarded as a zone one-half mile wide, one-quarter mile on either side of the line.⁵⁷

The speed of the subway might be expected to be a powerful attraction to potential riders. However, the difference in running time between the subway and parallel bus lines was only three minutes on an average trip. The reason that the subway required almost as much time to reach Winton or Rowlands roads was primarily due to its zig-zag route. However, during rush hours the advantage in running time was clearly in favor of the subway.

The distance between subway stations was approximately one half mile. If the stations had been any closer together, the schedule speed would have been reduced accordingly. This was, of course, a distinct disadvantage to would-be riders, unless their points of departure and destination were both close to a station.⁵⁸ Therefore, increasing the number of stations, or including one at Main and Clinton would have had a minimal effect in improving the subway.

One way the passenger service of the subway could have been made more profitable was to extend a spur to new industries. The sole example of such an extension was the laying of tracks to the General Motors Plant on Lexington Avenue in 1938. An extension could also have been made directly to Kodak Park, but from 1931 to 1940 when subway cars emerged from the subway at Emerson Street and traveled down Dewey Avenue on the then-existing Dewey trolley tracks they were used by only 150 riders each way each factory day,⁵⁹ hardly making the effort worthwhile. Furthermore many of these commuters had alternate forms of public transit available.

Although the northwestern quadrant served by the subway was already densely populated and little construction was done during the depression, the subway's prospects could have been improved if industry had been enticed to locate near the tracks. A precedent was set as early as 1892, when H. Sellers McKee, president of the consolidated trolley system, offered fifty free acres to any new industry willing to locate at the western end of the line as proof of the city's competitive vitality.⁶⁰ Yet this idea was not revived. This alone could have made the subway viable.

Those major improvements were necessary in order to make the subway more than just another link in the city's transportation system. Even Harold MacFarlin, former advertising salesman and head of the city's Department of Commerce, made only environmental changes in the subway, such as obtaining new cars or installing ten sections of ornamental picket fence around the underground City Hall Station.⁶¹

The Last Decade

When World War II started, the last streetcar had rolled off the tracks and, except for the subway, Rochester Transit was now an all-bus system. With 40,000 more people employed in Rochester and with gas and tire rationing and transit shortages, Rochester residents found it more convenient to rely on public transportation. According to McKelvey, "long considered a white elephant, the subway seemed for a time in the mid-forties to have justified its great cost."⁶² The subway became even more popular in June of 1943 when the Office of Defense Transportation ruled that bus service must be curtailed 20% in all major cities.

Passenger service increased from under 1.5 million passengers annually in the late thirties to over 3.5 million in 1943 and 1944; 4.8 million in 1945 and finally to a peak of 5.1 million in both 1946 and 1947. According to Wilfred Owen, the fact that the subway's passenger service continued to rise a year or two after the war was typical of most cities, but by

1948, every city in the nation was experiencing an exodus from mass transit systems.⁶³

Excited by the experience of operating in the black, Commerce Commissioner MacFarlin began projecting extensions of the rapid transit line to Kodak Park on the north (cut off from the subway since the demise of the street trolley in 1940-41) and to a more accessible suburban terminus on the south. The press again was excited about the subway's future, and the *Democrat and Chronicle* called it the "number two post war project" after the housing problem. However, a sudden drastic drop in the passenger load in 1948 checked consideration of these improvements and prompted the city to seek outside advice to help determine a proper course.

A report on the present and future prospects of the Rochester subway was written by a commission of experts headed by G.C. White, Assistant General Manager of the Erie Railroad. The commission conceded the vital importance of the subway's freight service (handled by two electric freight motors and one small gasoline engine and profitable almost every year that it was in operation) but it saw no reason to continue passenger service which was operating at a continued loss.⁶⁴ A Chamber of Commerce committee report and a study by Colpitts and Coverdale, Consulting Engineers, contained similar proposals.⁶⁵

The outstanding feature of an electric rapid transit system is its ability to provide fast mass transportation typically required by the existence of long narrow bands of very high population distribution or density. Rochester was never like New York City, London, or Boston with multi-story apartments in solid blocks on either side of the subway, but was a city of homes spread out. The Chamber of Commerce and other concerned citizens felt that a bus system not limited by tracks had the ability to go where the people were and take them to the place they wanted to go. The Rochester subway was simply another alternate transit line rather than a fundamentally important means of transportation.

However, the strongest reason for dismantling the subway was the need for an eastern connection to the Thruway from the Inner Loop. Two routes were considered; one was the subway and the other was University Avenue. The University Avenue plan was objected to by various residents, business firms along the avenue, and by the University of Rochester, which wanted to protect the Prince Street Campus. Since the subway had the advantage of being below grade, the Republican council majority statement claimed that construction of the Thruway link in the subway instead of alongside it would save about \$4,000,000 dollars in Thruway construction and right of way costs for the state and federal governments besides \$1,500,000 in right of way costs for the city.⁶⁶ The decision was approved by the Bureau of Municipal Research, the Citizens Council for a Better Rochester and the Chamber of Commerce. However, many people living near the subway right of way and Frank Gannett, publisher of the city's two remaining newspapers, whose company received its newsprint via the subway industrial railroad, wanted to continue the subway's operation.

On December 13, 1949, the issue of whether to continue the subway reached a critical point. The Rochester Transit Company announced that it couldn't operate the city-owned subway after March 31, unless the city took it out of the red, noting that the subway deficit on a per passenger basis was ten times that of a bus deficit.⁶⁷ The City Council over the dissent of the two Democratic members, voted to subsidize the subway up to \$61,879 for a year beginning June 1. This sum was intended to cover possible loss to the transit company in its operation of the subway. Just as the one-year contract was running out, the United States became involved in the Korean conflict. For a time, it seemed that the subway could be a great service to the city again if this conflict brought over-crowded bus lines and gas and tire shortages.⁶⁸ The Republican majority of the council, citing probable "return to war conditions" as justification, renewed the

subsidies paid to RTC until 1954. The Democrats still objected to continuation of the subway's operation.

Finally the need for the Thruway connector became too pressing and on September 11, 1954 a caucus of the Republican City Council (representing all councilmen save one Democrat) decided to end passenger service on the subway December 31, 1955. City officials claimed the decision was based primarily on the prospect of future savings resulting from discontinuation of the unprofitable passenger service and construction of a highway in the subway right of way.

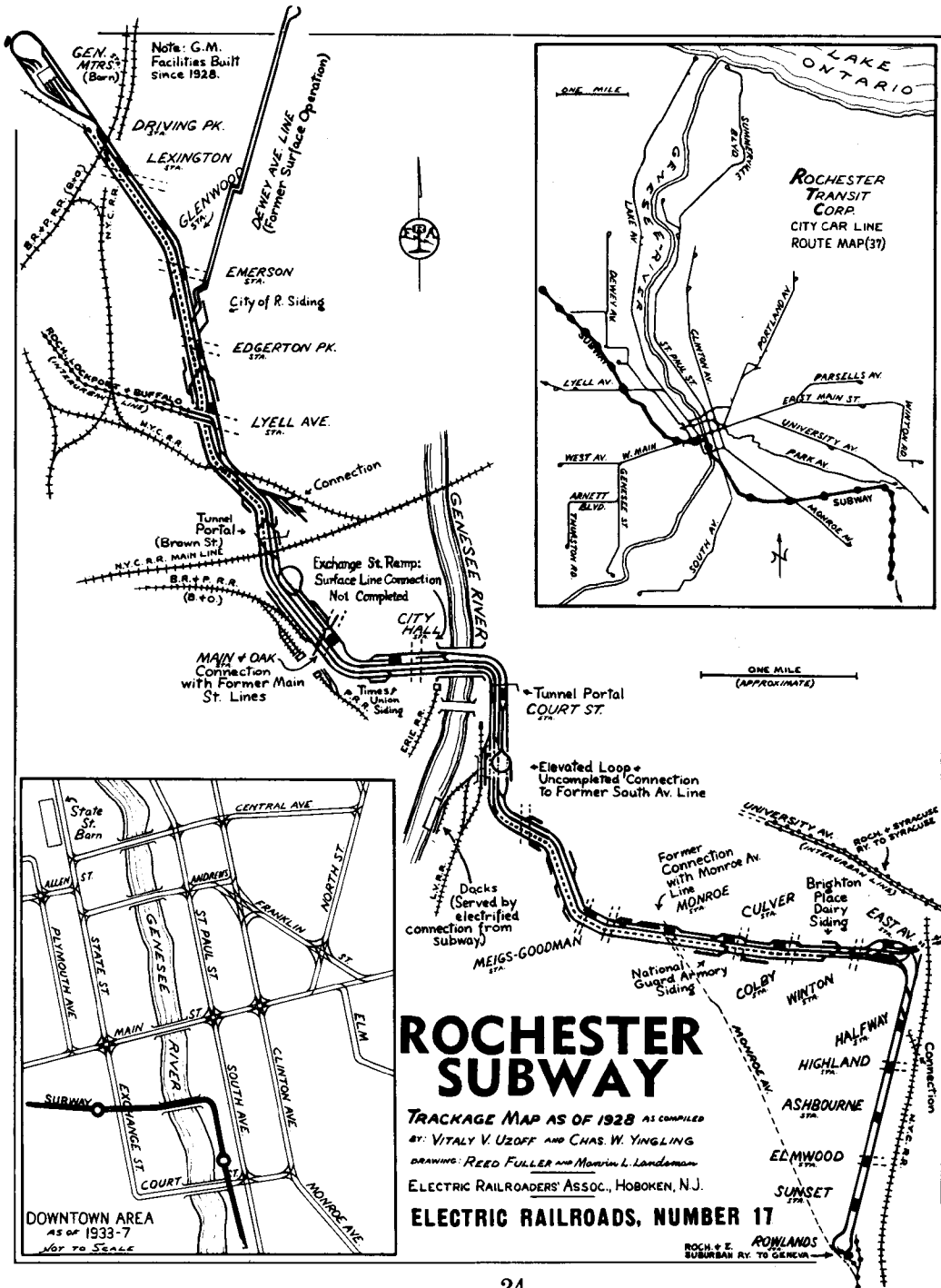
Under now-minimal objection from Gannett and few others, a bill allowing the city to close the passenger service of the subway was unanimously passed by the legislature March 31, 1955. At 1:35 a.m. July 1, 1956, the Rochester subway reached the end of the line.

NOTES

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4. George W. Hilton and John F. Due, **The Electric Interurban Railways in America** (Stanford, Calif. 1960), pp. 44, 233-239, and *passim*; Charles N. Glabb and Theodore Brown, **A History of Urban America** (New York, 1967), p. 273.
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11. *Ibid*, p.45.
12. Bion J. Arnold, "Report on Car Operation and Routing New York Railways' Rochester Lines" (October, 1916).
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21. **Times-Union**, August 16, 1923.
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24. **Ibid**.
25. Fisher, **The Rochester City Plan**, p. 22.
26. Arnold, "Report on Car Operation," p. 41.
27. McKelvey, **Quest for Quality**, p. 97.
28. Brunner, Olmsted, and Arnold, **City Plan for Rochester**, p. 19.
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31. Rochester Chamber of Commerce, **Book of Industrial Rochester** (Rochester, 1919).
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37. Fisher, **The Rochester City Plan**, p. 38.
38. "Rochester's Subway Development."
39. **Times-Union**, November 18, 1922.
40. Rochester **Journal**, June 11, 1925.
41. Rochester **Democrat and Chronicle**, April 13, 1927.
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64. Erie Commission Report, **Report on Rochester Subway Freight and Passenger Operation** (New York, 1949).
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Note: G.M. Facilities Built since 1928.

ROCHESTER TRANSIT CORP. CITY CAR LINE ROUTE MAP (37)

ROCHESTER SUBWAY

TRACKAGE MAP AS OF 1928 AS COMPILED BY: VITALY V. UZOFF AND CHAS. W. YINGLING
DRAWING: REED FULLER AND MORRIS L. LANDSMAN

ELECTRIC RAILROADERS' ASSOC., HOBOKEN, N.J.

ELECTRIC RAILROADS, NUMBER 17

ROCH. & E. SUBURBAN AV. TO GENESEE