

# RAPID TRANSIT

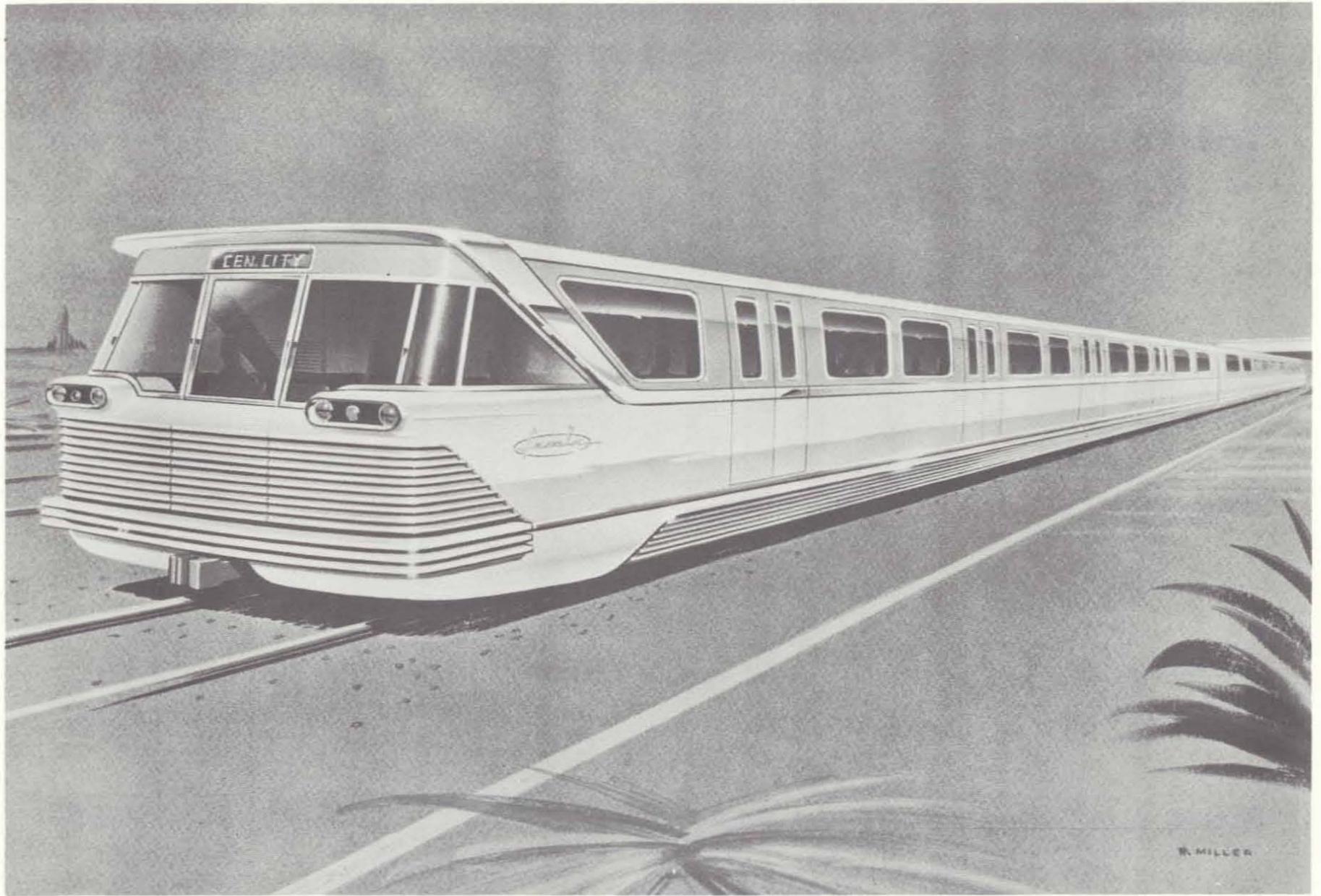
...a reality



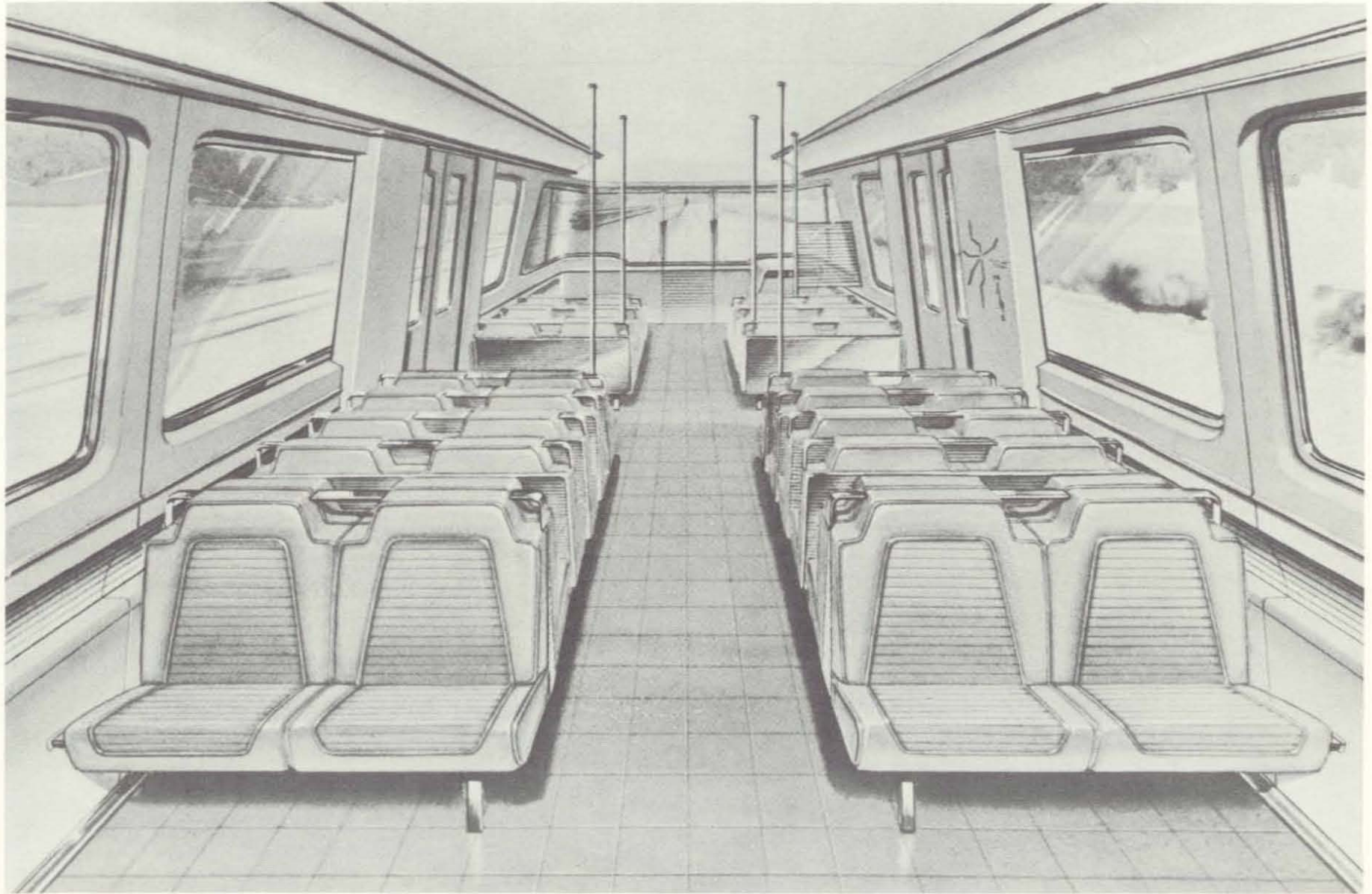








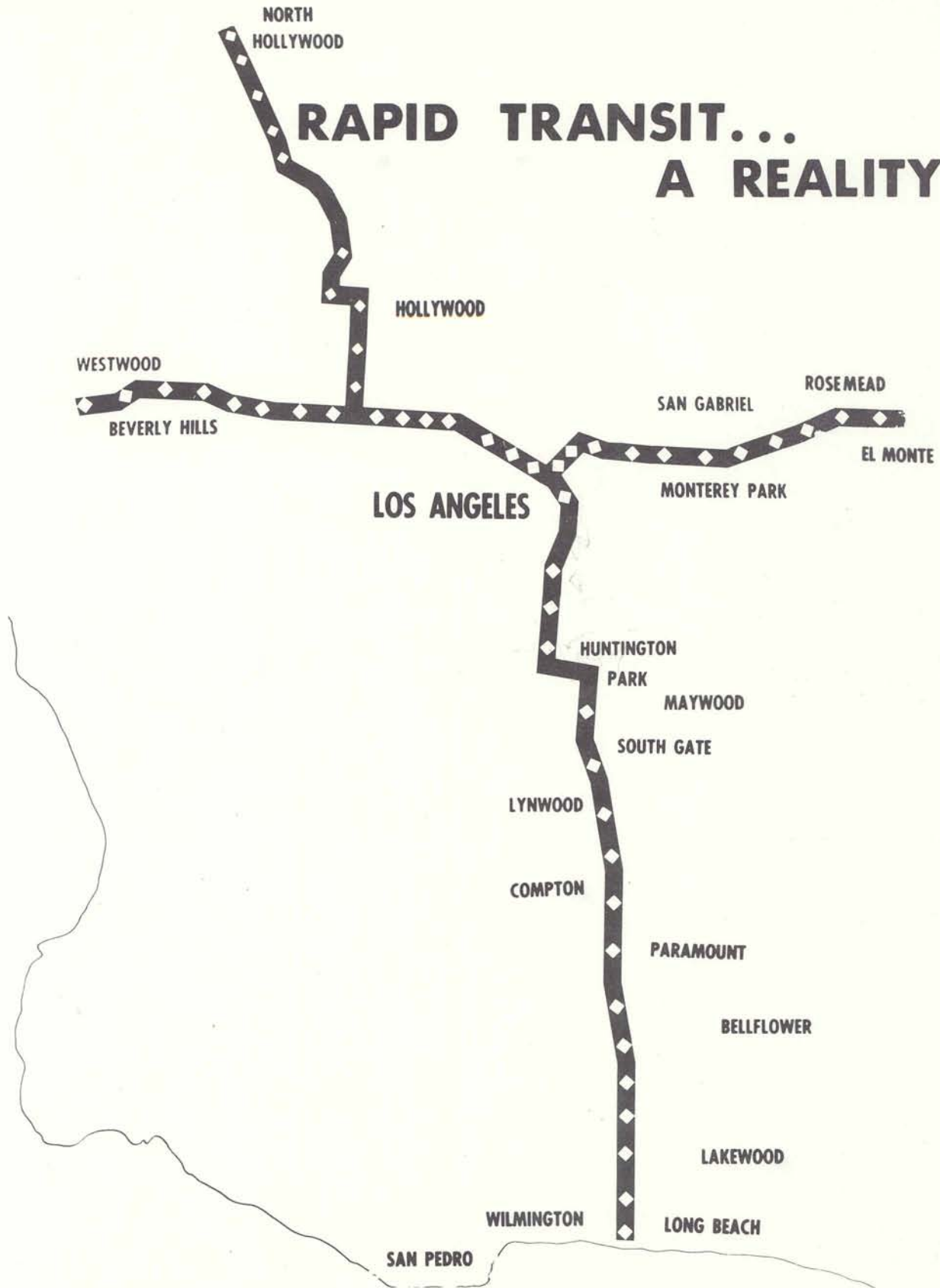
Proposed Ultramodern M. T. A. Rapid Transit Car



Interior of Proposed Ultramodern M. T. A. Rapid Transit Car



# RAPID TRANSIT... A REALITY

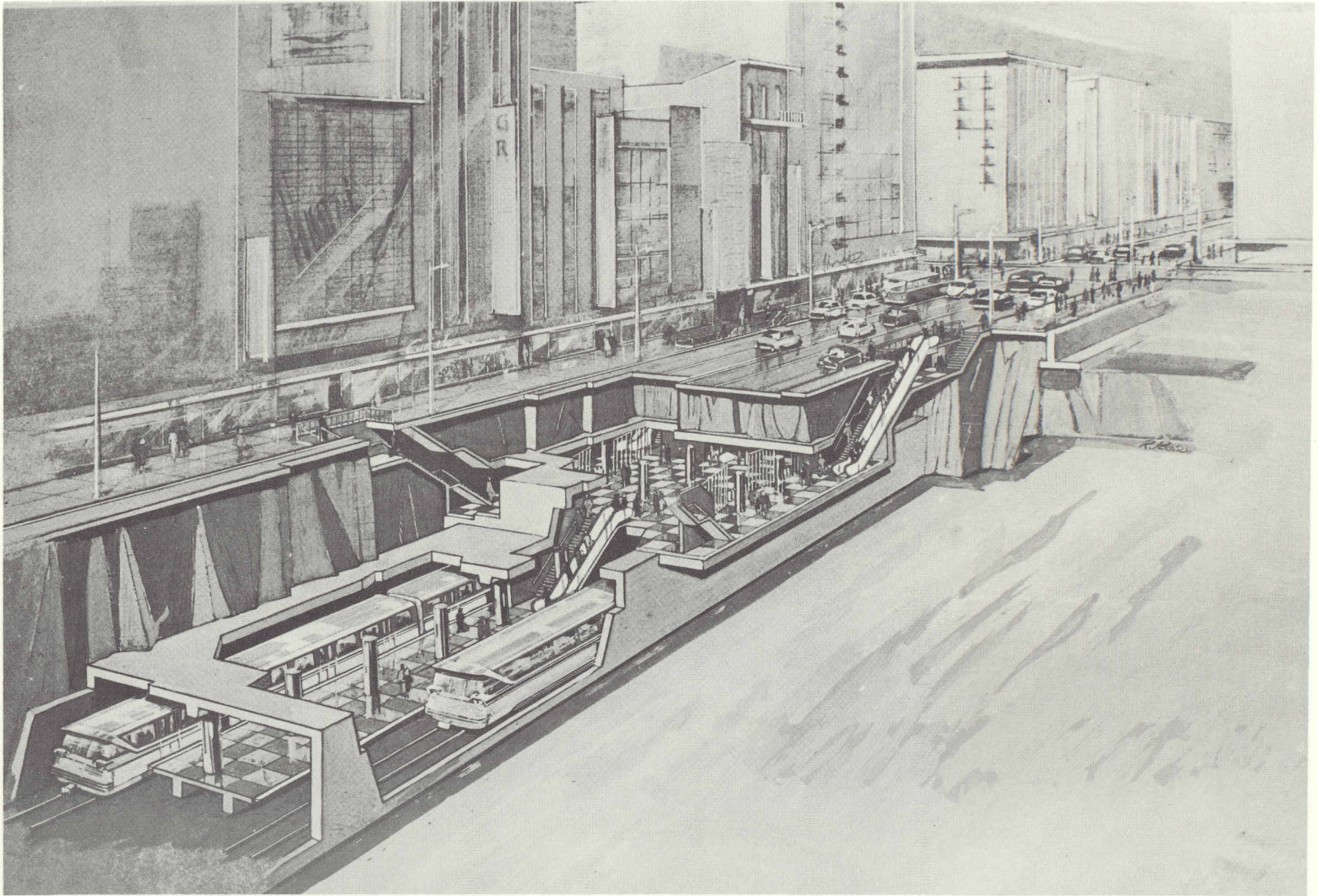


Fifty-eight mile RAPID TRANSIT System. (Diamonds indicate stations)



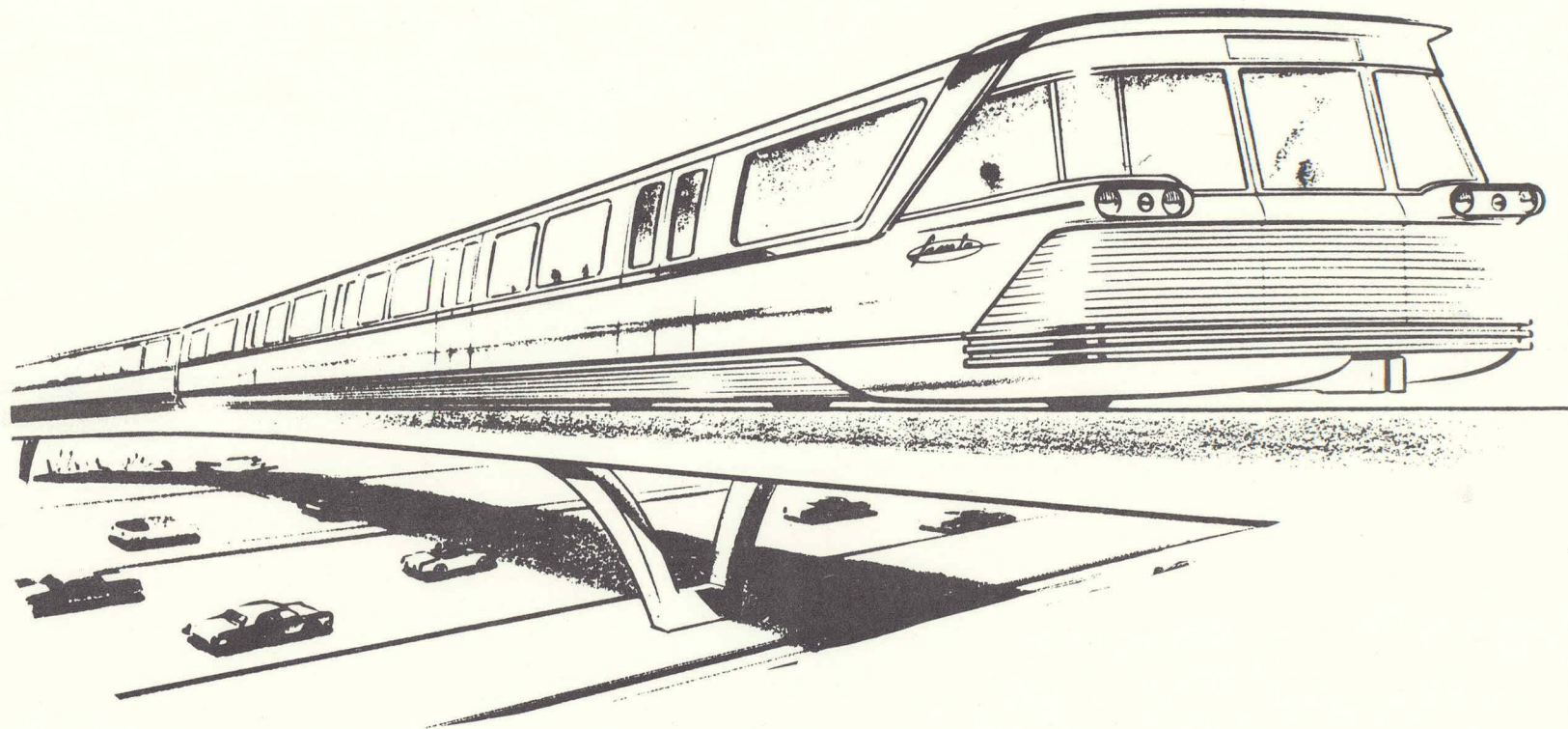
Escalator Proposed for Sixth Street and Broadway Downtown Subway Station





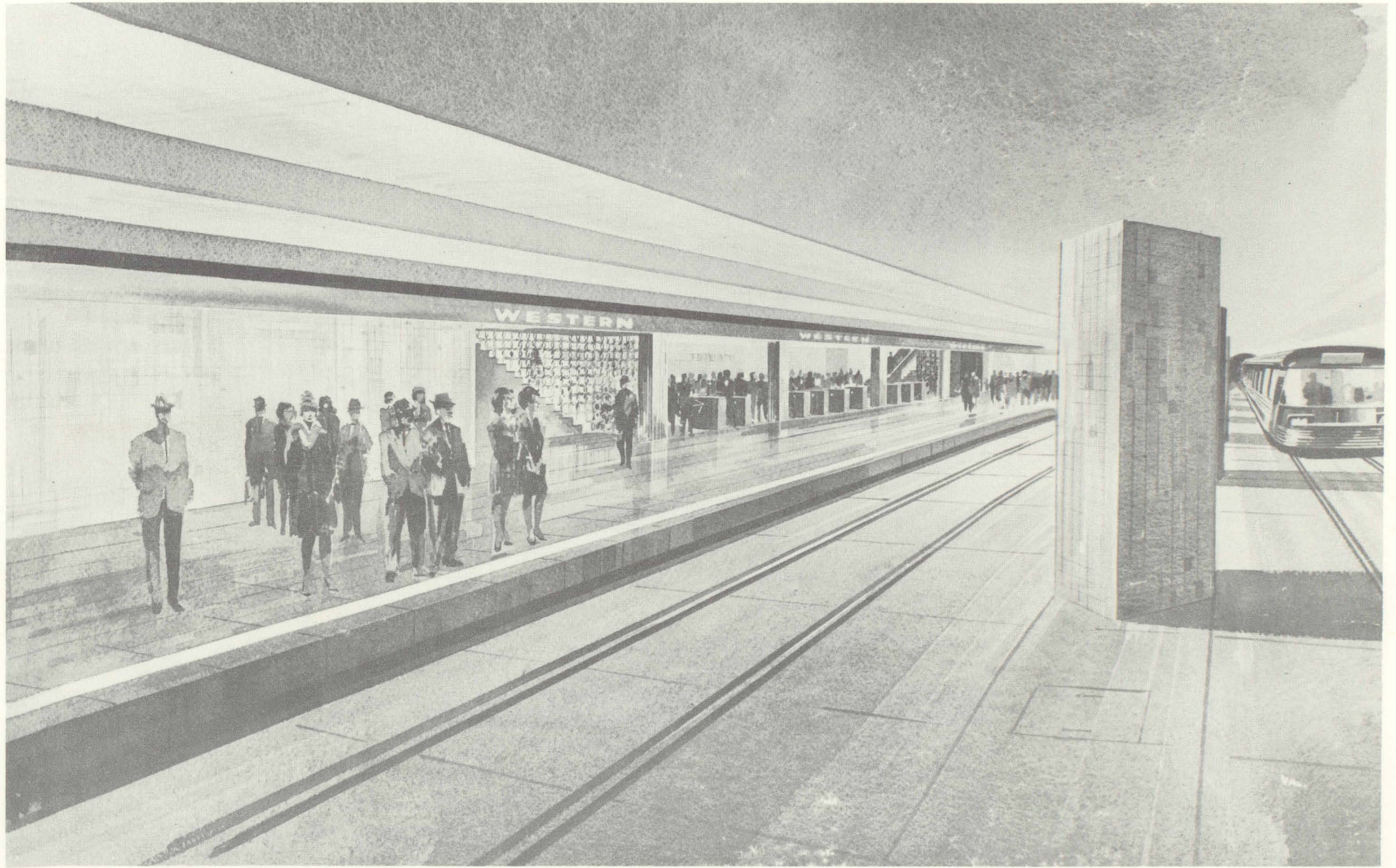
Typical Downtown Rapid Transit Subway Station





Skyline Route





Proposed Subway Station for Wilshire Boulevard and Western Avenue



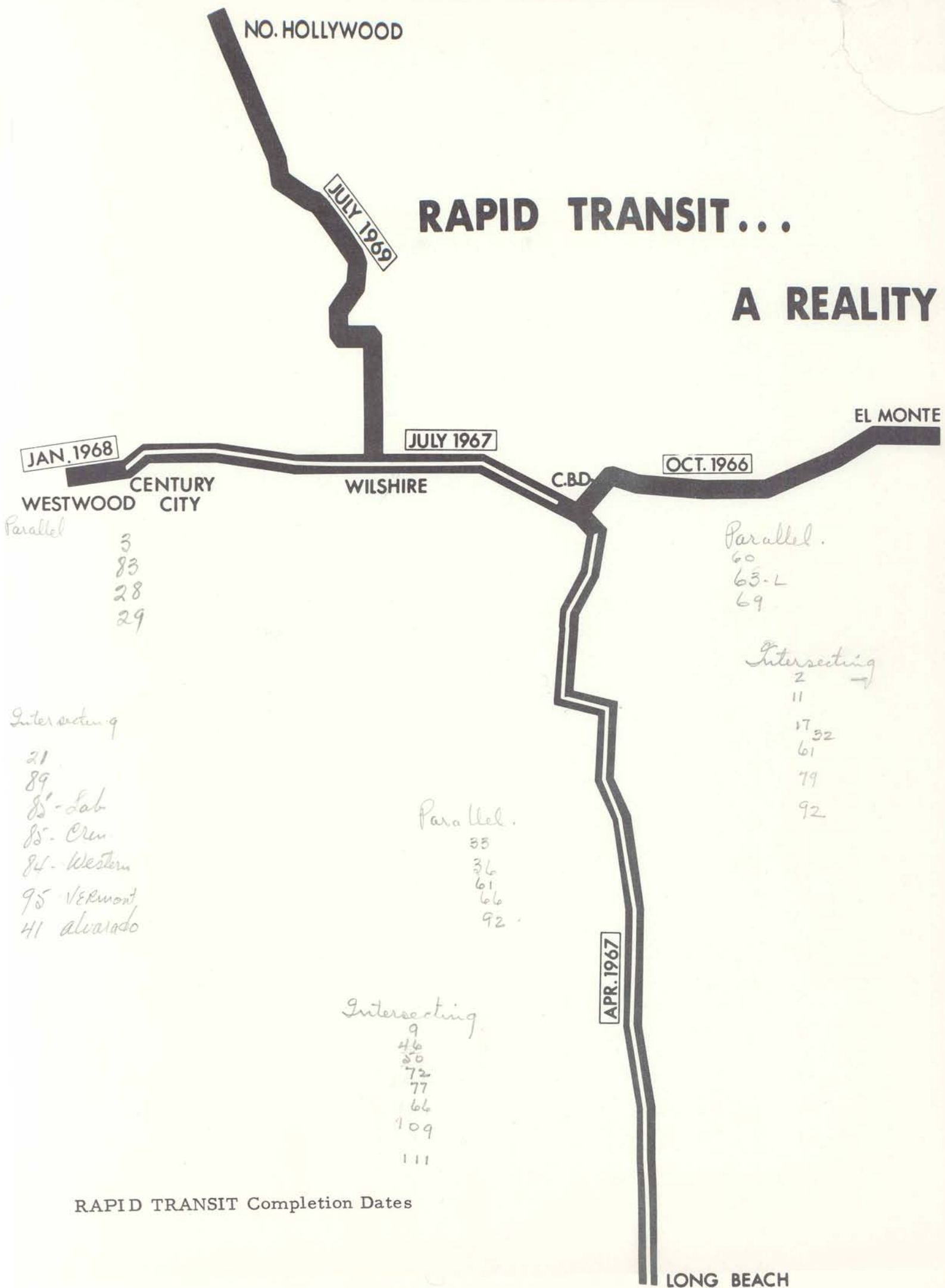


Proposed Surface-Level Rapid Transit Station for Line Operating Alongside Freeway



# RAPID TRANSIT...

## A REALITY



*Parallel*  
3  
83  
28  
29

*Intersecting*  
21  
89  
85 - Lab  
85 - Cren  
84 - Western  
95 Vermont  
41 Alvarado

*Parallel.*  
35  
36  
61  
66  
92

*Intersecting*  
9  
46  
50  
72  
77  
66  
109  
111

*Parallel.*  
60  
63-L  
69

*Intersecting*  
2  
11  
17  
32  
61  
79  
92

RAPID TRANSIT Completion Dates

LONG BEACH

In San Francisco the property owners are assuming the total obligation of \$792 million while taxpayers of L.A. County are asked to supplement or guarantee a portion of the \$649 million bond issue.

The immediate need for rapid transit is the *same* in both areas.

### ***I Live In An Area Not Near Enough To The Rapid Transit System To Use It. How Will The Program Help Me?***

Nearly all communities in Southern California are tied together by ribbons of concrete which are the streets and freeways. Over these arteries the essentials of life must flow. The life blood of the community can be slowed or halted by any hardening of these arteries — any congestion which effects the movement of goods and people is hardening of the traffic arteries.

Because most of the essential goods and the greatest number of workers pass through or into the central core of this vast highway network, the congestion at the core affects *all* of the movements in all of the highways.

Delays in deliveries of goods cause an increase in the cost of commodities in every community and delays to workers who live in those communities — and must travel over highways — represents lost man-hours.

Measuring the dollar cost of congestion in any area is extremely difficult, but some efforts have been made. San Francisco analysts estimate that during the rush hour in three Bay area counties alone, 150,000 man-hours are now lost to highway congestion on the average work day. In Pittsburgh, it is estimated that a 10-minute delay in traffic means a productive time loss of \$222,000 at basic steel wages. The National Retail Dry Goods Assn. calculates very roughly that the annual cost of congestion in New York City is \$1 billion.

So the principal way rapid transit can help an area dependent upon highways and freeways for its mobility is by removing the economic drag of congestion.

### ***Is The Monorail To The Airport A Part Of The Rapid Transit System?***

No.

It is a separate program. The Goodell Monorail firm is presently working with M.T.A engineers and other public agencies with a view toward establishing a route and cost of construction and methods for financing.

The airport type monorail is of special design, with low capacity vehicles for high speed point-to-point operation.

Monorail has shown no advantage when compared to other proven systems for high capacity urban rapid transit routes.

### ***What Can I Do To Help Speed The Program?***

Write to your representative in Sacramento. Chambers of Commerce, Service Clubs, and other civic groups can get behind the M.T.A which was established to build a rapid transit system for the area.

Naturally, the congested center, the core of our metropolitan complex, must be attacked first, just as the foundation of a building must be built first. Surface transportation, autos, and buses will be able to move faster and more freely once the rapid transit arteries have been constructed. Extensions to the system would be added as passenger potential develops through population growth.



# *Some Questions...*

## **Some Answers!**

### ***Why Do We Need Rapid Transit?***

To insure maximum mobility for the metropolitan area by relieving the freeways and surface streets of a part of the traffic load. Traffic and congestion which clog our streets will choke our economic lives.

The alternative would be to add many more traffic lanes through the congested areas. One rapid transit line can carry over 30,000 people an hour in one direction; about twelve lanes of super highways (3 8-lane freeways) or 36 arterial street lanes would be needed to do the same job.

Rapid transit is needed to insure the growth of the metropolitan area and its prosperity.

### ***Why Are Taxes Necessary?***

The M.T.A has explored fully all other possible avenues of financing. In 1962 a bill was introduced into Congress to establish an agency which would guarantee revenue bonds — sold to private investors — bonds which would finance construction of the first segment of the total transit system (the Backbone Route).

This was the only portion (through the Central Business District, West Los Angeles, and Beverly Hills with its high-rise building growth then east to El Monte) which would pay for rapid transit construction and operation through the fare box revenues.

The balance of the rapid transit network was to be built as and when the passenger potential developed through growth when it too could pay its own way.

Aid was also sought from other governmental agencies to finance the construction of a Skyline Route to Long Beach and possible later extensions into the San Fernando Valley. This request was denied.

But, the urgency for relief prevails. The emergency is now!

The people of the County who will find relief from traffic congestion must expect to pay a small portion of the construction costs for a rapid transit system.

The largest portion of the initial construction cost plus operating expenses will be paid through revenues from the fare box.

### ***What Is The Difference Between The Plan For Los Angeles And The Plan For San Francisco Bay District?***

The voters of the three northern counties — San Francisco, Contra Costa, and Alameda — recently approved a Bond issue of \$792 million to be paid for out of property taxes. This is the amount needed to build their 75-mile rapid transit systems' Trans-Bay tube and equipment. The estimated tax rate is to be 67¢ per \$100 of assessed valuation.

The Legislature of the State of California will be asked to pass enabling legislation applying taxes to property in Los Angeles County not to exceed 15¢ per \$100 of assessed valuation. Taxpayers of Los Angeles County are asked to supplement the revenues of the system to retire a bond issue which will be sold to private investors.

# RAPID TRANSIT



## ... A REALITY

### THE PROGRAM...

The immediate passage of enabling legislation will permit the Los Angeles Metropolitan Transit Authority to complete engineering and begin construction of a new 58-mile regional rapid transit system by July 1, 1964, at a maximum monthly cost to the individual taxpayer of little more than one gallon of premium gasoline in the peak year.

The 58-mile express system, unhampered by crushing peak hour congestion, accidents, mechanical breakdowns or cross traffic, will speed commuters effortlessly and safely through the central city from Long Beach to North Hollywood, and West Los Angeles to El Monte, releasing the arterial and free-way jam which has promised to stifle freedom of

movement and commerce in the second largest metropolitan area in the United States.

This program will be accomplished with a financial plan whereby M.T.A transit revenues will be supplemented by revenues obtained through taxes which will not exceed an annual rate of 15 cents per \$100 of assessed valuation in Los Angeles County. This tax, at its peak, would cost the typical Los Angeles homeowner (typical assessed property valuation: \$4,000) a few cents more than one gallon of premium gasoline per month. It would range from 28½ cents per month in 1965 to a peak of 41 cents per month in 1967, declining thereafter to approximately 19 cents per month in 1980.

### ACTION...

Immediately following passage of the necessary urgency enabling legislation in Sacramento, engineering of the Long Beach and Valley lines will commence, and the engineering of the West Los Angeles-El Monte line will be concluded. The latter was suspended in July, 1962, due to unavailability of Federal legislation which would have permitted the construction of a 22 mile basic segment totally out of revenue (the Backbone route). The downtown Los Angeles-El Monte line will be completed and in service in

October, 1966; Long Beach to downtown Los Angeles, in time for the World's Fair, April, 1967; downtown Los Angeles to Century City, April, 1967; Century City-West Los Angeles, January, 1968; and Wilshire-North Hollywood, July, 1969.

It is anticipated that a \$649 million, 4-percent bond issue will be placed by a nationwide distributing group in three 40-year term stages: September, 1963, \$200 million; January, 1965, \$250 million; and January, 1967, \$199 million.



# FINANCIAL FEASIBILITY...

The financial feasibility of the program is established by projections of population and conservative real and personal property growth estimates of Los Angeles County and projections of revenues available from operations and invested funds. Note Growth Chart.

The probable tax requirement is well illustrated by a comparison of the debt service requirement and the projected net from operations. Note Probable Rate Chart.

## GROWTH

Year	Population*	Net Assessed Value (000)
1963	6,503,095	\$12,683,834
1965	6,832,314	13,325,953
1967	7,178,199	14,000,578
1970	7,730,135	15,077,090
1975	8,745,939	17,058,342
1980	9,895,228	19,299,948

\*Population estimates based on 1980 projections by the Los Angeles Regional Transportation Study, Southern California Research Council, and Los Angeles County Regional Planning Commission.

## PROBABLE TAX RATE

Year	Debt Service (000)	Maximum Available From Operations and Invested Funds (000)	Required From Taxes (000)	Indicated Tax Rate
1963	\$ 5,053	\$ 5,777	\$ 0	\$0.0
1965	22,736	10,999	11,737	0.0859
1967	32,790	14,984	17,806	0.1241
1969		Full System in Operation, July 1.		
1970	32,790	19,984	12,806	0.0829
1975	32,790	20,488	12,302	0.0704
1980	32,790	21,005	11,785	0.0596

AS SEEN FROM THE TABLE ABOVE, A TAX RATE LIMITED TO 15c IS MORE THAN SUFFICIENT TO MEET REQUIREMENTS.

# BENEFITS...

Rapid transit will benefit everyone. It will be directly responsible for reduced automobile congestion; greater job, residential and cultural accessibility; reduced travel time; wider access to schools; lower

commute costs; improved property values; auto accident reduction and lower insurance rates; and improved city and county planning.



## THE SYSTEM...

The system will be completely grade separated. The east-west (backbone) route will be in subway from West Los Angeles along Wilshire Boulevard and through downtown Los Angeles to the Los Angeles River. From downtown Los Angeles, the Long Beach line will travel along a corridor parallel

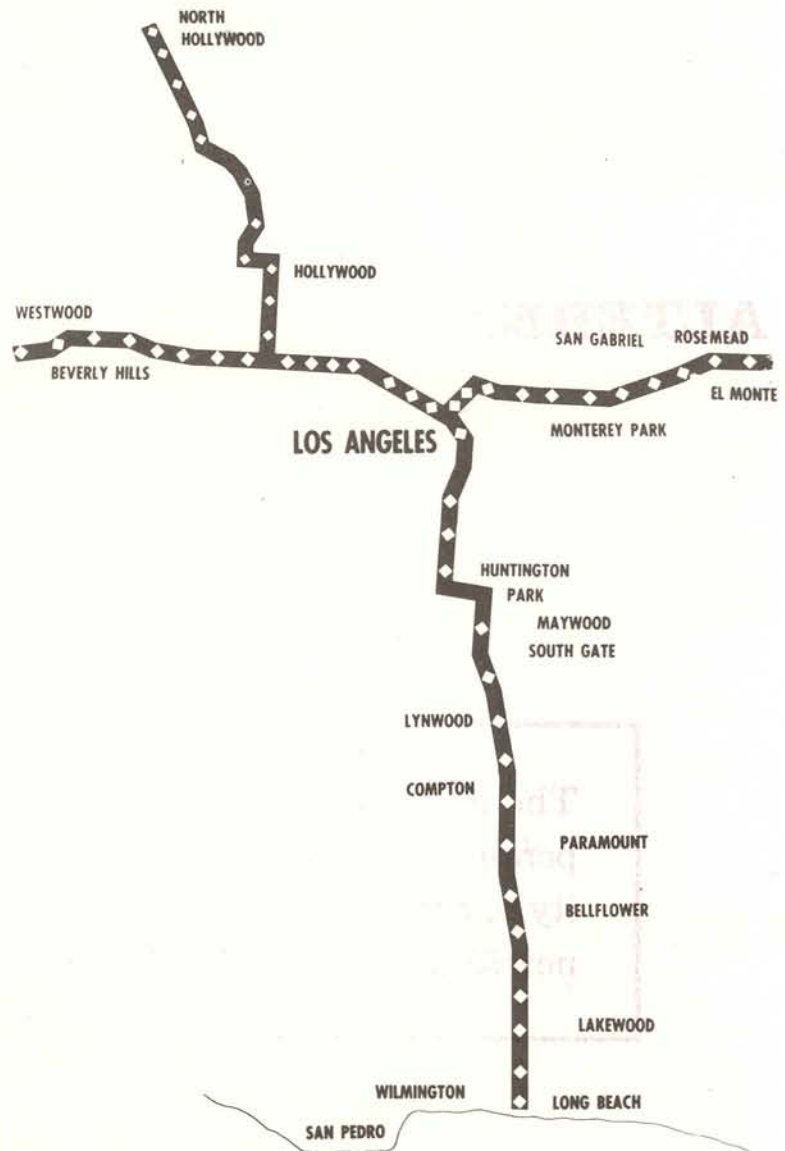
to Long Beach Boulevard and terminate in the vicinity of Ocean Boulevard; the North Hollywood line will leave Wilshire Boulevard near Crenshaw Boulevard and run northwesterly through Hollywood to Victory Boulevard. The El Monte segment will parallel the San Bernardino freeway.

## STATIONS...

The primary considerations in the design of the stations are a blending of aesthetics with utilitarian functions to provide directness and freedom of passenger circulation, ease of maintenance and simplicity and permanence of structure. The stations will provide swift and unimpeded passenger flow at peak commuting hours and will be located to provide ready and favorable connections with bus services which will serve as a feeder system to all routes. Ample parking facilities will be located at each of the terminal points as well as at the more important outlying stations. An automatic fare collection system will include money changers capable of handling bills up to five dollars and automatic ticket vendors and turnstiles.

## OPERATIONS...

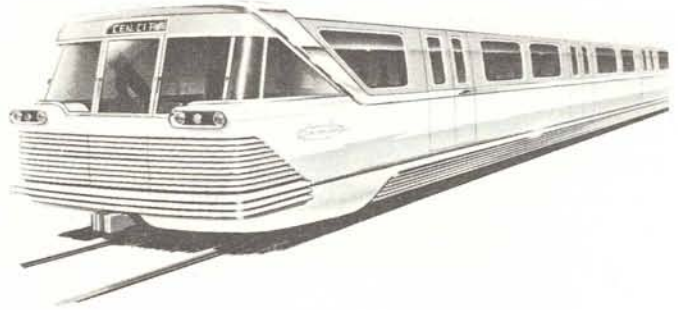
Operation of the service by pre-programmed electronic control, including dispatch, positioning, train headway, and speed will ensure economical and safe operation under all circumstances while permitting, at the same time, maximum performance in terms of speed, reliability and economy. Station or train announcements will be handled automatically. Passenger safety has been a paramount consideration, and the design of the train safety system provides maximum protection.





## VEHICLES...

The design and preliminary specifications of an ultra modern, electrically propelled, streamlined vehicle, capable of maximum speeds of over 70 miles per hour, which takes advantage of and incorporates all advanced developments and technology, has already been accomplished by the Authority's project engineer. The interior has been styled to provide the ultimate in passenger comfort in seating, air conditioning and lighting. Tinted, heat repellent windows will provide all passengers with a maximum view from the interior. Particular design attention has been given to the suppression and control of any sound or



vibration producing action while the car is in motion; an air spring suspension system and a lowered center of gravity will guarantee a smooth, swayless ride. Each vehicle will seat 85 passengers.

## ALTERNATE...

Since the freeway system to serve the congested core area depends on one fundamental condition: more mass rapid transit in metropolitan areas, there is no satisfactory alternate. The community cannot afford to build the additional freeways downtown which would be needed to carry only commuters. The high construction cost would delay the construction of many miles of freeway connecting links needed to

complete the planned 1980 freeway system.

These freeways are doing the job and more than the freeway planners expected. With the accomplishment of the complete freeway system by 1980 and the completion of a mass rapid transit system to assist the freeways in the congested core area the Los Angeles commuter could take less time in getting home from work in 1980 than he does right now.

The immediate passage of enabling legislation will permit the Los Angeles Metropolitan Transit Authority to complete engineering and begin construction of a new 58-mile regional rapid transit system by July 1, 1964.

# LOS ANGELES METROPOLITAN TRANSIT AUTHORITY

1060 SOUTH BROADWAY  
LOS ANGELES 15, CALIF.

LOS ANGELES COUNTY (continued)

Jesse M. Unruh - 65-D	3939 Wilshire Blvd., Ste. 209, L.A. 5
Joe A. Gonsalves - 66-D	12458 E. 183rd St., Artesia
Clayton A. Dills - 67-D	16319 So. New Hampshire St., Gardena
Vincent Thomas - 68-D	729 W. 9th St., San Pedro

ORANGE COUNTY

Wm. E. Dannemeyer - 69-D	1105 Commonwealth, Fullerton
James E. Whetmore - 70-R	11912 Weatherby Rd., Los Alamitos
Robert E. Badham - 71-R	303 E. 22nd St., Costa Mesa

SAN BERNARDINO COUNTY

John P. Quimby - 72-D	1116 Esperanza St., San Bernardino
Stewart Hinckley - 73-R	1405 Kincaid Rd., Redlands

RIVERSIDE COUNTY

Gordon Cologne - 74-R	P. O. Box 1945, Indio
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STATE ASSEMBLYMEN (1963)

LOS ANGELES COUNTY

Carley V. Porter - 38-D	1701 E. Compton Blvd., Compton
George Deukmejian - 39-R	5366 E. Broadway, Long Beach
Edward E. Elliott - 40-D	3404½ Whittier Blvd., L.A. 23
Tom C. Carrell - 41-D	753 San Fernando Rd., San Fernando
Tom Bane - 42-D	5711 Lankershim Blvd., No. Hollywood
Howard J. Thelin - 43-R	500 N. Brand Blvd., Glendale 3
Joseph M. Kennick - 44-D	Sec. Bldg., Ste. 606, Long Beach
George E. Brown, Jr. - 45-D	214 So. Garfield Ave., L.A.
Charles Edward Chapel - 46-R	P. O. Box 327, Redondo Beach
Frank Lanterman - 47-R	4420 Encinas Dr., La Canada
George E. Danielson - 48-D	668 So. Bonnie Brae, L.A.
Houston I. Flournoy - 49-R	130 N. Indian Hill Blvd., Claremont
Philip L. Soto - 50-D	511 Chatterson Ave., La Puente
John Moreno - 51-D	10113 Jersey, Santa Fe Springs
George A. Wilson - 52-D	2746 Florence Ave., Huntington Park
Mervyn M. Dymally - 53-D	426 E. 59th Pl., L.A. 3
John L. E. Collier - 54-R	1109 Fair Oaks Ave., So. Pasadena
Douglas F. Ferrell - 55-D	816 E. 116th Pl., L.A. 59
Charles Warren - 56-D	414 So. St. Andrews Pl., L.A.
Charles J. Conrad - 57-R	13440 Ventura Blvd., Rm. 110, Sherman Oaks
Harvey Johnson - 58-D	121 Monterey, El Monte
Anthony C. Beilenson - 59-D	9559 Sherwood Forest Ln., Beverly Hills
Robert S. Stevens - 60-R	10586 Ohio Ave., L.A. 24
Lester A. McMillan - 61-D	5360 W. Adams Blvd., L.A. 16
Tom Waite - 62-D	10440 Plainview Ave., Tujunga
Don A. Allen - 63-D	3450 W. 43rd St., Ste. 110, L.A.
Lou A. Cusanovich - 64-R	8949 Reseda Blvd., Ste. 202, Northridge

(more)



## **Your Views Are Important!**

Although most traffic experts agree that a rapid transit system, with highspeed arteries through the congested core of the Los Angeles metropolitan area, will furnish a necessary supplement to our Freeway network for moving people, your views are important to members of the Legislature.

Here are names and addresses of State Senators and Assemblymen for your convenience.

Sacramento address:

State Capitol  
Capitol Annex  
Sacramento, California

### SENATORS

Los Angeles County	Thomas M. Rees	217 West 1st St., L. A. 12
Orange County	John A. Murdy, Jr.	1623 West 17th St., Santa Ana
Riverside County	L.M. "Lee" Backstrand	3620 Market Street, Riverside
San Bernardino County	Eugene G. Nisbet	200 East 13th Street, Upland

Water, transportation, and smog are critical problems that threaten the comfort and welfare of the people of this community. We of the MTA welcome you here and appreciate your taking the time from your busy schedule, at this busy time of the year to meet with us, because we intend to propose a solution to one of these problems-- transportation.

My name is A. J. Eyraud. I speak to you as Chairman of the MTA. The Authority is a board of seven local citizen members with homes and businesses spread all over the county. They invest many hours and whole days in the affairs of your MTA without salary.

They are prominent in community affairs and are well known to most of you and they are here today. Fred Dean of Dean Electronics, Long Beach, is Vice-Chairman and chairman of the MTA Engineering Committee; Martin Pollard, Cadillac and General Motors Dealer, San Fernando Valley, is chairman of the Legislative Committee; Mortimer Hall, owner and operator of Radio Station KLAC, is chairman of the Personnel Committee; Nat Dumont, Dumont Aviation, is chairman of the Advertising, Promotion, and Public Relations Committee; Walter Briggs, owner of Walt's Auto Parks, is chairman of the Retirement and Insurance Committee; Warden Wollard, former editor of the Los Angeles Examiner, now retired, is chairman of the Finance Committee. These men are a Board of Directors operating your public transportation system which carries 3/4 of a million passengers everyday, producing gross revenues of \$42-46 million dollars a year. These dollars pay for the capital cost, maintenance and operation of the system, and are devoted to improving and extending the system wherever possible. The interests of these men are your interests and the interests of your community.



In 1951, the citizens of the Los Angeles area recognized that something had to be done for the solution of our critical transportation problem and requested the Legislature to establish the Authority. The proposal had the support of the County Board of Supervisors and the Los Angeles City Council, and most other public agencies and civic groups.

To the Supervisors, in fact, goes the credit for appropriating the funds that were necessary to gather information that led finally to the drafting, consideration, and adoption by the Legislature of the MTA Enabling Act in 1957. That Act directed the MTA to do two things.

The first was to buy and to operate the existing public transportation systems in the area. This has been done. Since 1958, your MTA has paid for all its bills entirely from revenues. At the same time, other metropolitan areas were heavily subsidized. For example, San Francisco, small as it is, is subsidized \$5-7 million dollars a year; New York, \$100-150 million dollars a year; the Boston MTA has almost exactly the same size system as Los Angeles and carries within 5% the same number of passengers that we do in Los Angeles; yet Boston is subsidized \$20-22 million dollars a year.

Every time the fare increases on a public transportation system, whether or not that increase follows cost of living trends, it defeats the very purpose of public transportation by driving passengers back in the cars and on the streets.

When fares were increased more than two years ago to 25¢, there were dire predictions that fares would increase again within 60 to 90 days. They have not.

The fares have not increased in the last 2 years, and they will not increase in 1963, and hopefully, they will not increase in 1964.

This is not an accident. Economies were effected by hard-headed business management.

MTA has consolidated our large maintenance facilities.

MTA has tailored service to patronage.

MTA has eliminated the competing service of the 3 predecessor companies.

MTA will convert this March from the obsolete and expensive streetcar operation to the more flexible, modern, and economical Dreamliner buses.

The MTA has upgraded the system and equipment generally.

At the same time MTA was effecting these economies, important service improvements were made. Many, many experiments with extensions resulted in permanent and important additions to the system--for example, the new line along La Cienega Boulevard, the new service in Alhambra and Riverside, and, more recently Glendale, to take the place of the private companies which went bankrupt. Several weeks ago the MTA initiated an entirely new and improved service for the whole San Fernando Valley. Thirty-five route miles were added, additional limited, express, and flyer service was instituted and schedules on main lines were made more frequent.

Also to make the service on the whole system more attractive, MTA has spent \$19,400,000 to put 705 new and modern units into service.

Reduced fares for Senior Citizens were offered on an experimental basis in the off-peak hours. The response indicated that many elderly people who otherwise would not be able to move around because of the cost involved were benefiting by the Senior Citizen Program. It is now a permanent part of MTA's service and fare structure.

This performance has created a unique situation in the United States--a public transportation bond selling at a premium of 105 to 107--establishing a credit record which will greatly assist in the financing and building of the system we will describe to you today.



Now, what about that system--mass rapid transit was the second major responsibility given to MTA.

There have been 30 or more studies over the last 30 years, sponsored by various public agencies and interested groups. These studies have all concluded one thing: we need better public transportation and mass rapid transit.

MTA aimed its studies and engineering to answering this need.

We employed outstanding experts in the economics and construction of mass rapid transit systems. The work of these International experts answered these questions: where should we build a system, what kind of a system should we build, and how can we finance it.

There is no need to take a great deal of your time to try to impress you with the critical situation which you already know exists. Your own experience tells you that there is a problem and your own intelligence tells you that that problem will create an impossible situation as we grow to twice as many people and twice as many automobiles.

At the same time we are presenting this plan to you, Governor Brown is speaking to the Legislature in Sacramento. I talked to the Governor this morning and he will say in that address that urban citizens need fast and safe transportation to and from work to lead fuller lives. He will compliment San Francisco for approving a rapid transit system there. He will tell the Legislature that the MTA has completed plans for a 58-mile transit system to serve the area, and that during this session, MTA will ask for changes in its Enabling Act to permit and to clear the way for construction. He will say of the MTA plan, and I quote, " I have studied the proposal and I find it sound. I urge you to approve it. The people of Los Angeles need it."

The answers are in--the need exists, the system has been developed, it can be built and it can be financed. It will take time to build it and so it is urgent.

We are proud of the work that the Authority has done for you and want to present to you now a description of the system and a plan for financing.

I will ask Mr. C. M. Gilliss, Executive Director of MTA, to present the details of the system, and I will ask Mr. Gerald Kelly, General Counsel for MTA, to tell you how we can pay for it.

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Statement by C. M. Gilliss, Executive Director, Metropolitan Transit Authority  
Statler-Hilton Hotel, January 7, 1963

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"We only wish somebody would complete some one of the many proposed rapid transit lines and put it in operation." How many times have we, in the public transportation business, heard this plea? But these are the words of a prominent writer which appeared in the Los Angeles Times on November 5, 1888. Since that time, the 19th Century version of a rapid transit system was actually built and it served well for 50 years.

Many of you will remember the shrill whistle in the distance and the clanging and rumbling of the train as it passed. It served its purpose until a new, convenient, and flexible transportation tool, the automobile, began shaping the living, working, and travel habits of all of Southern California. Then thousands of new streets laid over the train tracks brought millions of automobiles to impede the progress of those wonderful old trains until the system died.

It was made obsolete in many other ways. For one thing, the remarkable success of the freeways has taught us that any successful commuter facility must travel on its own free right of way. Look too at the almost unbelievable technological advancements of the last 20-30 years. They make possible new and fantastic 20th Century systems that are hard even to imagine.

The car, the station, the track structures I will briefly describe to you today are as modern as an orbiting space craft, and could no more be compared to the 19th Century train than one can compare the 1963 Thunderbird with the Model T Ford; or the 19th Century Hall of Records on Broadway to the new Hall of Administration,

What we will build in Los Angeles is the most modern mass rapid transit system in the whole world.

Our commuter goes through the unobtrusive subway station entrance on the corner and takes the escalator to the brightly lighted, attractively decorated and tiled mezzanine. He does not need a timetable because trains operate at 90 second intervals in peak hours.

He shows his individually coded credit card to the magic-eye fare computer, is admitted through the turnstile concourse and is taken by escalator quickly to the train platform. (A computer tabulating device will automatically record his entrance and his exit and he will be billed automatically for his total mileage at the end of each month.) He has missed his train, but in the time it takes to buy his newspaper, another train is there.

He enters quickly through one of the several entrance doors in the eight-car train as the train makes its 20-second stop. He seats himself comfortably in a wide contoured upholstered bucket-type seat. He is aware of the soft background music and the automatic announcement of travel information and station stops. He is aware of the bright and beautiful and attractive interior and the diffused air conditioning without drafts. The fluorescent interior light is soft and without bright contrasts. The wide and deep windows provide a maximum view from the interior and through the whole train. They are safety-plate glass, tinted, laminated, and heat repellent.

Our friend can hear the soft background music or the conversation of his companion because the new vehicle was especially designed for interior quietness. It is virtually silent and vibration free. An insulated floor muffles any sounds from the wheel-track contact, and a skirt of special sound-suppressing construction runs the full length of the train to muffle and restrict the transmission of noise to those outside. The trucks are also equipped with vibration-isolating devices. Rubber insulation pads are used throughout the construction of all the auxiliary components.



The gear and compulsion components are of advanced quiet design.

Our commuter is literally riding on air. An air spring control suspension system adjusts automatically at each load change in order that the car body level remains constant. He may not notice that the track incline is slightly downward leaving the station and slightly upward approaching each station to assist in smooth acceleration and dynamic braking. The train accelerates quickly and moves swiftly from station to station governed entirely by a centrally located electronic computer --- a-la John Glenn. This automatic system is fail-safe. The MTA attendant is along mainly to reassure the passengers - our traveler moves at speeds above 70 miles an hour & even with stops, his average speed is 35 to 40 mph.

In the time I will spend telling you about the equipment and the system and in the time our commuter has taken to read his favorite newspaper, his station at Rosemead Boulevard has been called. He has traveled in subway from along Wilshire Boulevard through the downtown civic center area onto the median strip of the San Bernardino Freeway moving along freely on his private right-of-way while his neighbor on the freeway in the bumper-to-bumper struggle to get home hopes fervently that there will be enough highway funds next year to complete the Pomona and the Foothill Freeway so that these "other motorists will get off his freeway," --- or perhaps, he too, next time, will try the train. Our commuter will leave us at the Rosemead Blvd. station, walk over the outbound freeway lanes into the attractive and spacious station and free parking lot area.

Whether he <sup>is</sup> park and ride or a kiss and ride commuter, or whether he travels from his home area to the rapid transit station on the frequent schedule of the feeder buses moving through the less congested suburban streets, he arrives at home comfortable and relaxed, and we know that he will be with us tomorrow morning, for he has learned that this new service is as simple to use as his new office elevator, and he knows that if he boards the train at 8:00 in the morning he can be at his desk by

8:30. The trip has cost him the same as a 1963 bus fare. The 16 miles has been covered in 23 minutes with no traffic lights or sigalerts.

We have taken an imaginary trip today - the trip will actually be made by thousands of commuters in 1967. The Long Beach extension will be finished April, 1967 - in time for the World's Fair.

The whole 4-corridor system will be in service by July, 1969. The rider may then move from UCLA, from north of North Hollywood, from East of El Monte, or from the Long Beach-San Pedro area to any one of 52 stations along the 4-corridor system.

Slimline Skyway structures with supports of light weight materials and prestressed members made possible by dramatic new construction techniques will grace and beautify the San Fernando Valley and Long Beach Lines. The Wilshire Blvd. Line will be in subway - along the San Bernardino Freeway median strip, the train will travel at grade.

A secondary distribution system will serve the growing Civic Center and the Bunker Hill high-rise redevelopment project.

Hollywood - Beverly Hills - Monterey Park - Compton are some of the way points in the system which will take roughly half of its passengers along one leg or all the way through the congested central area.

Construction of this system will be one of the largest projects ever carried out in Los Angeles County. It will provide employment for an average of 3,000 people annually over the six-year construction period. The peak labor force to reach 5,000 during the height of construction. The project will require 220,000 tons of steel, 1,700,000 cubic yards of concrete, 2,000,000 barrels of cement, over 60,000,000 board feet of lumber, and almost \$60,000,000 worth of electrical and electronic equipment.



The basic design of the car was adopted after many meetings with leading aircraft manufacturers, electronic specialists, railroad construction engineers, electrical equipment firms, transit designers, and "monorail" developers. Every possible technological development was investigated to assure that the system would provide the highest of speeds, operating efficiency, passenger comfort and convenience as well as engineering flexibility and safety.

This system is designed, quite frankly, to compete with the automobile, not for space on the already crowded streets and highways as our buses must do today, but to compete with it for passengers during commuter time to relieve those streets and highways.

As Mr. Robert Bradford, Chairman of the California Highway Commission, has said last week, his highway engineers are estimating highway needs on the assumption that Los Angeles would join the San Francisco Bay Area in building a rapid transit system. He went on to say he believes the average California driver will take less time getting home from work in 1980 than now; but he emphasizes that this depends on one fundamental condition - mass rapid transit in metropolitan areas.

This system we build, then, must compete in attractiveness and convenience with the private automobile in order to relieve the streets and highways of thousands of peak-hour commuters.

There is a booklet at the door for each of you containing more information than time will permit today, but I would like you to take a trip with me now on your new system. The employee or the executive in the Tishman Building on Wilshire Blvd. leaves his office and building at 5 o'clock. This is the time when everybody else is trying to find his car and move it out through the churning stop-and-go traffic toward his home.

Actual construction would begin early in 1964 following the preparation of final designs, purchasing of rights-of-way and the acceptance of contract bids. The first transit line would be in operation in October, 1966. The system would be completed by July, 1969.

The new system in Toronto, Canada has proved without question that a modern mass rapid transit system adds value to the surrounding property and the property it serves in a measurable and substantial way. That will happen also in Los Angeles.

The real question comes - who is going to ride it. Who is going to get out of their car and actually ride a mass rapid transit system. Your opinion and mine is only opinion and not dependable enough for an investment of this size. Just as any prudent businessman would do before starting a major project or marketing a new product, we have made a massive market survey. Some of this survey was made in cooperation with the City Traffic Department, the County Road Department, State Division of Highways, and others interested in an integrated transportation system.

We have employed also the best independent brains in the world with the greatest possible experience in projecting the number of passengers that would use such a facility. They have previously conservatively and successfully estimated and projected the traffic for the San Francisco Bay Bridge, the new Carquines Bridge, the New Jersey Turnpike project, Sunshine Parkway project, and other similar projects. Their survey and study has been made in depth - and their opinion will sell bonds.

The result of our own modest efforts has also supplied reassuring evidence that people will leave their cars and ride new and modern and speedy service. Three years ago we provided a freeway flyer from the San Fernando Valley. It began with 4 units and now some 15 units a day are required to handle the patronage on that single line. Wherever possible in the recent San Fernando Valley service improvements, MTA established express and limited service on principal lines.



The response was immediate. On one line patronage increased 39% - on another, 32%. These are new riders who have left their cars in their garages to ride buses which cannot expect to compete in travel time with the automobile. These and other experiences we have had recently encourage us greatly that the experts do know what they're talking about when they say that, with a modern and fast mass rapid transit system, many, many people will leave their cars at home at commuter time.

If your travel requirements are such that you cannot and, therefore, will not use the system, remember that those who work with you, those who serve you in the stores, those who come to shop at your stores, those who work in your home, those that provide the services and goods will use it and, to the extent that they use it, they will make the freeways and surface streets free for your use.

Our rapid transit line can carry 5 times as many commuters and occupy only 1/4 the amount of right of way necessary for a modern six-lane automobile freeway. I say it can carry, because it can only carry those passengers if they ride the system, and that is the very reason that the system is designed to serve the congested area at commuter time. Such a service will help to relieve all traffic in the Los Angeles Basin. Off-peak service will be a community bonus.

The mystery traffic jams on freeways are not mysteries to the transportation engineer. He knows that a completed street highway and freeway system plus a rapid transit system will answer most of those sigalerts.

We might consider what the alternates are. Frankly, since the freeway system to serve the congested core area depends on one fundamental condition, more mass rapid transit in metropolitan areas, there is no satisfactory alternate.

The community cannot afford to build the additional freeways downtown which will be needed to carry only commuters. The high construction cost would delay the construction of many miles of freeway connecting links needed to complete the planned 1980 freeway, and needed to provide access and convenience in areas such as the Antelope Valley.

These freeways are doing the job and more than the freeway planners expected but they need help at commuter time. We propose to give the community that help in the most modern, attractive, efficient, speedy, silent, and safe system that can be designed by the best talents available.

The system has been laid out. It is the foundation of a total system which can be built and adapted with extensions as the population and traffic make it desirable.

It can be built, it must be built --- if not today, it will be built at a later time out of sheer desperation. What an opportunity we have to make Los Angeles the most convenient place in the world to live and be in business.

May I now direct your attention and interest to Mr. Gerald Kelly, General Counsel of MTA who will answer the important question -- what will it cost and how do we pay for it.

###



REMARKS OF GERALD G. KELLY, GENERAL COUNSEL  
METROPOLITAN TRANSIT AUTHORITY

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Statler-Hilton Hotel, Los Angeles  
12 Noon, January 7, 1963

The total cost for the 58-mile rapid transit system is \$649,000,000.

This cost estimate is all inclusive. It includes all construction costs, such as

Structures  
Tracks  
Stations  
Electrification  
Automatic train control  
Communication  
Utility Relocations, and  
Yards and Shops

It also includes the cost of

Engineering  
Rights of Way  
Contingency  
Inflation  
Financing Costs  
Retirement of the present \$40,000,000 - 5-3/4%  
bond issue

In order to hold interest payments during construction to a minimum, the \$649,000,000 issue would be sold at three intervals:

1964 - \$200,000,000

1966 - \$250,000,000

1968 - \$199,000,000

These bonds would have a term of 40 years with 4% interest rate.

As soon as all the bonds are sold, the Authority will have a fixed annual charge for payment of interest and repayment of principal in the amount of \$32,790,000.

Before seeking legislation in Washington last year, the Authority engaged the firm of Coverdale & Colpitts to conduct detailed surveys in order to arrive at estimates of passenger revenues. The Authority's estimates are not guesses, but rather projections based on carefully marshalled facts. These projections show that 260 cars operating on 58 miles of rapid transit system will annually travel a total of 12,870,000 car miles and conservatively generate \$31,000,000 in revenue.

Estimates of expenses, include all operating and maintenance items, plus an insurance premium expense of 2-1/2% of the gross and a depreciation charge of 9% of the gross.

After deducting the total expense estimate, there is an annual net of \$20,000,000 available for payment of interest and repayment of principal of the bonded indebtedness.



This chart shows the total annual payments for principal and interest, the net fund available from operations, the tax fund required to meet the deficiency, and the estimate of the annual tax rate.

The maximum tax authority of 15¢ per \$100 of assessed valuation when applied to an average \$21,000 house, which is assessed at \$4,000, indicates a maximum possible payment of \$6.00 per year or 50¢ a month.

Actually, the rates are considerably lower than the 15¢ authorization. The highest cost per average householder is 41¢ per month. The cost for over one half the life of the bonds, or some 25 years, is 20¢ per month. This result occurs because the financing cost is fixed and does not inflate. Therefore, as the total of assessable property increases through new construction, the rate reduces.

The tax supports only the interest and principal payments on the bonds. All operating and maintenance expense together with two-thirds of the interest and principal payments are supported by revenues.

Compare this briefly with the recent successful San Francisco financing of its rapid transit system. The cost of \$792,000,000 is not all inclusive. To this must be added the rolling equipment cost of \$71,000,000 plus \$40,594,000 for the cost of approaches to the Bay Tube. The San Francisco Authority tax rate will reach a peak in the ninth year of 67¢ per \$100 of assessed valuation and hold at or near 67¢ for 25 years with no reduction resulting from increases in assessed valuations. In other words, the same average householder in San Francisco will pay \$27.00 per year as against \$2.40 per year for the same householder for the same 25-year period in the Los Angeles Metropolitan Transit Authority proposal.

You may be saying to yourselves - the Los Angeles Metropolitan Transit Authority proposal sounds very good when compared to San Francisco, but what if MTA's revenues do not come up to expectations? The 15¢ maximum was selected for this very purpose. For example, if 15¢ were levied each year over the 40-year life of the bonds, the bond debt would be retired as for 20 years of the life of the bonds such rate would meet all of the bond requirements except \$3,000,000 per year, and MTA's bus system alone generates this kind of money.

You have recently read of a renewed effort of the administration to obtain passage of a Federal transportation bill. As proposed, it will be based on grants under a 25% - 75% formula --- 25% Federal Funds matched by 75% funds generated from local areas. MTA has no legislative program in this session of the Federal Congress. It does not intend to ask for Federal grants. However, it will not stand idly by if a grant program is passed. It will insist upon its share for this great metropolitan area. If such a grant program comes about, the 58-mile system will immediately be expanded to the extent made possible by such a grant.

##



CAN COMMUNITIES AFFORD NOT TO ASSIST  
MASS TRANSIT?

By

Frank J. Scheifler  
Transportation Assistant Superintendent  
San Francisco Municipal Railway

Regional Conference  
of  
American Transit Association

Los Angeles, California  
April 6, 1964

The answer to this question seems to be an unqualified "No", but other considerations are necessary as to how much, what kind, and by whom.

Public transit has long been the step-child in plans for moving people. Millions and even billions of dollars for the construction of freeways and parkways have been appropriated for the movement of private automobiles. As a by-product of all this construction, parking areas and garages are needed in the vicinity of the destination of the drivers to store the automobiles. These parking garages, generally, do not provide adequate reservoir space for all the automobiles. The resulting backlog, of necessity, goes out to the city street causing traffic delays and frayed nerves. This is especially true if the ultimate destination is in a downtown, metropolitan area.

The plans for freeways are all vehicle-oriented, but recent proposals indicate that some individuals and agencies are becoming people-oriented. It has been proven that the most economical use of our present valuable roadway space for moving people is the mass transit vehicle.

Transit operators have found that freeways are useful devices that provide routes for express coaches and they also effect some money saving in providing a fast dead-head, pull-in or pull-out trip, but they still remain primarily a route for the private automobile.

Assistance to mass transit can be of direct financial aid. The elimination or reduction of the various forms of taxes for the private operator or subsidizing the operations



of the public carriers out of direct ad valorem taxes are the main sources of monetary relief. Other means available are having the school district pay the difference between the regular fare and the reduced student fare, and having the merchants of a specific area support a ride-shop system. The mass transit bill to provide grants for commuter transit facilities is still under study in Congress.

Assistance, other than financial, seems to be easier to obtain. The United States Government has assisted some companies with transit studies to test various ways to attract additional patronage. These results have been applied to comparative operations in other parts of the country. The State Government has cooperated with transit operators by providing passenger loading bays in the vicinity of freeway service roads and in the case of the Bay Area Rapid Transit District, the median strip of the Grove-Shafter freeway will be used for the rapid transit trains. The City Government, through the cooperation of the various agencies, can provide many means of expediting traffic -- exclusive transit lanes, towaway streets, good signal timing.

The San Francisco Municipal Railway has had the experience that the downtown interests, the largest taxpaying group in the City, have consistently opposed an increase of the present 15¢ fare. Their reasoning is that to maintain a vibrant downtown area the most economical way is to maintain a low fare to encourage people to use the transit vehicles, and make up the deficit through taxes.

The voters of the San Francisco Bay Area answered the question of the topic of this talk with a resounding "No" as 62% of the electorate approved the rapid transit plans to the tune of \$792,000,000.

Planners have been giving serious thought to providing transit some assistance in the form of exclusive transit streets. San Francisco is now studying various ways Market Street can be restored after rapid transit finishes the construction of the subway. The plans range from making Market Street into a pedestrian mall with a roadway of three traffic lanes for transit and emergency vehicles only, to a wide vehicular street with three lanes of traffic in each direction.

Mass transit must compete for its patronage with the automobile and until it can provide a product with comfort, convenience and cost comparative to the automobile many people will continue to join the daily traffic jam with their private automobiles.

Communities must give whatever assistance is necessary to provide mass transit the means by which it can compete with the automobile or the resulting chaos from choked traffic arteries will gradually deteriorate the life blood of the community.



## Choked in Own Traffic?

# Calif. Official Sees 8 Million More Cars by '80

By KENNETH REICH

SACRAMENTO, Dec. 28 (UPI) — The best estimates say California will have 8 million more cars on the road by 1980. Pessimists claim this means the state will choke in its own traffic.

But Robert B. Bradford, state director of public works, said yesterday he believes the average California driver will take less time getting home from work in 1980 than now.

### TRANSIT NEED

Bradford emphasized this depended on one fundamental condition: More mass rapid transit in metropolitan areas.

He said his engineers were estimating highway needs on the assumption Los Angeles and San Diego would join the San Francisco Bay area in adopting a more extensive rapid transit system.

The public works director said if this were done California's projected 5000-mile freeway network would carry 60 per cent of all vehicular traffic when completed in 1980.

At the same time, he indicated new taxes would be needed to help cities and counties finance arterial roads leading into the freeways.

### TAX PROPOSALS

Bradford declined to comment on proposals for a flat seven-tenths of a cent increase in the gas tax plus other increases in Diesel and use taxes.

"That's a legislative problem," he said. "I'm not an expert on taxes, but new money has to be found. The cities and counties can't do it on their own."

"We spend a lot on highways in this state, but we should," he said. "You have to have the courage to build ahead for population growth—not wait until five minutes after midnight and then wish you had."

Bradford also made some

free-spoken comments on specific traffic problems. These included the following:

1. The state is falling behind the bridge needs in the Bay area. "We need another east-west bridge right now and will need another north-south one very soon. I have people talking about the Dumbarton Bridge, but I don't want to get sidetracked on the Dumbarton and take some of the steam out of the southern crossing and the Hayward-San Mateo."

2. Negotiations are proceeding with the Mexican government for road construction on the Baja California side to ease traffic congestion around the San Ysidro border crossing south of San Diego.

3. Reconstruction of the Redwood Highway should have been completed "by noon tomorrow." The future of the Redwood area lies in tourism and recreation.

4. The automobile tolls on the Richmond-San Rafael Bridge are going to stay at 75 cents for the foreseeable future.

5. Construction of the Westside Freeway up the Western side of the San Joaquin Valley will reduce the through traffic on U.S. 99. But 99 will continue important. Work on bypasses in the Merced and Modesto areas is going slowly, but will be finished by 1964 and mid-1965 respectively.

6. Another first-class highway crossing is needed over the Sierra, but it isn't a top-priority item.

7. The Pomona Mall is a "wonderful thing." It's a magnet attracting people to the downtown area and it separates the pedestrians from the cars.



**Every Sigalert  
Reflects  
The *Urgent* Need  
For  
Rapid Transit!**

**All Freeways  
Tied Up by  
Mystery Jam**

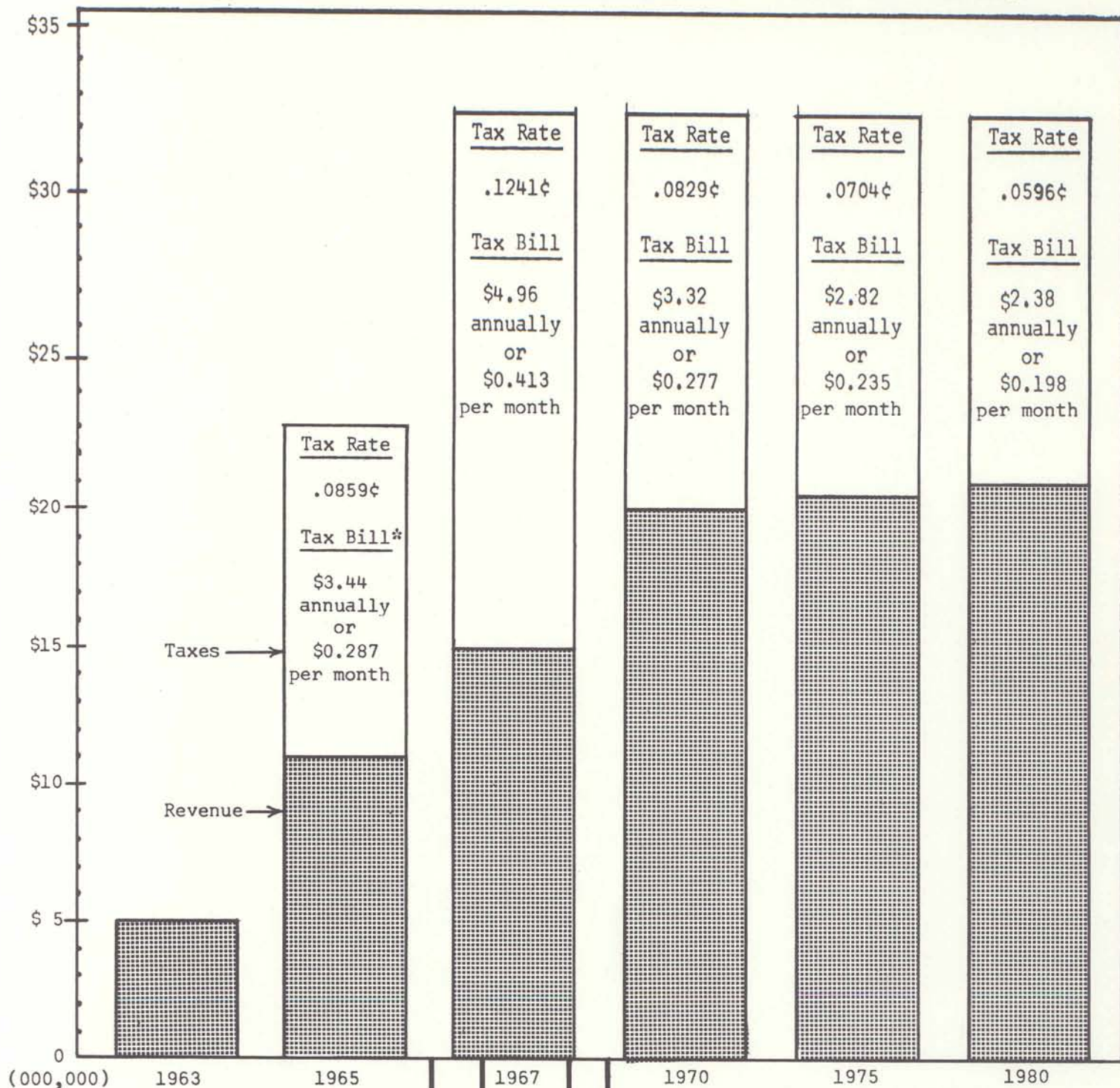
No one knew for sure how it all started but for nearly two hours Wednesday evening traffic was jammed bumper-to-bumper on every freeway to a distance of two miles from the Civic Center. One explanation was that freeway construction work near the Civic Center was halted close enough to the rush hour to begin slowing down traffic shortly after 4 p.m.

By 5 p.m. scores of cars developed vapor locks and added to the problem.

Then the sigalerts began on one freeway after another and it was 7 p.m. before police were able to announce that traffic was moving in a normal manner on all freeways.



## RAPID TRANSIT DEBT SERVICE - SOURCE OF FUNDS



L. A. - El Monte	Oct. 1966
L. A. - Century City Long Beach - L. A.	Apr. 1967
Century City - Westwood	Jan. 1968
Wilshire - No. Hollywood	Jan. 1969

\*Typical assessed property valuation: \$4,000

# Excerpts

Dave Heyler is on vacation. Guest columnist

## Governor Brown

Says—



GOV. EDMUND G. BROWN

IN A FEW DAYS, California will celebrate an important event—our arrival as the most populous state in the nation.

Bigness is not new to California. Our mountains and deserts and the vast reach of our rich Central Valley have long testified to the immensity of our physical domain.

But there is no virtue in bigness alone.

If we have citizens unemployed, children on half-day sessions, freeways clogged with automobiles and parks over crowded, we may well wonder whether a large population is more a curse than a blessing.

And we are building on a scale to match our mountains: The largest freeway and highway system in the world, a water system which will be the biggest anywhere, more houses than any other state and the largest system of tuition-free higher education in the Free World.

We must not let these things happen. We must continue to plan for orderly growth to preserve this bright land. That planning must be implemented in the next session of the State Legislature and in our city and county legislative chambers.

# Citizen-News

Thursday, Dec. 27, 1962

TO ASSURE CONTINUITY of our planning for the future, I will make several proposals to the Legislature next year and I will take appropriate administrative steps where our goals can be met by executive action alone.

• • •

—that we work closely with local government and regional bodies to achieve workable mass transportation. San Francisco is on its way with rapid transit. Los Angeles has an excellent plan, but it must be put into motion.



• • •

The challenge facing our generation is to keep this great land of ours bright and golden and preserve our magnificent way of life for our children, our grandchildren and future generations.

It can be done and it shall be done, with your help.

EDMUND G. BROWN  
Governor



• • •



# Quotes

## REFLECTING THE **URGENCY** FOR IMMEDIATE ACTION

The following quotes have been extracted from statements of public officials, businessmen, civic leaders and association executives — all interested in bringing mobility to the nation's urban areas.

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**Richard Carpenter, executive director, League of California Cities...**

"An integrated transportation system requires a high degree of cooperation on the part of cities, counties, the state, private agencies and the public."

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**Harrison A. Williams Jr., United States Senator, New Jersey...**

"Most of our metropolitan areas, which are the economic backbone of the nation, are already in the throes of an urban transportation crisis of traffic congestion and near paralysis during rush hours. By 1975, the number of vehicles on the road is expected to rise from the current level of 65 million to more than 100 million. The impact of this development will be staggering if, at the same time, mass transportation services decline another 38 per cent, as they have in the last 10 years. The result is likely to be either the complete strangulation of our metropolitan area or an expenditure for urban highways at a fantastically higher rate than presently anticipated."

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**Dr. A. J. Hagen-Smit, California Institute of Technology...**

"It is not enough to have a slightly improved, outmoded bus system. What we need is a highly flexible system of rapid transit, which is so convenient and frequent that almost everyone wants to leave his car at home. He will save his nerves and his pocket-book—and perhaps even his life."

**Philip M. Hauser, head, Population Research Center, University of Chicago...**

"...public transit systems are the solution to the problem of moving people within the metropolis. We are learning this the hard way—but mass population and space considerations alone indicate that learn it we will."

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**Dr. Tully C. Knoles, Chancellor, College of the Pacific...**

"One of the most ridiculous things in American life is to stand by the highway near a great industrial center or a university and watch the cars go by; each with only a single passenger. We have given up mass transportation in favor of an individual transportation which is extremely expensive and very dangerous—and which California cannot afford, either financially or physically."

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**William R. MacDougall, general counsel and manager, County Supervisors Association of California...**

"An integrated program must be developed which will include state freeways, county highways, city streets, bus systems and the long-awaited rapid transit ... We have a problem which calls for a new type of effective cooperation of the local governments."

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**Editorial in the Temple City TIMES...**

"If we don't have some kind of rapid transit system in this second largest metropolitan center of the western hemisphere, what will we have? Chaos, possibly."

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**Editorial in the Palos Verdes Estates NEWS...**

"Whether we like it or not, all of us in Los Angeles County are tied in one way or another with the rest of the area and any proposal which would serve in any way to alleviate traffic problems and move people from one place to another rapidly and efficiently, deserves close attention because these plans are in our best interests."

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**Editorial in the Los Angeles MIRROR NEWS...**

"It is pretty generally agreed that we must develop a satisfactory rapid mass transit system, or face the spread of traffic-choked blighted areas all over the metropolitan district."



**The Legislature of the State of California, in Senate Concurrent Resolution 57 of 1959...**

"...all state and local governmental agencies...are hereby urged to cooperate voluntarily...in planning and developing public transportation facilities to the end that optimum safety, convenience, efficiency, and economy in the movement of people in the metropolitan areas may be achieved."

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**The California Legislature's Joint Interim Committee on Highway Problems...**

"In the long run, with the metropolitan area growth in prospect in California, it seems likely that freeways and rapid transit will *both* be required to accommodate the expanded economy and the social and cultural demands of the people."

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**R. M. Shillito, general manager, Downtown Business Men's Association of Los Angeles...**

"The DBMA is most concerned about the total future transportation—traffic, transit, parking—pattern of Downtown Los Angeles...We conclude (from analysis of discussion at the State Chamber's Metropolitan Transportation Conference) that (1) the metropolitan area's foremost problem is transportation, (2) there is a general agreement on the need for integrated transportation, (3) there is a difference of opinion on ways and means to attack the problem, (4) there is an urgency, for time is running out, (5) legislation will be forthcoming because the Los Angeles Metropolitan Transit Authority as a State agency is under a mandate to advance a program, and (6) business and government have expressed a desire to cooperate."

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**Southern California Research Council...**

"Completion of the freeway system in Southern California will not solve the mass transportation problem of the Metropolis. Freeways and individual passenger cars simply cannot handle peak hour commuter movements. With nearly 12 million persons and eight million motor vehicles in the Los Angeles Metropolitan Area by 1980, other forms of public transportation must be devised to complement the freeway system."

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**J. C. Womack, State Highway Engineer, California...**

"We are deeply concerned with the urban transportation problem. (There is) full awareness of the urgency of an early solution...We are ready not only to bend over the drafting table but also to sit around the conference table with any rapid transit district or other public agency to work jointly toward solutions in the public interest, limited only by our legal obligations."



## L. A. Highway Official Says Freeways Will Not Solve Congestion

"Freeways will only help, not entirely solve, the urban transportation problem."

**"Parking and transit must no longer be treated as step-children."**

Those two statements keynoted the speech of S. S. Taylor, general manager of the Los Angeles Department of Traffic, before the recent annual meeting in San Francisco of the American Association of State Highway Officials.

"An important inter-relationship exists between streets, freeways and mass transportation," Taylor told the highway officials. "These two systems should not exert uncoordinated competition for the taxpayer's dollar.

"The solution of the commuter problem in large cities lies in discovering that complementary system of streets, freeways and transit lines which will most effectively promote and serve a truly functional pattern of land use."

Taylor cited Los Angeles as a city primarily dependent upon motor vehicles for transportation. Because of this, he added, the question of land use is critical.

"Already," he said, "approximately 28 per cent of the land area comprising downtown Los Angeles is in streets, freeways and service ways, and another 38 per cent is in the off-street vehicular parking and loading." Thus, about two-thirds of the land is primarily devoted to rubber (motor vehicles).

"One freeway interchange in Los Angeles is consuming approximately 80 acres of land area, and each average mile of freeway is requiring about 24 acres.

"One-third or more of our *entire* urban area is already required for transportation facilities.

"Ultimately it appears that Los Angeles will have a freeway network forming a city of square giant blocks with approximately four miles of freeway on each side. **Within these 16 square mile areas, and unifying them, an integrated transportation system must operate or they will plow under the goose that lays the golden egg, destroying the city they were meant to serve, its productivity and the traffic revenues therefrom.**"

Taylor said it will not be feasible to provide sufficient traffic lanes in some sections of the freeway system to satisfy traffic volumes predicted for the next 20 years.

"The 'excess traffic' in 1980 — which must be carried by the surface street system or mass transit — is estimated at greater than the total present day volumes," Taylor said. "Therefore, in 1980, metropolitan Los Angeles, even with approximately 900 miles of anticipated freeways and 300 miles of expressways in operation, may well have worse traffic conditions than exist today — unless we provide relief beyond the freeways."



# 1962...

## A YEAR OF RAPID TRANSIT ACTION

### NATIONWIDE CALENDAR OF EVENTS

#### SAN FRANCISCO

- November 9:** Bay Area voters OK \$792,000,000 rapid transit system with 67¢ tax rate for 40-year period. Contains 75 miles of double-track route, average operating speeds of 50 mph and frequencies of as little as 40 seconds.
- December 7:** Bay Area Rapid Transit OK's contract with engineering firms.

#### NEW YORK CITY

- March 23:** New York City Transit Authority awards \$60 million contract for 540 new subway cars.
- April 6:** New York Port Authority to take over Hudson and Manhattan Suburban Rail Line by July 31.
- July 20:** New York City Transit Authority budget calls for a new \$197 million subway capitalized through taxation.
- August 31:** \$6 million rebuilt Lexington subway station opens at New York.
- October 26:** New York City Transit Authority asks city to consider tax funds to expand subway service to Queens.
- November 2:** New York City Transit Authority automated train tests extended to July 1.
- November 16:** \$6.5 million subway express stop opens in New York City.
- November 30:** New York City Transit Authority awards contract for 424 new subway cars.

#### PHILADELPHIA

- May 4:** Philadelphia commuters increase on tax subsidized "operations" rail service.
- May 18:** NHFA Loan OK'ed for new Philadelphia suburban rail cars.
- September 7:** Philadelphia Mayor orders northeast subway extension moved up to a 1964 starting date.

- September 28:** Philadelphia subway elevated riding increases.
- October 12:** Delaware River Port Authority names consultant engineer for Philadelphia/Kirkwood, New Jersey Rail Line.
- December 7:** Philadelphia elections again favor rail operation. Approves \$4,800,000 bond issue — 2½ to 1 vote — to help improve privately owned commuter rail systems.

## CHICAGO

- July 7:** Chicago Transit Authority Board OK's federal loan to buy new cars.
- September 21:** \$2.2 billion transit and traffic improvement program proposed for Chicago. Includes two rapid transit lines using freeway center strips in addition to more downtown distribution subways.
- October 19:** Chicago Transit Authority rerouting of Lake Street El Line to open October 27.
- December 14:** Consultant Engineers back Chicago Rapid Transit extension proposal.

## BALTIMORE

- July 27:** Baltimore asked to be test site for new "aerial" rapid transit system.

## CLEVELAND

- August 10:** Cleveland Transit System releases engineering/feasibility study of proposed southwest rapid transit extension.

## BOSTON

- October 12:** OK \$3.6 million U.S. Transit grant for Boston rail service.

## WASHINGTON, D. C.

- November 9:** Transportation plan submitted to White House recommending subway system for Washington, D.C. to be financed by federal cost.

## GENERAL

- June 29:** Institute of rapid transit designs and tests of new space "aerial" rapid transit.
- July 27:** Institute of rapid transit proposes "aerial" research project under Federal Government.
- December 14:** President Kennedy asks \$1 million for northeast U.S. rail transit study.

### *Progress Note*

THE CHICAGO Transit Authority proudly reports that its buses plowed through traffic last year at an average speed of 11.74 m.p.h., an improvement over 1960's 11.66.

Average speed of horsecars in Chicago in 1906: 12 m.p.h. — *Newsweek*







