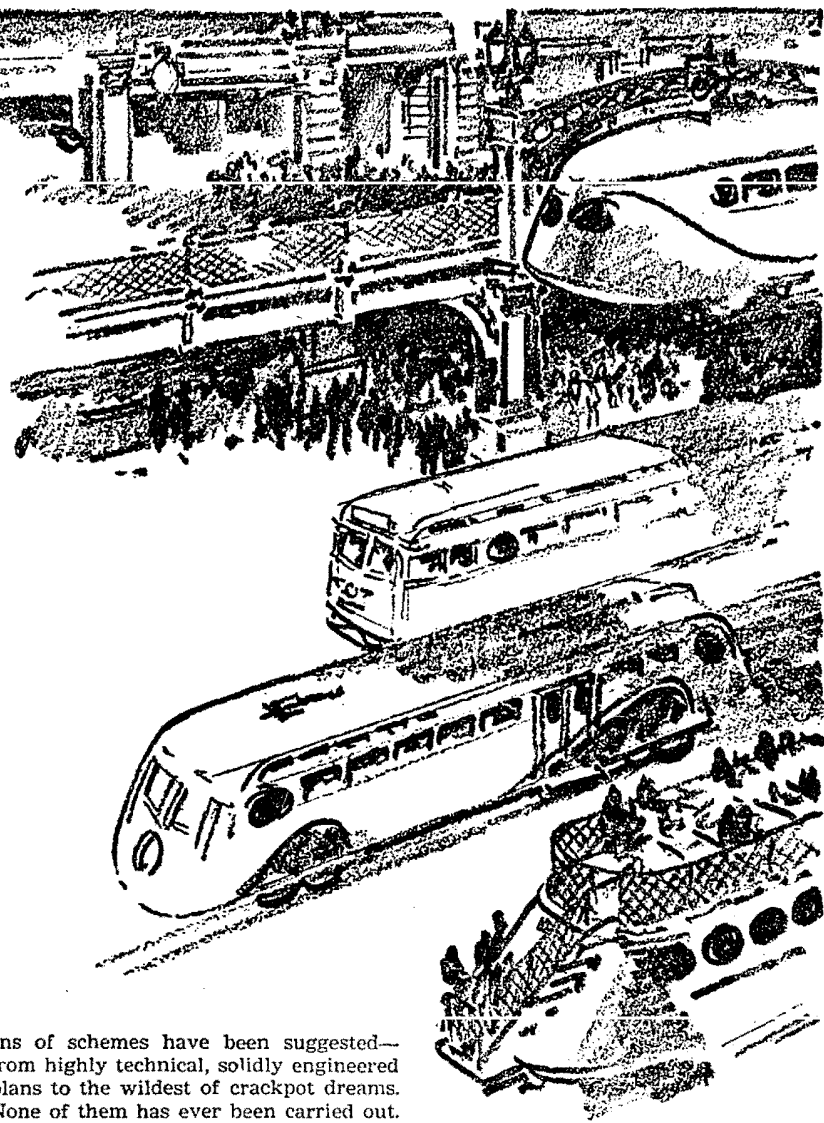


# SUBWAY, ELEVATED - Or What?

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**E**XACTLY at 4 p.m. last March 15 the traffic officer on the corner of Seventh and Broadway swore softly to himself. Big raindrops were beginning to patter down. He pulled his tarp closer about his thick shoulders.

"By the mothers of all the saints, this be one helluva time for it to rain . . . I'll never get this traffic unscrambled to-night . . ."

How right he was! The heavens turned inside out and unleashed more than an inch of rain during the peak traffic hours of 4 to 7 p.m. If you were one of the 750,000 trapped in the downtown business district that evening you remember how it was. The city's worst traffic tie-up!

Street cars were stalled in one solid line from Temple to Twelfth. It took disgruntled motorists three hours to drive to Beverly Hills. Busses were hours behind schedule. Special radio announcements had to be broadcast to explain the situation; even so, the railroads received more than 100 calls an hour from frantic wives wanting to know if there had been an accident.

It was an excellent object lesson—even though we all ate cold suppers and our dispositions were ruined!

Into sharper focus than ever before it brought Los Angeles' crying need for a rapid-transit system. It proved that our antiquated, snail's-pace traffic facilities are fifty years out of date. It showed that if Los Angeles is to fulfill her destiny as the Pacific Coast's greatest city she must completely overhaul her methods of getting people in and out of the downtown business district.

But you don't have to wait for a thunderstorm to blow up before you see how badly our traffic needs unscrambling. Any afternoon between the hours of 4 and 6 p.m. will give you a pretty good idea.

Los Angeles' downtown business district grew up in the wrong place.

In 1781 Felipe de Neve should have led Los Angeles' eleven first families six miles further west. If they had erected their adobe houses out near the La Brea tar pits instead of on the banks of the Los Angeles River, our downtown business district would not be cramped on two sides by hills and on the third by a river. Seventh and Broadway should be out around Wilshire and La Brea.

But who is to blame De Neve?

He could not look ahead almost a century and a half to foresee a metropolis of 1,500,000 people. He could not predict that 750,000 of these would battle their way into the business district each morn-

ing and struggle out again at sundown. He did not know that 475,000 would be driving their own automobiles, that 260,000 would be riding street cars, and 15,000 would be coming in by bus.

It is modern, mechanical vehicles of transportation that have caused our traffic headache—more so than the faulty location of the city. Henry Ford and John Stevens, "father of the railroads," are more to blame than De Neve.

Threading in and out on the same level, we have automobiles, trucks, busses, taxis, street cars, steam railroad trains, with an occasional bicycle or horse-drawn cart to complicate matters. And no clanging of trolley bells, no swearing of cab drivers, no crowding or pushing of trucks, or scampering of pedestrians can help the confusion.

Construction engineers point proudly to our great harbor, our agricultural and mineral resources, our climate, and an abundance of water and electricity from the Colorado River. They predict a rosy future for Los Angeles. By 1950 we will have a population of 4,000,000 and by 1975 it will have jumped to 5,000,000, it is estimated.

But traffic engineers shake their heads and paint a gloomier picture. "It can't be done," they point out, "without a modern, high-speed transportation system. Trade, industry, agriculture, water and electricity are nothing . . . unless you have a fast, cheap, safe way of getting people and goods into the city!"

Wise City Fathers in New York, Chicago, Philadelphia and Boston came to this realization years ago. Each of these cities now has rapid transit in one form or another. San Francisco, which clung to her out-of-date ferries for so long, is now stepping out. Two fast automobile and street-car bridges across the bay were just the beginning. She is now flirting with the idea for a subway under Market street.

Mark Twain's well-known indictment of the weather—"that everybody talks about it, but nobody ever does anything"—is applicable to the traffic situation here in Los Angeles.

Traffic surveys and rapid-transit plans for Los Angeles are nothing new. Doz-

ens of schemes have been suggested—from highly technical, solidly engineered plans to the wildest of crackpot dreams. None of them has ever been carried out.

Let's take a look at four of the outstanding traffic surveys and recommendations for rapid transit that have been made within the past twelve years. All are the work of well-known engineers and represent real thinking on the problem.

As far back as 1913 surveys for improving Los Angeles' transportation system were suggested. It was not until 1925, however, that the first comprehensive plan was prepared. It was drawn up by Kelker, De Leuw & Co., consulting engineers of Chicago, at the request of the City Council and the Board of Supervisors.

The report was prepared on the basis of a future population of 3,000,000 people. It is contained in a fat volume of 202 pages analyzing existing transportation facilities, street traffic, rapid transit in other cities, a co-ordinated plan for Los Angeles, the design of rapid-transit structures and methods of financing it for our city.

At the outset it was suggested that our traffic be segregated on different planes—subways, surface and elevated. Trains and street cars operated in this manner—free from grade crossings—would furnish the best means of mass, rapid transportation.

Principal recommendations were for immediate and future construction of a subway system, elevated railway tracks and additional bus and street-car surface facilities to serve as "feeders." The downtown business district from Temple to Pico on Main, Broadway and Hill streets was to be undermined with subways—with extensions out Pico, Wilshire and beneath Hollywood Boulevard. This plan called for immediate construction of 26.1 miles of subway with 15.4 miles

**Some system of rapid transit must be devised for Los Angeles. Dozens of schemes have been suggested—none ever carried out. Let's look into four plans that have been drawn recently**

for construction in the near future.

From this subway system, elevated tracks would stretch out in all directions like the arms of a giant octopus. As recommended in the report this would require 85.3 miles of elevated tracks to be built immediately and 155 miles in the future.

The existing 572.3 miles of street railways would be augmented with 41.6 miles of immediate track construction and 62.7 miles in the future. This would feed into the subways and elevateds.

This gigantic network of high-speed railroads would carry passengers to the Long Beach-San Pedro-Redondo district through two main arteries; to Santa Monica, Beverly Hills and Hollywood by three routes; to the San Fernando district by one; to Pasadena, Alhambra and San Dimas by two, and to the El Monte, Montebello and Huntington Park area by three.

Present riding time would be slashed and fares would be cut to the point where people would prefer to ride fast-traveling trains instead of struggling into the city and out again in their own automobiles.

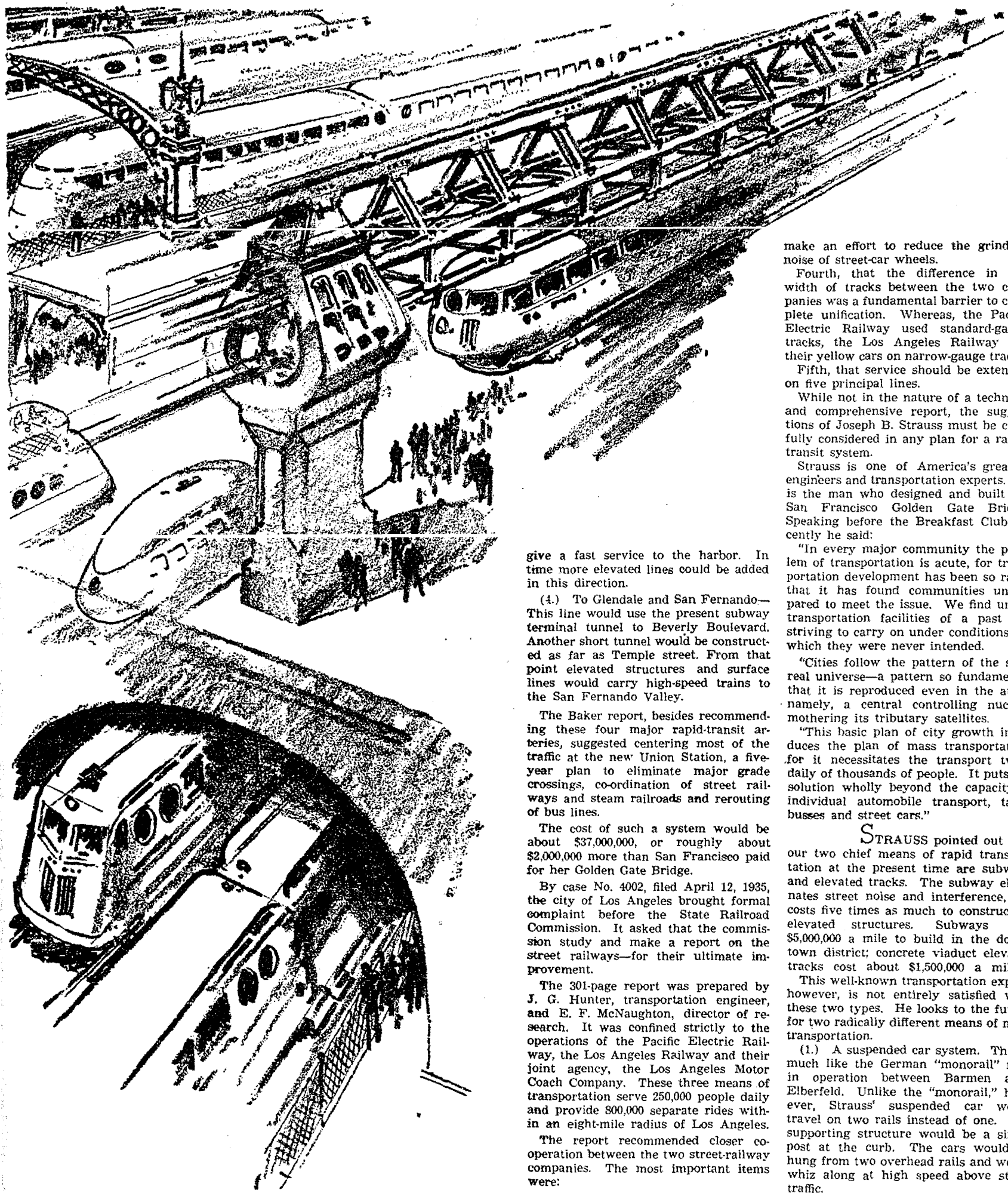
This system of rapid transit, it was estimated, would cost \$133,000,000 to build.

In 1933 the Central Business District Association hired Donald M. Baker, a Los Angeles engineer, to make a survey of our traffic problems. President Roosevelt was beginning to pour billions into a gigantic public works program. It was hoped that a rapid-transit system could be built with funds supplied by the Federal Emergency Administration of Public Works.

The Baker survey, ninety pages long, also recommended a network of subways and elevated railways. It did not contemplate as comprehensive a system as the Kelker-De Leuw report.

Engineer Baker worked out a scheme of rapid-transit lines radiating out from the downtown business district in four directions. These would be:

(1.) To Pasadena and San Gabriel



make an effort to reduce the grinding noise of street-car wheels.

Fourth, that the difference in the width of tracks between the two companies was a fundamental barrier to complete unification. Whereas, the Pacific Electric Railway used standard-gauge tracks, the Los Angeles Railway ran their yellow cars on narrow-gauge tracks.

Fifth, that service should be extended on five principal lines.

While not in the nature of a technical and comprehensive report, the suggestions of Joseph B. Strauss must be carefully considered in any plan for a rapid-transit system.

Strauss is one of America's greatest engineers and transportation experts. He is the man who designed and built the San Francisco Golden Gate Bridge. Speaking before the Breakfast Club recently he said:

"In every major community the problem of transportation is acute, for transportation development has been so rapid that it has found communities unprepared to meet the issue. We find urban transportation facilities of a past age striving to carry on under conditions for which they were never intended.

"Cities follow the pattern of the sidereal universe—a pattern so fundamental that it is reproduced even in the atom, namely, a central controlling nucleus mothering its tributary satellites.

"This basic plan of city growth introduces the plan of mass transportation, for it necessitates the transport twice daily of thousands of people. It puts the solution wholly beyond the capacity of individual automobile transport, taxis, busses and street cars."

**S**TRAUSS pointed out that our two chief means of rapid transportation at the present time are subways and elevated tracks. The subway eliminates street noise and interference, but costs five times as much to construct as elevated structures. Subways cost \$5,000,000 a mile to build in the downtown district; concrete viaduct elevated tracks cost about \$1,500,000 a mile.

This well-known transportation expert, however, is not entirely satisfied with these two types. He looks to the future for two radically different means of mass transportation.

(1.) A suspended car system. This is much like the German "monorail" now in operation between Barmen and Elberfeld. Unlike the "monorail," however, Strauss' suspended car would travel on two rails instead of one. The supporting structure would be a single post at the curb. The cars would be hung from two overhead rails and would whiz along at high speed above street traffic.

(2.) The second type of vehicle that interests Strauss would be a special type of motor bus which operates on the street level or above it. Both of these systems can be constructed cheaply. Employing rubber-tired wheels, they are silent in operation.

Strauss, however, holds no brief for any one system. He says a thorough study should be made of the Los Angeles district before any plan is adopted.

Los Angeles is beginning to realize a need for a rapid-transit system. Four groups at the present time are working on a solution.

What is to be the answer?

give a fast service to the harbor. In time more elevated lines could be added in this direction.

(4.) To Glendale and San Fernando—This line would use the present subway terminal tunnel to Beverly Boulevard. Another short tunnel would be constructed as far as Temple street. From that point elevated structures and surface lines would carry high-speed trains to the San Fernando Valley.

The Baker report, besides recommending these four major rapid-transit arteries, suggested centering most of the traffic at the new Union Station, a five-year plan to eliminate major grade crossings, co-ordination of street railways and steam railroads and rerouting of bus lines.

The cost of such a system would be about \$37,000,000, or roughly about \$2,000,000 more than San Francisco paid for her Golden Gate Bridge.

By case No. 4002, filed April 12, 1935, the city of Los Angeles brought formal complaint before the State Railroad Commission. It asked that the commission study and make a report on the street railways—for their ultimate improvement.

The 301-page report was prepared by J. G. Hunter, transportation engineer, and E. F. McNaughton, director of research. It was confined strictly to the operations of the Pacific Electric Railway, the Los Angeles Railway and their joint agency, the Los Angeles Motor Coach Company. These three means of transportation serve 250,000 people daily and provide 800,000 separate rides within an eight-mile radius of Los Angeles.

The report recommended closer cooperation between the two street-railway companies. The most important items were:

First, that the outstanding problem was said to be the need for not less than 200 modern street cars to replace the ones in service on the tracks of the Los Angeles Railway. In addition it recommended the modernization of 300 other steel cars.

Second, that the service as a whole was operated on a satisfactory and economical basis, but that certain changes in routes and extensions of service were needed.

Third, that noise constituted a serious objection from the point of view of the owner, the car rider and the public. It was recommended that both companies

westerly direction on Hoover and Pico to West street. Elevated tracks would continue to the Vineyard station near Pico and La Brea and from there surface tracks would carry trains to Beverly Hills, West Los Angeles and the beaches of Santa Monica, Ocean Park and Venice.

(3.) To Long Beach and San Pedro—From the present Pacific Electric Building a partially elevated track would cut through the heart of the southeast industrial district. Elevated tracks and elimination of grade crossings would

Valley—This line would exist as a subway through the downtown district from Tenth street on the south to the new Union Station on the north. From the Union Station a track would carry cars under the Los Angeles River by tube or over by bridge to the present surface tracks on Mission Road. This line would cut costly traffic delays through the congested downtown district.

(2.) To West Los Angeles and Beverly Hills—The Pasadena line subway would be continued west on Tenth street to Figueroa. Then it would run in a