

The regular meeting of Los Angeles Metropolitan Transit Authority for December was held at the office of the said Authority at 2233 Beverly Boulevard, Los Angeles, California, on the day and date above written, with the following named members present:

Walter J. Brunmark
Fred S. Dean
Martin E. Pollard
Jim Wilson

Absent:

H. C. McClellan
B. O. Miller
Lloyd S. Whaley

Also present:

Ralph P. Merritt, General Manager
Stephen Wells, Wells Agency

The meeting was called to order at 3:15 P.M. Minutes of previous meeting read and approved. The financial statement of the Treasurer was presented and on motion duly made, seconded and carried -- was adopted and ordered to be filed.

Chairman Pollard called upon the General Manager for his report on his trip to Washington, D.C., New York, and other eastern cities. Mr. Merritt then read a complete report of all his activities and their results in connection with negotiations with various governmental agencies, with financial institutions and engineering firms regarding numerous phases of the program of this Authority relative to the progress and development of the steps necessary to be taken by it to carry out the provisions of the Assembly Bill by which it was created and under which it operates.

The said report was discussed freely by all members. Mr. Dean said that he believed we would be attacking our problem in the wrong manner by having a geographical survey first and an economic survey

second; that inasmuch as we are going to ask the State Legislature to amend Assembly Bill 3112 by enlarging the scope of our activities, it would be wiser to wait until that action was taken by the Legislature and then make the geographical survey of such enlarged area as might be decided upon.

At the request of Mr. Brunmark, that portion of the General Manager's report dealing with the engineering survey was explained by Mr. Merritt.

The matter of using rights of way that are being abandoned by the Pacific Electric Railway Company for routes and rights of way for a monorail transportation system came up for discussion. Mr. Merritt stated that he is in favor of using such routes wherever they are found to be the most desirable. He said further that the first step is to make a thorough economic study of the region designated; that Coverdale & Colpitts of New York City can be secured to lay out the routes, and have signified their willingness to cooperate in such studies with Donald Baker, who is thoroughly familiar with the traffic problem in this City and County of Los Angeles.

It was unanimously agreed that the Authority should proceed at once to:

- (a) Have Assembly Bill 3112 -- the Act establishing the Authority -- amended.
- (b) Have economic studies made as soon as possible.
- (c) Establish program for engineering studies by competent organizations.

The General Manager then made certain recommendations in connection with his report, as follows:

1. Negotiate with Board of Supervisors for allocation of \$100,000 for necessary surveys.

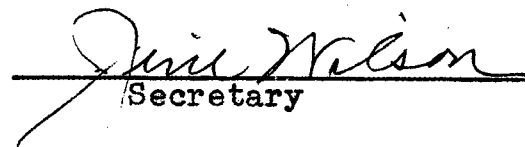
2. General Manager and Attorney Beebe to prepare amendments to Assembly Bill 3112 to be submitted to the State Legislature in January 1953.
3. Prepare a contract with Donald Baker in amount not to exceed \$20,000; prepare contract with Gibbs & Hill in sum not in excess of \$15,000; and contract with Coverdale & Colpitts for an amount not over \$50,000. All in accordance with report and recommendations as read.

It was decided that no action be taken on General Manager's report at this session, but that all members should study said report and action on same be deferred until next meeting of the Authority.

The General Manager was directed to make a summary of his report with a sufficient number of copies to supply each member with one, said copy to be delivered to each member prior to next meeting of the Authority on December 15. A complete copy of report and recommendations of General Manager is included in and made a part of these minutes.

Chairman Pollard said that Mr. Merritt, as General Manager of this Authority, had been requested to meet and confer with representatives of the San Francisco Bay Commission on Transportation. Moved by Mr. Dean, seconded by Mr. Brunmark, that the General Manager be authorized to attend that conference and be allowed necessary hotel and travel expense incidental thereto. Motion carried.

There being no further business, it was regularly moved, seconded and carried that the meeting adjourn to meet in special session at the office of the Authority at 2:30 P.M. on Monday, December 15, 1952.


Secretary

REPORT

TO THE

LOS ANGELES

METROPOLITAN TRANSIT AUTHORITY

November 4, 1952

determined by the responsibility your Authority may give to International Monorail Incorporated through Monorail Engineering & Construction Corporation.

Our pictures of the German system and our exhibits are in the adjoining room. I thank you for your attention.

GEORGE D. ROBERTS, President

THE ENGINEERING DATA OF MONORAIL

PRESENTED BY

GEORGE D. ROBERTS,
President

MONORAIL ENGINEERING &
CONSTRUCTION CORP.

TO

LOS ANGELES METROPOLITAN TRANSIT AUTHORITY

November 4, 1952

LOS ANGELES METROPOLITAN TRANSIT AUTHORITY
2233 BEVERLY BOULEVARD
LOS ANGELES, CALIFORNIA

ciated with our corporation by a lateral operative agreement is Monorailway Corporation of New York. The spokesman and authorized representative of these five companies is Monorail Engineering & Construction Corporation -- I am, therefore, speaking on behalf of all of these companies.

In the initial stages of your studies and in the development of your conclusions on the transit problems of the Los Angeles Metropolitan area, we offer, without cost to the Authority and in the public interest, the services of International Monorail acting in an advisory and consulting capacity to make available at your request the results of our studies and engineering of Monorail. In addition, Monorail Engineering & Construction Corporation, at this time, offers to this Authority the use of any of its patents of construction, switching or safety devices without royalty or other costs. It is the expressed hope of all the members of International Monorail Incorporated, Ltd. that we may be permitted to work with your Authority so that you may arrive at informed decisions on Monorail. We believe that you will undertake the development of a Monorail system for this great metropolitan area, to permit all its people to live where they like and work where they choose. Unless there is an integration of people by means of mass rapid transit, we lose our economic power.

Before describing the engineering of a Monorail system, let me continue with a brief summary of the field of activity of each member of International Monorail. Because we are the spokesman in America of International Monorail, let me describe Monorail Engineering & Construction Corporation. This is a California Company, organized six years ago upon my return from war time service in the Air Force followed by a considerable period of convalescence. My pre-war interest in metropolitan transit problems was the result of the organization and financing of the Yellow Cab Systems in Los Angeles, Oakland and San Francisco by my office. Following the war and as a result of the encouragement and advice of my old friend, Jesse Haugh, formerly of the Union Pacific Railroad and

met with general approval here and abroad. The base buried below the surface permits a five foot width above surface level as the width of the right-of-way necessary for a two way track system. This is the most sightly, most secure against sway, most economical in space and material. Towers will vary in height as required.

2) Car Design

Our recommendation is the car being designed for us by St. Louis Car Company, whose 67 years of experience in all types of light weight cars, qualifies them to develop the Monorail car upon which they have been working on for many months. Budd Equipment has designed cars for Monorailway Corporation but we see no new advantages in their design. Both are offered for consideration. The St. Louis Car Company's car is quick loading, comfortable, air conditioned and can be run singly or in trains. Full specifications are available on request. Standard cars seat 50 passengers with 50 standees.

3)

Motive power--speeds, braking and sub-stations Both General Electric and Westinghouse have developed plans applicable to Monorail. Monorail Engineering has worked with the General Electric Company and has a contractual relationship for engineering. Their preliminary summary of materials and costs is attached with electric power Monorail can develop any speed required. Higher speeds mean higher costs because of greater horse-power of motors, greater size of wire, greater capacity of sub-stations and greater use of power. Economic engineering studies must determine speeds. Sub-stations designed by General Electric would be located approximately every four miles and comprise three buildings. Electric braking is standard practice. Electro-diesel power appears to present undesirable features of noise, smoke and bulky installations.

mendation, Dr. Allan E. Puckett, was employed as consultant. Dr. Puckett went to Germany under our instruction to study the Monorail system which had then been in operation for 50 years. Upon the further recommendation of the California Institute of Technology and Dr. Puckett, the J. M. Montgomery Engineering Company of Los Angeles was employed to make the first over-all study of all phases of Monorail, including structural design, car design, motive power as well as economic phases. Nearly a year was spent on this report with a staff of between twenty to thirty engineers. I have before me, and offer for your information, the four volumes of this report and I specifically call your attention to the conclusions which stated:

"THE FINAL CONCLUSION IS THAT A MONORAIL SYSTEM, ANSWERING MODERN NEEDS IS NOT ONLY FEASIBLE, BUT AN ENTIRELY PRACTICAL AND REASONABLE SOLUTION TO THE RAPID TRANSIT PROBLEMS."

The final engineering data of any Monorail system depends upon the advanced determination of the route to be followed, the speed required, grades, curves, placement of stations and anticipated peak-loads of travel. Without such information no final detailed plans can be made available by anybody. Rights-of-way will determine the height and spacing of towers. Required speeds will determine the horse-power of motors and therefore the size of the equipment, sub-stations, power lines, and the cost of operation. Peak load travel will determine the number of cars to be used in trains, therefore the size of station platforms and the design of stations. All of these factors are the result of preliminary and economic engineering studies and decisions which are the responsibility of this or any other Authority.

As a preliminary step in demonstrating the practicability and availability of a possible right-of-way from Van Nuys to Long Beach our company determined to study the engineering implica-

And now, the fifth corporation of this group of world-wide engineering firms, is Monorailway Corporation of New York of which Mr. Frank S. Lyon is President. Their chief engineers are Gibbs & Hill, outstanding railroad designers and the company which electrified the Pennsylvania Railroad. You will be interested in seeing the personnel of this corporation and a list of their important industrial and transit projects. Mr. Edward A. Anson, Vice President of Gibbs & Hill, presented some time ago a complete engineering discussion of Monorail before the New York Railroad Club and I offer this reprint as an important engineering contribution. Budd Equipment Company designed the cars for Monorailway. Among the important financial backers of Monorailway, is Mr. W. R. Coe of the Virginian Railway, an industrialist of wide interests and great wealth. Mr. Frank S. Lyon has committed his corporation, with the approval of his Directors, to an association with Monorail Engineering & Construction Corporation, whereby all engineering developed by his corporation is again available to the Authority through Monorail Engineering & Construction Corporation.

Therefore, I present to the Los Angeles Metropolitan Transit Authority, the most important recent news in connection with Monorail, which is that Monorail Engineering & Construction Corporation, Monorailway Corporation, Railplanes, Ltd., Societe Lyonnaise and M.A.N. pooled their engineering, their patents and experience and have now created an association for the purpose of working together in all parts of the world in the development of Monorail transit systems. The plans, specifications, studies and material developed by them are available for your use in accomplishing the purpose of this Authority. Monorail Engineering & Construction Corporation acts in its own behalf and on behalf of all of these associates in offering these services to you.

To specifically describe structural engineering data of Monorail, requires technical discussions covering the vast field of the variations of tower construction suited to each particular situation with

standing engineers associated with it and their work has been largely developed for the purpose of providing transit in the British Colonial areas as well as in the cities of England and Scotland. The recent war and post-war financial break-down in Great Britain has prevented the accomplishment of their plans. However, the work of this British Corporation is what is referred to as the 'Bogie', a general term involving trucks, braking devices, and associated engineering features. A general idea of the type of engineering done by Railplanes, Ltd. is contained in the plans which were given to me a month ago for presentation to your Authority.

I think it very important that I refer to Ambassador William H. Draper, Jr.'s 'Report to the President' as of August 22nd, 1952, where he points out "that American companies must face hard facts, settlement for the next export balance to the United States, running now at the rate of billions of dollars a year, can only be made, as I see it, in one of three ways:

- 1) We can buy more in European countries, which would permit those nations to earn their own way, and at the same time would improve our own American standard of living by making imported goods available for consumption;
- 2) We can invest abroad some part of the large amounts due us each month either through governmental or private investment channels, and look for future repayment;
- 3) and finally, we can continue indefinitely military and economic grant programs."

While in Paris on October 2nd, 1952, I had a discussion with Ambassador Draper and pointed out the fact that this association we were making with the British, French and Germans was precisely along the lines he advocates in his 'Report to the President'. Such an alliance on the subject of 'transportation' which is a necessity the world over, conforms exactly to Ambassador Draper's ideas. The inter-relationship between Monorail Engineering & Construction Corporation and the British, French and Germans carries out the Ambassador's ideas.

tions involved in the construction of a Monorail system along the channel of the Los Angeles River. The U. S. Army Engineers, in the construction of the Flood Control structures, acquired rights on either side of the structures which may be translated into rights-of-way for a Monorail transit system without weakening the Flood Control structures. The Los Angeles River flows through the heart of the metropolitan area of Los Angeles, from Van Nuys through downtown Los Angeles to Long Beach, a distance of 44 miles. On either side of this river channel are many of the main housing projects of this area and 70% or more of the major industrial plants. It was, therefore, highly practical and desirable to determine whether there was a right-of-way along the Los Angeles River for a Monorail system and whether this right-of-way could be used with the many engineering problems of over-passes and curves. To accomplish this study, our corporation employed S. B. Barnes and Associates of Los Angeles. This study was completed in 1951. The finding, resulting from this study was that the Los Angeles River is a practical right-of-way for a Monorail system. I offer for your information the Barnes' Report.

It was not the purpose of our corporation to determine that the Los Angeles River was the very best right-of-way—there are obviously a number of others and obvious that your Authority must determine the most advantageous. Portions of the Pacific Electric rights-of-way may be available and may represent economic advantages. Portions of freeways yet to be constructed should be carefully considered in conjunction with the State Highway Commission. There are side streets and other potential rights-of-way. Each of these presents a different engineering problem of tower construction, station location and related services of bus lines. Since our corporation is primarily concerned with the management of construction and the administration and possible operation of Monorail systems which may be proposed for services in metropolitan areas throughout the United States, we do not undertake to substitute our judgment for that of the Transit Agencies who are duly authorized to create a solution of transit problems for their

RESOLUTION NUMBER SEVEN

The Los Angeles Metropolitan Transit Authority DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

Section 1. That all funds of the Authority shall be deposited by the Treasurer of the Authority in the California Bank of Los Angeles, California, in an account in the name of the Authority to be maintained at the branch of said bank located at 200 South Spring Street, Los Angeles, California; provided, however, that said Treasurer shall not so deposit any moneys of the Authority unless and until all applicable conditions of Article 2, Chapter 4, Part 1, Division 2, Title 5 (Sections 53630 et seq) of the Government Code of the State of California have been complied with.

Section 2. That moneys in said account shall be withdrawn or paid out only by a check or draft of the Authority upon said California Bank, signed by the Treasurer and countersigned by the Chairman of the Authority; provided, however, that in the case of any check or draft in an amount not exceeding \$2500 the signature of the Chairman may be affixed by any member of the Budget and Finance Committee of the Authority, and the signature of the Treasurer may be affixed by another member of said committee other than the Chairman.

Section 3. That no member of the said Budget and Finance Committee shall so affix the signature of the Chairman or of the Treasurer to any such check or draft, even though the same may be in an amount not exceeding \$2500, unless the same shall be for payment of salaries or wages or for the payment, in whole or in part, of some other obligation of the Authority which in total does not exceed \$2500; provided, however, that the said bank, in honoring a check or draft in an amount not exceeding \$2500, shall have no responsibility to determine whether or not the requirements of this Section 3 have been complied with; and provided, further, that the requirements of this Section 3 shall not prohibit the Chairman (who is himself a member of said Committee) from affixing to any check or draft his signature as Chairman.

Section 4. That the Treasurer of the Authority is hereby authorized and directed to enter into an agreement with the said California Bank covering the deposit of funds, said agreement to be in substantially the standard form furnished by said bank and designated "California Bankers Association Form No. 41(XI) 2-52".

MINUTE RECORD OF LOS ANGELES METROPOLITAN TRANSIT AUTHORITY

MEETING HELD ON THE Fourth DAY OF November 1952

STANDARD FORM C34 PRINTED IN U.S.A.

CHARLES R. HADLEY CO., PATHFINDERS, LOS ANGELES, SAN FRANCISCO, NEW YORK, CHICAGO

REG. U.S. PAT. OFF. STANDARD MINUTE RECORD

We, the undersigned, being all the members of the Los Angeles Metropolitan Transit Authority, do hereby ratify, adopt and consent to all the acts, resolutions, appointments, proceedings, rules and regulations shown upon the above minutes for meeting held on November 4, 1952, and do hereby declare them to be the acts, resolutions, appointments, proceedings, rules and regulations of the Authority and do hereby approve said minutes.

<u>Marvin Tamm</u>	<u>12/2/52</u>
<u>Fred Dean</u>	<u>12/2/52</u>
<u>W. J. Bunn</u>	<u>12-2-52</u>
<u>Ken [unclear]</u>	<u>12-15-52</u>
<u>L. S. Whaley</u>	<u>12-15-52</u>
<u>R. J. Means</u>	<u>Jan 9/53</u>
<u>Jim Wilson</u>	<u>11-15-52</u>