

C O P Y

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ENGINEERS
1256 Market Street
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To the Board of Directors
Alameda-Contra Costa Transit District
Oakland-Berkeley
California

Gentlemen:

We take pleasure in transmitting herewith the initial report as provided by our contract with your Board of August 28, 1957. This contract provides that surveys and studies be made to determine how the existing facilities now operated by the Key System Transit Lines can be best utilized until such time as long range transit facilities, coordinated with those of the San Francisco Bay Area Rapid Transit Commission, can be planned and established. This is the initial report containing a summary of circumstances adequate to support a recommendation as to whether or not rail facilities or any part thereof now operated by the Key System should be acquired by the District. Our final report is scheduled for presentation before the end of November.

As a basis for the preparation of estimates of initial capital expenditures and also revenues and expenses, we have considered four basic schemes as follows:

Plan 1. The establishment of a rubber-to-rail transfer station in a location on the Key System Mole, adjacent to the Bay Bridge toll plaza, and the operation of rapid transit rail shuttle service to the existing San Francisco terminal with existing car equipment;

Plan 2. Similar in all respects to Plan 1 except for the purchase and operation of 29 modern articulated pneumatic-tired rapid transit units;

Plan 3. The operation of an all-bus system between present termini in the Alameda-Contra Costa Transit District and the San Francisco terminal; and

Plan 4. Continued rail operation on the A and F lines between their present termini in Berkeley and Oakland and the San Francisco terminal and the conversion of the B, C and E lines to bus operation.

Our surveys covering the condition and the estimated cost of rehabilitating the tracks, signal equipment and rolling stock has been completed, together with survey of existing bridge transit terminal facilities in San Francisco and the East Bay area. Our studies have

been carried on with a view to presenting a realistic and accurate comparison of the relative advantages and disadvantages of these four plans. For instance, we have assumed in all plans that none of the existing obsolete and overage bus equipment owned by the Key System Transit Lines and the Greyhound Lines would be utilized in the operation and that new sufficient 51-passenger diesel buses would be purchased to supplement the useful buses now available to supply the bus fleet required for each operation. Depreciation allowances have been estimated on the same basis for all plans and estimates of annual operating expenses have also had a common basis.

The determination of the best scheme for rapid transit service between the Alameda-Contra Costa Transit District and San Francisco cannot be made solely on the basis of initial capital outlay. Neither should the decision be limited to the single factor of earning power. Before a final recommendation can be made, these two important factors must be weighed together with answers to other questions on each of the four plans, such as:

Does it provide improved service?

Does it offer capacities sufficient to handle future growth of trans-bay traffic?

Would the proposed transit operation provide the betterments in service required to insure acceptance by the public?

Is the improved convenience sufficient to stop or even reverse the trend of increased use of private automobiles?

Does the initial plan permit logical future extensions of direct rail rapid transit service between San Francisco and the important focal centers in the Alameda-Contra Costa Transit District?

Will the plan conform to the logical development of area-wide rapid transit by the Bay Area Rapid Transit Commission?

PLAN 1

The capital outlay required for this plan would total \$6,455,000. Estimated revenues would cover all operating expenses, depreciation on equipment, and leave available a net income of \$1,287,000 which would exceed amortization charges on initial financing by a comfortable margin under the present fare schedule. This plan would provide some measure of improved convenience as compared with present operation. The long headways on the five rail lines would be reduced to 2 to 7 minutes by substitution of feeder buses on these lines. All operation of trains over public streets would be eliminated.

This plan, based on the continued operation of obsolete car equipment, should be considered as an initial step in the accomplishment of Plan 2 and should be adopted only in the event that the additional financing involved in Plan 2 is impossible during the interim period.

Plan 1 has the advantage of conforming to the logical development of area-wide transit which may be developed by the San Francisco Bay Area Rapid Transit Commission. Such future development would undoubtedly encompass rail rapid transit extensions from the existing San Francisco terminal to and through downtown San Francisco and to the important centers in the District. Any plan which fails to preserve these valuable rail facilities will, in our opinion, require the expenditure of many millions of dollars for the trans-bay tunnel essential to the development of any rapid transit to serve the metropolitan area. We, therefore, recommend the serious consideration of Plan 1 in the event that financing of Plan 2 is found to be impractical at this time.

PLAN 2

Capital outlay required for this plan would total \$12,800,000. We estimate that revenues based on the present fare schedule would cover all operating expenses, depreciation on equipment, and leave available operating income of \$1,610,000, which is \$420,000 greater than Plan 3---the all-bus alternate.

This plan we consider would provide the greatest measure of improved convenience over the present operation of any of the plans considered. The frequency of service would be improved as in the case of Plan 1. This plan would also eliminate operation of all rapid transit trains over public streets. There would be a marked improvement in the speed of the service for all passengers now carried on the rail lines. This would amount to a saving in travel time of 14 minutes per day for this important group. The net saving in travel time for all of the trans-bay passengers would amount to more than 1,000,000 hours per annum.

Plan 2 conforms to any logical development of area-wide transit which may ultimately be constructed by the San Francisco Bay Area Rapid Transit Commission. Such a plan, in our opinion, would undoubtedly include rail rapid transit extensions into San Francisco and from the mole terminal to important centers in the Alameda-Contra Costa Transit District. The preservation of the existing valuable rail facilities is essential to economical development of area-wide rapid transit.

The improved service which would be provided by the ultra modern pneumatic-tired rapid transit cars recommended would attract additional passenger traffic to the operation during the initial year. This could be expected to increase thereafter so as to reverse the present trend away from mass transit and to the use of automobiles of trans-bay travel.

PLAN 3

The capital outlay required for this plan is a total of \$6,050,000. The estimated revenues would cover all operating expenses, depreciation on equipment and leave a net income of \$1,190,000, a somewhat lower figure than in the case of Plans 1 and 2. The frequency of service would be maintained on the nine existing trans-bay bus lines, but there would be reductions in headway compared with the existing rail lines.

The plan would, however, result in substantial time savings for those passengers now utilizing the five rail routes totaling ten minutes per day per passenger, an aggregate of more than 960,000 hours per annum.

Plan 3 should be considered in the nature of a temporary expedient. Existing Bay Bridge rapid transit tracks would be scrapped and, until such time as metropolitan area-wide rapid transit is constructed, trans-bay passengers would be forced to rely on automobiles and buses. It is impossible for us to visualize a metropolitan area of seven million or more people (as estimated for the San Francisco area in thirty years) with fairly even distribution of population on each side of a water barrier such as the San Francisco Bay, without rail rapid transit connections. It is our view that the removal of the rails from the Bay Bridge would add many million dollars to the cost of such necessary new transit facilities. We, therefore, recommend against the all-bus Plan 3.

PLAN 4

Capital outlay for this plan, including the rehabilitation of the tracks and pavement on Routes A and F, would total \$6,530,000. Estimated revenues would cover all operating expenses, depreciation on equipment and leave an annual operating income of \$770,000. This plan would provide but little improved convenience to the public. Also, the rapid transit train operation on the public streets would be eliminated except for those along routes A and F.

Probably the greatest argument for this plan is the maintenance of through operations between the center of Oakland and Berkeley and downtown San Francisco together with the preservation of the tracks over the Bay Bridge. Plan 4 can be placed in operation with the smallest capital outlay but, on the other hand, provides smaller returns than any of the other plans considered. Plan 4, however, lacks many of the advantages of Plan 2 and we, therefore, do not recommend its further consideration.

The initial investment, the estimated operating results and the several other pertinent factors have been considered for each plan. With the single exception of the greater initial investment involved, Plan 2 has more advantages than any of the other schemes.

Plan 2 has a further advantage, the preservation of an essential rail rapid transit link across the San Francisco Bay. Failure to adopt this plan would necessitate the construction of a bridge over San Francisco Bay to serve the same function. Such construction was estimated at upwards of \$70,000,000 two years ago. The imposition on the San Francisco Bay Area Rapid Transit Commission of this unnecessary financial burden would constitute a serious problem in the development of area-wide rapid transit. It could conceivably postpone the start of construction of much needed works for years. Finally, convenient rapid transit service afforded by Plan 2 will reverse the trend of increasing automobile travel across the Bay Bridge, alleviate the present peak

hour congestion and, in our judgment, postpone for a number of years the need for the construction of a second highway bridge across San Francisco Bay.

For these reasons we recommend the adoption of Plan 2.

Respectfully submitted,

DE LEUW, CATHER & COMPANY

Charles E. De Leuw