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Redundancy in Public Transit - Vol III. The Political Economy of Transit in the San Francisco Bay Area, 1945-63

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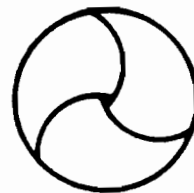
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Vol. III: The Political Economy of Transit  
in the San Francisco Bay Area, 1945-63

Seymour Adler



August 1980  
Final Report

Institute of Urban and Regional Development  
University of California, Berkeley

Prepared for

U.S. DEPARTMENT OF TRANSPORTATION  
Urban Mass Transportation Administration  
Washington D.C. 20590



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Los Angeles County Regional Planning Commission

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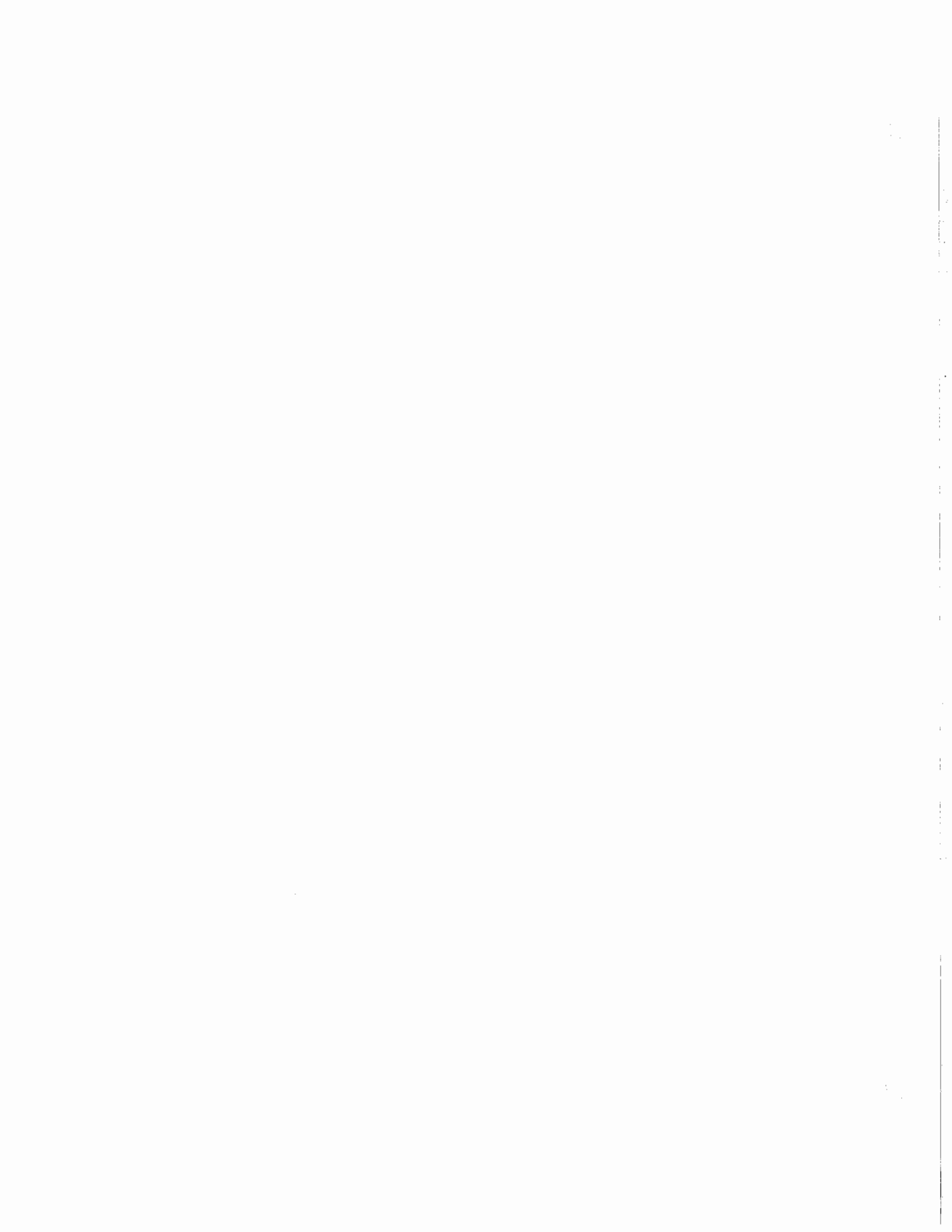
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The Political Economy of Transit  
in the San Francisco Bay Area 1945-1963  
by Seymour Adler

ABSTRACT

This report focuses on two concrete developments. One is the historical process that produced the Bay Area Rapid Transit District in 1957 and the district's particular regional rapid transit plan, approved by the voters of Alameda, Contra Costa, and San Francisco counties in November, 1962. The other is the process that produced the Alameda-Contra Costa Transit District in 1955 and 1956, and the particular transit service this District began operating in 1960. The relation between the two districts, the latter is contained within the former's territory, is one of the central concerns.

These developments are analyzed as contingent outcomes of a regional transit movement that was active during this period. Several aspects of this movement's history are analyzed. Its origins are located in the context of postwar automobile-based suburban growth and the decline of privately owned interurban transit. Government-owned interurban rapid transit, in addition to freeways and off-street parking, are discussed as the transport means sought by business and political leaders in downtown San Francisco and Oakland to maintain and enhance their competitive positions and to gain shares of postwar economic growth.

The composition of movement leadership groups is described; the informal and formal regional organizations they created are analyzed with particular reference to the internal conflicts which delayed the movement's



progress in the early years, and then caused it to fracture and partially disintegrate during the latter period. These conflicts are interpreted as instances of urban mercantilist politics. Existing central business districts were in competition with each other while they were also in competition with growing suburban commercial zones. Transit was a controversial political terrain on which the many places in the region sought to gain competitive locational advantages.

The movement sponsored a pioneering venture in regional transportation planning; the central planning innovation was a regional rapid transit system designed to function in a metropolitan area where land use patterns had been and would continue to be shaped by the motor vehicle. The important roles of private consulting firms and representatives of private financial capital in the public works planning process are highlighted.

Several alternative transit system designs were technically feasible and were advocated by various interested individuals and groups. The political and economic reasons why some technical features, such as an underwater tube, were adopted, and others, such as bus rapid transit, were rejected are discussed; the priorities of an alliance between downtown Oakland and San Francisco account for many of the technical choices made.

In addition to its internal, mercantilist dimension, two aspects of the movement's situation are considered. One of these is its relation to the three major privately owned interurban transit companies in the region. The decline of Key System, which was controlled by National City Lines from 1946 through 1960, and its consequences are traced in detail. The role of the California Public Utilities Commission, which closely

regulated privately owned transit companies, is analyzed.

The other aspect is the relation of the transit movement to the large-scale program of freeway and bridge building conducted by state government agencies. The movement's progress was intimately linked with bridge location controversies that raged during the period; the political and design connections between transit and freeways are explored, particularly with regard to the San Francisco freeway "revolt" of 1959.



"The history of cities can be written in terms of congestion and the devices developed to ease this congestion and its resulting problems."

--Colonel Sidney Bingham, "Long Range Transit Program for San Francisco," February, 1949.

"The reason why mass transportation companies are losing so much money today throughout the nation and why they can't induce people away from their automobiles to mass transportation is because the manufacturers of the buses and the trolley coaches and streetcars are not keeping pace with the times. They are not building a type of vehicle that is for the comfort of the people and conducive to speed and they find that they financially are unable themselves to build a facility in which they can move with the type of speed to match the automobile which the motorist is using, and you can't expect the people to move at a horse and buggy speed in an atom age."

--Marvin Lewis, San Francisco Supervisor and member of the San Francisco Bay Area Rapid Transit Commission, testifying to the Subcommittees on Rapid Transit Problems of the California Legislative Assembly Interim Committees on Transportation and Commerce and on Public Utilities and Corporations, 1 December 1953.

"Every metropolitan area in the civilized world has some form of surface-free mass rapid transit system except Los Angeles and San Francisco. Without an integrated system of transit in our metropolitan areas the great anticipated growth will become a dream that will fail because people can not move freely, safely, rapidly and economically from where they live to where they work."

--Ralph Merritt, General Manager, Los Angeles Metropolitan Transit Authority, testifying to the Subcommittee on Rapid Transit Problems of the California Legislative Interim Committee on Transportation and Commerce, November, 1954.

"The obligation of the municipality to provide adequate mass transportation when deemed necessary has long been recognized in the United States and the concept is neither revolutionary or socialistic.... If private industry is unable to furnish an adequate mass transportation system under conditions which exist and which are likely to continue to exist for a substantial period of time, the municipality not only has the right but is under the duty and obligation to provide such transportation.... We are not here concerned with the question of an encroachment by government into a field that has previously been regarded as falling within the exclusive domain of private industry. There is no ideological question involved."

--quoted by the Division of Highways,  
California Department of Public Works,  
"Report to the California Toll Bridge  
Authority on the Bridge Railway  
Situation on the San Francisco--Oakland  
Bay Bridge, October, 1954.

"From the pyramids of Egypt, to the rebuilding of Rome after Nero's fire, to the creation of the great medieval cathedrals and the reconstruction of Paris by Baron Haussmann all great public works have been somehow associated with autocratic power. For pure democracy has neither the imagination, nor the energy, to create major improvements."

--Raymond Moley, in his foreward to  
Robert Moses, Public Works: A  
Dangerous Trade, New York, 1970.

"The family that can get to the theatre easily is quite likely to go. It is as simple as that."

--Parsons, Brinckerhoff, Hall and  
MacDonald, Regional Rapid Transit,  
San Francisco, 1956.

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## I INTRODUCTION

My purpose is to analyze the political economy of urban transit in the San Francisco Bay Area during the period from the end of World War Two through the early 1960s. I will focus on two concrete developments. One is the historical process that produced the Bay Area Rapid Transit District (BARTD) in 1957 and the District's particular regional rapid transit plan, approved by the voters of Alameda, Contra Costa, and San Francisco Counties in November, 1962. The other is the process that produced the Alameda-Contra Costa Transit District (ACTD) in 1955 and 1956, and the particular transit service this District began operating in 1960. The relation between these two districts, ACTD is contained within BARTD; they run parallel services on a number of routes, will be one of my central concerns.

I will analyze these developments as contingent outcomes of a regional transit movement that was active in the Bay Area during this period. By contingent I mean that alternatives were both technically available and advocated by interested groups at various points in the movement's history; these alternatives concerned all important aspects of the make-up, powers, plans, and services of the Districts. There wasn't anything inevitable about the final version presented to BARTD voters in 1962, for example. Moreover, there were many aspects of the



final plan that were not in accord with what movement leaders had wanted.

Nothing significant either did or did not happen because no one thought if it, or because it wasn't part of the spirit of the times. This included the kind of transit facilities to be provided, for example, buses running in exclusive lanes instead of rail transit; the methods of organizing and financing their provision; and the theoretical and philosophical assumptions underpinning transportation and land use planning practice.

The range of available alternatives was limited, however; these limits were set by the nature of the transit movement and by the context in which it acted. The movement was a loosely structured one. There were functioning organizations that were regional in scope throughout this period in the movement's life: the Bay Area Transit Committee in the late 1940s; the Bay Area Rapid Transit Commission (BARTC) from 1951 through 1957; and the Districts in the later years. There was also continuity in the composition of leadership groups. These were always: merchants, financiers, and real estate developers; their political, journalist, and professional planning and engineering allies; and interested construction and equipment supply firms. There were even several leading activists who were involved from the 1940s right on through: San Francisco investment banker Arthur Dolan, for example, and downtown Oakland merchant Sherwood Swan.

However, the leadership groups, the organizations, and the movement generally contained several strands of conflict that made effective, unified action on a regional scale very problematic. The most fundamental of these conflicts was the intense competition for

shares of postwar population and economic growth. This competition had both inter- and intra-metropolitan dimensions. The Bay Area faced challenges from Portland, Seattle, and especially Los Angeles. Since sufficient transportation infrastructure was essential to attract and accommodate growth, the provision of adequate transport capacity was a crucial regional project.

However, all aspects of every urban transportation facility, its location, size, design, financing and control, affected the competitive position of each part of the Bay region relative to the others. Therefore, locally based coalitions of business, political and technical allies organized to defend and advance their competitive advantages. This competitive dynamic structured relations between established central business districts and between these and rapidly growing suburban areas.

There wasn't any agency, public or private, with sufficient power to overcome this competition. What progress the movement was able to make came as a result of laboriously constructed partial alliances that were based on technical choices. These choices, however, deepened some fractures within the movement at the same time as they created a basis for solidarity elsewhere. One set of limits on the transit movement was set by the nature of business politics generally. Within these limits, though, regional rapid transit was intensely controversial.

The other set of limits resulted from the movement's situation. I will pay particular attention to two other Bay Area transportation issues that were important for the particular development of the transit movement during this period. One was the relation between transit and the ambitious program of freeway and bridge building. The idea of a

regional transit system was initially advanced in the context of a raging controversy concerning the location of additional bridge crossings of the Bay; the bridge question would be intimately linked to transit progress throughout the period. The transit movement was active, moreover, at the same time that state and federal governments were spending large and increasing sums of money on freeway construction.

There were many and varied connections between freeways and motor vehicle facilities including finance, design, and their respective roles in regional development; there were also important political ties. Furthermore, the state agencies in charge of the freeway and bridge building efforts, the California Toll Bridge Authority (CTBA) and the Department of Public Works (DPW), had their own priorities and bases of support that were independent of the transit movement; these gave them a certain autonomy relative to it.

The other issue was the movement's relationship to the existing Bay Area transit companies. There were four of these; three were private and one was public. The three private enterprises were closely regulated by the California Public Utilities Commission (CPUC), another state agency with its own priorities and autonomous in relation to the movement. All were in chronic financial difficulty, caught in a deepening cycle of increasing operating costs, patronage declines, fare increases and service cuts. Their responses to deteriorating financial conditions were in large measure responsible for the very existence of the movement; they continued to shape the movement's options even as they declined.

There were similar transit movements in metropolitan areas throughout North America; similar conditions produced similar concerns.

The Bay Area pioneered in several respects, however; the Bay Area movement went farther, faster than anywhere else.

## II SAN FRANCISCO TRANSIT

When the Municipal Railway of San Francisco began running electric streetcars in 1912 about one-third of San Francisco's land area was unpopulated. These areas were separated from the rest of the city by the fabled San Francisco hills, and lacked essential water, transportation and other services. The Muni opened up these lands for development, tunneling through the hills and constructing lines radiating from downtown to the outer reaches of the city.<sup>1</sup>

Opening up land for residential and commercial development was historically the primary motivation for private/capital investment in transit in metropolitan areas throughout North America. The traditional pattern, which also characterized most of pre-1900 private transit investment in San Francisco, was one in which private entrepreneurs bought large quantities of relatively cheap undeveloped land on the fringes of growing urban areas, then borrowed heavily to invest in transit lines serving their real estate. Relatively low fares that did not increase with distance traveled (very popular with the riding public and politically difficult to change) encouraged settlement. Profits came, of course, with the sale of land that had vastly increased in value to residential and commercial developers. The transit operation, however, was rarely profitable. The combination of high fixed charges, low and

unchanging fares, and relatively light traffic in the early years of the development process led to continuing losses, bankruptcies, liquidations, and reorganizations.<sup>2</sup>

As George Hilton and Melville Ulmer make clear, the peak period for net capital formation in the electric streetcar industry was the first decade of the twentieth century. The developmental capacity of private capital investment in transit was at its height during this period. Beginning with the years just prior to World War One net capital formation in the industry turned negative and began a precipitous decline.<sup>3</sup> For a variety of historical reasons private capital investment in San Francisco transit declined a little earlier than elsewhere.

As I mentioned above, the hills were forbidding and expensive barriers to overcome. Moreover, the San Francisco City Charter that was adopted in 1900 and amended several times during the next decade discouraged private capital from entering this field. The charter declared for ultimate public ownership of utilities and prohibited granting exclusive franchises. In 1902, amendments limited franchise grants to twenty-five years, provided for service and rate regulation, and levied a city tax on gross receipts. After a franchise grant expired, all fixed facilities were to revert to the city. These were followed in 1910 by provisions enabling the city to purchase at a fair price any facilities provided under future franchise grants and fixed the minimum wage for transit employees at \$3.00 per eight hour day.<sup>4</sup>

All these legislative actions were in response to bitter conflicts among the city, the private transit companies, and the San Francisco labor movement. The result was severely to restrict further private

capital investment in transit. The city's business and political leadership worried that homeseekers would go elsewhere in the Bay Area where necessary infrastructure was in place. This leadership recognized that, if the political and geological obstacles were going to be overcome, the city itself would have to enter the industry.

"The desire to penetrate the area west and south of Twin Peaks was not a competitive one . . ." although the Municipal Railway did create a number of lines competitive with remaining private firms, " . . . but rather a wish to open up for development the vast stretches isolated from the downtown district by insurmountable barriers." Muni electric streetcar service through the Twin Peaks Tunnel started in 1918 and through the Sunset Tunnel in 1928, which was its last rail trunk line extension. Muni also pioneered in using gasoline buses in San Francisco, using them as feeders to streetcar lines beginning in 1918 and 1919. All significant extensions after 1928 used gas buses and electric trolley coaches.<sup>5</sup>

The creation of the Muni was a clear example of Progressive Era politics at the local level. Progressivism in transit meant the use of governmental power and public money to undertake those activities that were judged necessary for the growth and competitive position of the local economy and tax base, but which private capital either could not organize at all or was organizing in such a way as to create severe political and economic difficulties. Post World War Two transit history would have much in common with this earlier period.

Muni chronically operated at a loss in its early years. "The extensions into sparsely settled territory . . . were not profitable from an operational point of view but were to prove essential in the

development of outlying areas." San Francisco population increased by a little more than fifty percent in the 1910-1930 period, most of this new growth locating in the parts of the city opened up by public investment.<sup>6</sup>

Transit patronage in San Francisco, however, reached its pre-World War Two peak in the middle 1920s, as it did on most other transit operations in the nation. During 1926 almost 350 million revenue passengers rode all public and private lines in the city.<sup>7</sup> By the eve of the Second World War revenue patronage had declined by fifty percent. Both the Muni and the remaining privately owned Market Street Railway Company, held to a five-cent fare throughout, faced severe financial difficulties during the Depression '30s, lacking funds for maintenance of rolling stock, tracks, rights-of-way and electrical distribution facilities, and for investment in new equipment. The Market Street Railway, its equipment and facilities older and in more deteriorated condition than the Muni's, wanted to abandon the field. Official San Francisco made several attempts to municipalize this failing private enterprise, finally convincing the city electorate in 1944, that public ownership was necessary to prosecute the war successfully.<sup>8</sup>

The war years of gasoline rationing, other restrictions on motor vehicle use, and the movement of millions of women and formerly unemployed workers into the wage labor force swelled the ranks of transit riders for the duration. Revenue patronage in the city climbed steeply to almost seventy-five percent of the 1926 peak, and the newly consolidated Municipal Railway was able to accumulate a little extra cash.<sup>9</sup> But the surge in ridership created severe problems for transit here and elsewhere. Already suffering from years of deferred maintenance



transit systems were unable, because of wartime priorities, to secure the parts, equipment and skilled labor necessary for repairs and expansion. Population and economic activity boomed in the Bay Area during the war; transit operators strained mightily to supply the necessary capacity.

In a report on the first six months of operation of the new Muni, E. G. Cahill, Manager of Utilities in the San Francisco Public Utilities Commission (SFPUC), the city department that ran the Railway, surveyed the damage: "It is my frank opinion that it will be a miracle if this rambling wreck of a railroad which we have inherited will hold together for the duration . . . We knew it was junk when we bought it and it was obvious that we had to buy it to keep it moving and get the most out of it. But only actual possession could disclose in what unspeakable condition it was." The former Market Street Railway properties were on the verge of collapse. Muni, while not quite as bad, was barely holding together. The Manager advised that "Immediately after the cessation of hostilities, the whole system must be scrapped. If this period is too long, it will scrap itself. It is obvious that equipment, each piece of which must be dragged off to the carbarns fifteen times every five months, is in the last stages of decrepitude. We must build from the bottom and give the City of San Francisco the kind of mass transportation it deserves."<sup>10</sup>

There would be two programmatic aspects to the process of giving San Francisco its transit due. The short-term program, similar to those in cities all over the country during the latter 1940s, was called "modernization" in the transit industry. This involved substituting modern, efficient equipment and facilities for older, deteriorated

ones. In San Francisco this would mean getting rid of the large majority of street railway lines and substituting buses and electric trolleys for the streetcars. The longer term program was to supply San Francisco with an extensive rapid transit system. Planning for both programs began when the end of the war was in sight.

Two city agencies were closely involved with these issues, although their priorities differed. The SFPUC and the Railway management were primarily concerned with modernization. Moreover, their efforts and their vision were circumscribed by the Muni's worsening financial situation and by insufficient staff capacity to engage in long-range transit planning. The City Planning Department supplied this capacity, concentrating its attention on longer term problems, including freeway and rapid transit development. The planners were also concerned with the modernization program, though, and coordinating the actions of an operating agency and a planning agency was a continuing administrative issue. I will discuss Muni modernization first, then rapid transit planning.

At the time of consolidation in September, 1944, the San Francisco transit network consisted of the following elements: thirty-two electric streetcar routes using 678 streetcars. These radiated from the central business district outward to the residential areas of the city; two electric trolley coach lines using eighteen trolleys; and twenty-nine bus routes served by 165 gasoline buses. These were used primarily as feeders to the streetcar lines in outlying, sparsely settled areas.<sup>11</sup> This radial, downtown-oriented pattern using electrically powered vehicles on the higher density routes was the most common one in larger cities in the United States at that time.<sup>12</sup> The most dramatic aspect

of the Muni network was the four sets of tracks running in downtown Market Street, the most important commercial and traffic artery in the city's central core. The inner and outer tracks were an expression of a less coordinated era in the local transit industry, when the Muni and the Market Street Railway ran parallel along several routes. Boarding a car on the inside tracks during rush hour truly required urban survival skills. The streetcars then were larger and heavier than they are today. There also weren't any traffic islands.

The modernization program was developed and extended in a series of planning documents. The first was prepared by Leonard Newton, vice-president and general manager of the Market Street Railway, for the SFPUC. His postwar plan for the Muni submitted in April, 1945, called for substituting buses and trolleys on many streetcar routes, tearing up the outside tracks on Market Street and reconstructing the inner ones and other tracks and rights of way for those remaining streetcar lines; purchasing new equipment; and extending motorized service to growing outlying areas. The Newton plan would utilize 289 streamlined streetcars in place of the decrepit 678. He advocated increasing the number of trolley coaches from eighteen to 220, and the number of buses from 165 to 273. The total cost of the proposals was estimated at twenty-three million dollars.<sup>13</sup>

The principles embodied in the Newton plan were adopted and extended in two more reports done in the next three years. In March, 1947, the Technical Committee of the Mayor's Administrative Transportation Planning Council proposed an even more extensive program of bus and trolley substitution than had Newton. This committee was composed of the heads of the city departments interested in transportation issues,

and was led by Planning Director T. J. Kent. The technicians wanted to reduce the number of streetcar lines from thirty-two to seven, and to use 212 streetcars instead of the 289 proposed by Newton.<sup>14</sup> Finally, in March, 1948, Planning Commission consultants DeLeuw, Cather and Company proposed a further modification in the direction of more extensive street railway abandonment, and bus and trolley substitution. DeLeuw, Cather thought that only two of the seven streetcar lines the Technical Committee considered viable should be retained. The consultants added an additional twist to the city's modernization program. They proposed buying a sufficient number of articulated buses, the kind that bent in the middle, to conduct a test of their adaptability to San Francisco's distinctive conditions.<sup>15</sup> These fifty-eight passenger buses were manufactured in the United States by Mr. Fageol's Twin Coach Company, which was trying hard to maintain its share of the transit bus market in the face of growing concentration in this industry. These buses were being used in a few Midwestern cities with apparently favorable results. The SFPUC and the Railway management were very interested in this variation on the traditional bus theme, and had been for some time.<sup>16</sup>

There were several reasons why Muni modernization plans focused on street railway abandonment and why articulated buses looked attractive to transit management. One was the familiar one of wanting to avoid the costs of reconstructing severely deteriorated tracks, rights-of-way, and electrical distribution facilities, plus, the maintenance costs associated with these. New streetcars were also more expensive to purchase than other vehicles, necessitating higher initial capital costs.<sup>17</sup>

A second, extremely important service-related reason was that

buses enabled Muni to run expresses from outlying residential areas downtown. Furthermore, Muni would be able to offer improved express bus service when the buses could run on the extensive freeway network that was on the San Francisco planning agenda. Streetcars obviously couldn't pass one another; vehicle speeds were severely limited by this built-in incapacity. Moreover, a disabled vehicle on the tracks could paralyze large parts of the transit system. Electric trolleys were similarly restricted because of the overhead wires which supplied their power.

This express capacity was crucial. It was the only type of service that transit operators could offer to compete with the automobile on the basis of speed, short of constructing extremely expensive rapid transit facilities. Muni began running express buses from the Sunset district downtown in 1946, and pushed for traffic control measures on the downtown streets to expedite the expresses during the peak periods.<sup>18</sup> The Technical Committee's 1947 report called for extensive use of express service to move people from outlying residential areas to the San Francisco bayshore. The technicians also called for separating transit and private vehicle traffic in congested areas in order to increase transit speed and carrying capacity. This meant reserving some central business district streets for " . . . almost exclusive transit use."<sup>19</sup>

The speed and comfort made possible by express service was essential if transit were to attract those people living in outlying areas who could drive downtown if they wanted to. As transit analyst John Bauer wrote, more and more of those with a choice were commuting to work in their private autos. These were the people who were responsible for the extremes of rush hour traffic congestion. They had to be induced to shift to transit. " . . . the shift will require thorough

modernization of mass transit facilities, really attractive service, and effective appeal to rather well-to-do people . . . The private automobile passenger is a proud individualist who shuns crowding . . . often he is . . . rather class conscious in regard to the crowds."<sup>20</sup> It was this type of service that transit planners were hoping would effectively relieve peak period downtown congestion. Downtown merchants, commercial property owners, and employers shared this vision of free-flowing traffic moving masses of people. There would even be space for shoppers to park during the day. An additional bus-related benefit was that express service could be relatively easily and cheaply extended to serve sparsely settled but growing areas of the city.

The third reason for abandoning streetcars in San Francisco was wage-related operating costs. In an industry with wages accounting for at least fifty percent to sixty percent of all operating costs, any innovation that reduced the demand for wage labor and/or increased labor productivity was obviously attractive. There were three parts to this issue in the city. One was the two-man streetcar ordinance enacted through the initiative process during the Depression. It was in response to a proposal by the Market Street Railway Company to substitute one-man cars for the two-man vehicles then in operation. The incentive for this was obvious, cut labor costs and increase productivity for the remaining workers. The California Railroad Commission (now the Public Utilities Commission) was encouraging transit companies all over the state to make this substitution as a way of achieving financial solvency. However, the San Francisco labor movement mobilized support for an ordinance prohibiting one-man operated streetcars in the city. This ordinance was repeatedly attacked by the city's major

business groups, political leaders, and the railway management. However, it was successfully defended until 1954, when it was repealed. This two-man requirement clearly supplied a powerful incentive to substitute vehicles which were not covered by the ordinance. Buses and trolleys could be operated by one worker.<sup>21</sup>

DeLeuw, Cather's proposal for large passenger capacity articulated buses was an extension of this principle. These buses would allow Muni to maintain the number of seats supplied in transit service, but with fewer vehicles and fewer vehicle operators. This was an obvious attempt to increase productivity; the SFPUC did, in fact, order a few of these articulated buses and place them on the streets for a demonstration program. However, Muni management was forced to abandon the experiment and a possible major commitment to the use of the articulated buses because of strong opposition from the transit unions. The Railway workers demanded that because these buses were so large they be considered in the same category as streetcars. Therefore, they would be subject to the two-man ordinance.<sup>22</sup>

The significance of the two-man ordinance was increased by the institutional determination of transit labor wage rates. In late 1946 the San Francisco electorate demonstrated its support for Muni workers by approving an ordinance pegging Municipal Railway wage rates at the average of the two highest rates paid to transit workers on any size operation in any size city in the state. This formula was also retained until 1954.

The final factor adding to the attractiveness of bus transit was the favorable effect of increased vehicle operating speeds on unit operating costs. Because buses were able more effectively to maneuver

in traffic than other transit vehicles they could achieve higher speeds. Therefore, the same amount of labor and the same number of vehicles could supply an increased number of seats in transit service.

In 1945 and 1946 the Municipal Railway modernization plan was a bitterly controversial class political issue. This was because the SFPUC initially proposed to finance the twenty-three million dollar Newton plan through an increase in the fare. In late 1945 the SFPUC voted to increase transit fares from the flat seven cent per ride rate that had been in effect since the 1944 consolidation to three rides for twenty-five cents, and ten cents for a single ride. The fare increase was strongly opposed by the city's labor movement, led by the American Federation of Labor-based San Francisco Labor Council and the San Francisco Congress of Industrial Organizations. The San Francisco branch of the Communist Party, which was active in local politics in the middle 1940s, and a chain of neighborhood newspapers which supported labor and other progressive causes likewise opposed the fare increase. The basis of opposition was the regressive nature of the modernization financing plan. Moreover, the fare increase constituted an attack on the standard of living of the city's working people.

The SFPUC was supported by all the city's major business and property owner's groups, the major newspapers, and by Mayor Lapham. This coalition's philosophy was that the users ought to bear the full costs of any and all transit improvements. They were opposed to tax support for the Railway. The publisher of the San Francisco Progress neighborhood newspaper chain launched an unsuccessful recall campaign against the Mayor because of Lapham's support for the increase.<sup>23</sup>

At a San Francisco Board of Supervisors hearing about the fare



increase, John Shelley, then head of the San Francisco Labor Council, future Congressional representative, and Mayor during the BART construction period, told the Supervisors that he " . . . was not surprised that the Chamber of Commerce had approved the proposed increase in streetcar fares, since . . . " he states " . . . few of the members of that organization used the streetcars, or . . . even lived in San Francisco. Few of the members of the Building Owners and Managers Association, or of the Apartment House Owners Association, rode on the streetcars . . . " <sup>24</sup>

The labor and progressive forces failed to block the SFPUC. However, a reprieve was granted by the federal Office of Price Administration (OPA), which filed suit to halt the increase in January, 1946. The OPA argued that the increases would worsen an already very bad inflationary situation. Furthermore, the OPA disagreed with the prevailing philosophy regarding investment finance. Federal officials thought that capital improvements ought to be financed through borrowing, and that repayment was a legitimate charge on the city's tax base. The labor movement had likewise supported financing improvements through property taxes. In addition, fare increases would only cause a decline in the number of transit riders, which would worsen the Muni's financial situation. <sup>25</sup>

The fare increase was finally implemented several months later, but by this time costs had increased and revenues had declined to the point where the increased income from higher fares would barely be sufficient to cover operating costs and make a few urgent repairs. The SFPUC reluctantly turned to a general obligation bond issue to finance modernization. The city's business and political leaders went along. <sup>26</sup>

In November, 1947, a twenty million dollar Muni modernization

bond issue to finance the wholesale transformation of the San Francisco transit system was overwhelmingly approved. The measure required a two-thirds affirmative vote; modernization was endorsed by seventy-seven percent of those voting on the issue. The only remaining question was the distribution of new vehicle purchases between buses and trolley coaches. When it became clear that the necessary materials for constructing overhead trolley wires was going to be readily available, the city went relatively heavily into that type of vehicle. The local arguments in favor of trolleys were its greater ability to climb the steep San Francisco hills, and its cleaner, quieter ride.

During the next several years Muni busily made itself over. In early April, 1949, the Utilities Manager announced that the streetcar line abandonments set for July 3rd, would represent ". . . the most extensive conversion of surface routes on a single day in American transit history."<sup>27</sup> By the end of 1951 the city transit system had an entirely different look. In place of the 678 streetcars on hand in 1944, there were 210. Trolleys had increased from eighteen to 398, and the number of buses from 165 to 493.<sup>28</sup> Patronage, however, declined steadily throughout the period, and the Muni required increasingly larger tax subsidies.<sup>29</sup> A revealing and rewarding statistic, though, was the sharp decline in the number of accidents involving Municipal Railway vehicles. These decreased from more than 16,00 in the fiscal year 1945-1946 to about 7,000 in 1950.<sup>30</sup> The pre-modernization figure was a grim reminder of what life had been like at war's end.

Market Street subway proposals had a long and unsuccessful history in San Francisco, dating back to Muni's Progressive Era origins. The last pre-World War Two effort culminated in the defeat of a forty-nine million dollar bond issue to construct a subway in 1937. Costs of

construction were to be repaid out of income, i.e., out of fares. This was not a popular proposal during the Depression.

The postwar round of rapid transit planning was begun by local consulting engineers Woodruff and Sampson, who prepared the Transportation and Utilities Section of the San Francisco Master Plan for the Planning Commission in early 1946. The consultants noted the extremely deteriorated condition of the transit system, and argued that former transit riders were being forced to drive as a result. The consequence of this shift from transit to private autos was worsening traffic congestion downtown, which imposed serious costs on the local economy. They warned that the ". . . usual effect of similar conditions in other cities had been decentralization, the moving of business houses to areas more readily accessible. The consequence of this movement is blight, with reduction of property values." Woodruff and Sampson were concerned that such decentralization was already taking place and oriented their proposals to its prevention and cure: "All proposals made herein for improved transportation facilities within the city are based on the premise that the best interests of San Francisco require that the Business District be retained substantially within its present boundaries and that it is essential to furnish convenient access thereto . . . by transit."<sup>31</sup>

The Master Plan proposals accepted the Newton plan as a starting point, but went on to propose two grade-separated rail rapid transit lines for the city; one under Market Street through downtown and the other radiating out from the city center along Geary Boulevard, the major traffic artery linking downtown with rapidly growing residential areas in the city's northwest Richmond district. The following principle was articulated to guide transit improvements: ". . . the Master Plan is

based on the premise that it is essential to provide transit facilities of such excellence that, especially during the rush hour, the convenience afforded by such facilities will be such as to encourage the greatest use thereof."<sup>32</sup>

The Planning Commission and some members of the Board of Supervisors, particularly Marvin Lewis, the city's leading official critic of the Muni management and the SFPUC, were concerned about a possible conflict between the Master Plan Section's rapid transit proposals and the SFPUC's Newton plan. The chief worry was that reconstruction of the Market Street streetcar tracks would preclude construction of a subway there.<sup>33</sup>

Newton had not discussed rapid transit facilities for the city. Perhaps this was owing to his generally pessimistic outlook, based on his previous experience, regarding the future of transit. Newton had based his modernization proposals on the assumption of a decline in transit patronage from wartime to pre-war levels. Moreover, reflecting the short-range interests of the Railway management, Newton had not considered the consequences of his assumptions for the city's longer term economic prospects.

The Planning Commission therefore recommended, and Mayor Lapham approved, the creation of the Mayor's Administrative Transportation Planning Council and its Technical Committee (mentioned previously) to coordinate the programs of the various city agencies and to make recommendations regarding the twenty million dollar bond issue the SFPUC wanted to float.<sup>34</sup> The Technical Committee's March, 1947, report encouraged rapid transit planning and modernization as equally necessary elements of an overall program. The technicians also articulated a context for understanding the importance of transit to San Francisco.

Their analysis expressed the vision that would motivate the San Francisco wing of the regional transit movement. The Technical Committee's purpose was to recommend a program, ". . . to break the transportation bottleneck which threatens to strangle San Francisco if decisive action is not soon taken."

This was a crucial period for urban transportation. "What San Francisco does today to remedy its transportation problem either will be greatly appreciated or disdainfully deprecated by San Franciscans yet unborn, depending on the degree of wisdom with which the City now acts. For San Franciscans today are in a moment in the development of their City in which they can determine the pattern of the City for the next one hundred years just as irrevocably as did Jean Viaget, and Jasper O'Farrell after him, when they laid down the straight and narrow grid of streets which characterize San Francisco today, one hundred years after their unhandiwork."

A great deal was at stake. Action had to be commensurate with the city's responsibilities. "San Francisco is a world city. Situated on the shores of one of the finest natural landlocked harbors of the world, located at the crossroads of Occidental and Oriental civilizations, facing the world's largest ocean on whose shores live three-fifths of the world's population, San Francisco is a city not only of California, or of the United States, or of North America, but of the World. The natural outlook of San Francisco is wide and broad and all-encompassing, and as such demands a similar outlook by its people in their approach to the problems besetting the organization of the facilities of their city."<sup>35</sup>

San Francisco was seen as the heart of a nine-county Bay Area that was destined to receive an immense population and economic boom. The intra-regional distribution of the boom was clear, industrial development along the Bayshores and mushrooming residential zones down the peninsula and all over the East Bay and Marin County. "The central commercial and administrative core of this . . . complex is centered and concentrated in Downtown San Francisco, the Central Business District . . . All roads and all bridges lead to it, and it is here that the greatest number of people in the area, both transient and permanent, daily converge . . . The Central Business District . . . contributes the largest proportionate share of property tax returns which provide operating funds for the City."<sup>36</sup>

An efficient system of mass transit was an absolute necessity if this spatial pattern were to be realized. The technicians argued that everyone could not possibly ride in cars to points of concentration. It was physically impossible to provide so much motor vehicle street capacity and spaces for parking. If more and more cars tried to squeeze downtown, "The result would be the diffusion and dispersion of the central core of the City, and the values and advantages which justify its existence and the existence of the City would be destroyed." The Committee warned that "Unless a good transit system is developed and maintained, business and industry will tend to continue its trend toward dispersion into residential areas, both in the City and in other parts of the Bay area, causing decreased efficiency and increased blight." They articulated another principle of urban transportation planning: "Fundamentally the overall transportation problem is one of facilitating and expediting the movement of persons and goods rather than one of moving one certain

type of vehicle only; the automobile."<sup>37</sup>

The Technical Committee recommended a bold, comprehensive set of short and long term programs, including Railway modernization, rapid transit facilities, an extensive network of intraurban freeways, off-street parking facilities, and several traffic control measures including one-way streets, synchronized traffic signals, parking regulations, and staggered work hours. They also recommended that funds be made available to hire consultants to prepare a more detailed comprehensive transportation plan for the city. The Board of Supervisors approved this last one; the Planning Commission hired one of the leading engineering and planning firms in the nation: DeLeuw, Cather and Company.<sup>38</sup>

The report was warmly received by the city's business and political leadership, with the exception of Marvin Lewis, who continued to worry that the Muni's modernization program would conflict with longer term rapid transit construction. The November bond issue vote coincided with a mayoral election. Successful candidate Elmer E. Robinson made transportation issues one of his central campaign themes. He supported the modernization bonds. He also pledged to build a rapid transit system for the city, beginning with a subway in downtown Market Street. Robinson promised to submit another bond issue to the electorate to finance its construction during his administration.<sup>39</sup>

Robinson added official momentum to the local rapid transit planning process. He also brought in his own expert to assist him in developing a plan. The Mayor borrowed Colonel Sidney Bingham from New York. Bingham was a top official in the New York transit system, and widely regarded as the nation's top transit expert. He was known as a bus and subway man. Robinson didn't want to be tied to consultants

supported and hired during his predecessor's regime.<sup>40</sup>

In November, 1948, DeLeuw, Cather submitted their comprehensive, long-range transportation plan to the City Planning Commission. This plan was the first post-war document based on solid technical analysis and hard data, an origin-destination study of Bay Area traffic done by state and federal highway agencies. The consultant's orientation was a familiar one: ". . . the transportation facilities as a whole must be so designed and arranged that they will help the Business District to retain and enhance its drawing power, and mold its growth along logical and desirable lines . . . Business will be aided by the relief from traffic strangulation. Unwarranted decentralization will be combatted and natural growth encouraged. The ensuing benefits will be shared by the entire city."<sup>41</sup>

DeLeuw, Cather proposed an \$82.6 million transit component. The key element was a subway for streetcars under Market Street from which would extend a tunnel to and through Twin Peaks. This element would cost \$52.5 million. They also suggested a rail transit line within the median strip of a proposed Mission freeway, an elevated structure through the Mission district. The transit portion of this combined freeway-transit facility would cost eleven million dollars. In addition to these rail rapid transit proposals, DeLeuw, Cather advocated facilities for bus rapid transit. This would involve a subway for buses entering the Central Business District from the western portions of the city. Express buses would operate in the residential streets of the Richmond and Sunset districts, get on proposed freeways heading downtown, and enter the central core through their own Post Street tunnel. Together with express bus facilities on the Bayshore freeway the bus rapid transit elements cost



\$19.1 million.<sup>42</sup>

An interesting aspect of the DeLeuw, Cather rapid transit plans was the projected patronage on which they were based. The volume of peak-hour transit use expected in 1970 was as follows:

Market Street-Twin Peaks Rapid Transit	-	8100
Mission Rapid Transit	-	8800
Geary Express Bus	-	2900
Richmond Express Bus	-	2600
Sunset Express Bus	-	2600

The downtown segment of the Market Street subway would, therefore, carry 16,900 people in the peak hour. The bus subway would handle 8,100 people. None of these figures indicate a particularly heavy load. The point, however, was that transit operations had to be taken off the surface streets if speed and capacity were going to be increased. Grade separation was the crucial element.<sup>43</sup>

A few months after the DeLeuw, Cather plan was released, in February 1949, Colonel Bingham presented his solution to San Francisco's transportation problems. The key was grade separation, once again. Transit operations had to be taken off the congested streets, ". . . the rapid transit subway is the most efficient system available. This is the pattern . . . that has prevailed in all great cities and no better solution has yet been devised." Bingham's plan resembled DeLeuw, Cather's concerning the location of routes, but Bingham took strong exception to DeLeuw, Cather's recommendation for streetcar use in the Market Street subway. The Colonel was concerned with wage-related operating costs. Streetcars required at least one (and in San Francisco, two) workers per car, while a subway train needed one motorman and one conductor to move up to eight

cars. Moreover, the need for overhead wires to supply streetcar power necessitated larger tunnel construction than real subway cars required.<sup>44</sup>

Bingham made a interesting financing proposal: he suggested taxing property that would be directly benefited by the subway. He realized he was advocating something very controversial. "There are undoubtedly short-sighted business men who will oppose such a charge. The more public spirited and forward looking members of the business community will certainly realize that a subway is a civic investment that will yield them dividends in the form of a greater population, great business activity, and a lessening of the delays and congestion in surface traffic." To reinforce this point Bingham painted a gloomy scenario without rapid transit: "The alternative is to continue to rely on a surface transit system and the private automobile, which can only lead ultimately to such a creeping paralysis of surface traffic flow that industry and commerce will be forced to escape from the center of the city. This will change the pattern of life in metropolitan San Francisco to such an extent that the revolution in property values, that is sure to follow, may have the most disastrous consequences for the city as we know it."<sup>45</sup>

The San Francisco Chronicle received the subway plans with editorial eloquence: "The unstoppable, choking growth and multiplication of downtown traffic congestion has been for years, still is and always will be an unanswerable argument for the construction of a San Francisco subway system. There is no other ultimate solution of a problem which each year is costing the community staggering losses in time and money." The Chronicle proudly recalled its vigorous support for a subway system since 1929, and noted the similarities between the latest plans and

the one rejected by the voters in 1937. Mayor Robinson also liked the plans, but not Bingham's innovative financing suggestion.<sup>46</sup> The Downtown Association declared a Market Street subway its number one top priority issue for 1949. The continued dominance of the central business district, its high property values, and the level of retail sales hinged on its construction.<sup>47</sup>

There was sporadic opposition to these rapid transit planning documents throughout the period. The same labor-progressive coalition that opposed fare increase-financed Muni modernization also attacked the nature of the rapid transit proposals.\* Regarding the Planning Commission's Transportation and Utilities Master Plan Section, the San Francisco CIO Council's Housing and Planning Committee noted that "It seems . . . the Commission failed to predicate their planning upon the basic premise that the majority of the people of San Francisco are workers who must have rapid transit between their homes and their jobs. It appears to have concerned itself more with the downtown business houses." The CIO Council was angry that no rapid transit was provided to get workers from residential areas to industrial production sites in the southeast sector of the city. The Council later proposed a much more extensive and expensive rail subway plan than had the Planning Commission consultants, to be financed without raising fares.<sup>48</sup>

The People's World, local newspaper of the Communist Party, also called for an extensive subway system. This would be financed either through federal loans, or through general obligation bonds financed by property taxes, so those who would reap the greatest benefits, the banks and other big real estate interests, would pay their

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\* Their opposition was based on the limited nature of the rapid transit plans being promoted.

just share of the costs.<sup>49</sup> The Haight-Stanyan edition of the San Francisco Progress editorialized that "All transit plans, including the debatable Master Plan, are conceived for the benefit of DOWNTOWN, rather than SAN FRANCISCO AS A WHOLE."<sup>50</sup>

A second opponent of local rapid transit was the tax-conscious Municipal Conference. The Conference called itself an organization representing the largest property tax paying interests in the city. In 1949 the Conference took court action to force a second postwar fare increase on the Municipal Railway, to a straight ten cents per ride, in order to lessen the amount of tax subsidy the Muni would receive.<sup>51</sup> The Conference opposed rapid transit for San Francisco because of the burden it would place on the property tax base.<sup>52</sup>

Finally, a rare dissenting vote on the need for a local rapid transit system was cast by a transit expert. Arthur Jenkins had been hired by the San Francisco Board of Supervisors to do a study of the economic and organizational features of Muni. Several Supervisors had been accusing the Railway management of incompetence for some time, and Jenkins was supposed to pinpoint the difficulties. Arthur Jenkins was a central figure in California transit history. During the 1930s, he worked for the California Railroad Commission as their Transportation Research Engineer. While there he conducted exhaustive studies of the transit situation in both the Bay Area and in Los Angeles. After the war he went into private consulting practice. He was hired by the Key System in the East Bay as traffic manager to supervise their transition to an all-bus system. At the same time he was working on this San Francisco study he was also preparing a major modernization program for the Pacific Electric Railway Company. He would be actively involved in transit issues for many more years.<sup>53</sup>

In April, 1949, Jenkins delivered an extensive critical analysis of the structure of transit management in the city. He also said he was unconvinced of the need for a subway in San Francisco. He pointed out that San Francisco was a relatively small city; it was only seven miles from the foot of Market Street downtown to the furthest residential areas. Changes could be made in surface transit, Jenkins thought, to increase speed. Moreover, a subway was enormously expensive; why burden the tax rolls for a "super-deluxe" operation when less costly alternatives were available?<sup>54</sup>

The Chronicle was editorially astonished that Jenkins questioned the need for a subway.<sup>55</sup> However, his report apparently struck a responsive chord with the Railway management. Muni engineers were increasingly confident they could speed up surface transit sufficiently to eliminate the need for a subway. They looked to several improvements: more express buses; keeping automobiles off the tracks and out of the way of the streetcars downtown, perhaps by building a buffer zone around the rails; and more traffic control techniques to facilitate transit vehicle flow.<sup>56</sup>

Mayor Robinson wanted a Market Street subway, though. He directed his recently hired Director of Planning, Paul Opperman, to prepare a plan for a subway in time for Robinson to submit a fifty million dollar bond issue to the voters in November, 1950.<sup>57</sup> Opperman hired DeLeuw, Cather to do the technical work. While a plan materialized, a bond issue would not. Mayor Robinson reluctantly postponed his subway project because of the national economic mobilization to fight the Korean War.<sup>58</sup>

## III BRIDGE CROSSINGS I

In 1945 it was obvious to virtually everyone in the Bay Area that the San Francisco-Oakland Bay Bridge would soon be hopelessly congested. Opened to motor vehicle traffic in 1936, the Bridge was a huge traffic and financial success. Financing for this truly monumental public work was provided by Herbert Hoover's Reconstruction Finance Corporation (RFC), which bought the first issue of \$62 million worth of toll-secured revenue bonds in late 1932. The project was one of Hoover's personal favorites. The Great Engineer had been associated with the location studies done for the Bridge in the late 1920s. Because it was one of RFC's earliest and largest efforts directly to create employment during the darkest Depression days, the President was looking to it for a political as well as an engineering triumph.<sup>1</sup>

The Bay Bridge project was handled by the RFC's Self-Liquidating Division. As this name makes clear, the RFC was interested in financing only those projects which were certain not to default on their interest and principal payments. Insistence on financial soundness flowed directly from RFC's orientation as primarily a banker's organization.<sup>2</sup> It demanded several conditions intended to minimize and protect the federal government's financial commitment. Among these were requirements that the California legislature vote the funds for building the approaches

to the Bridge and also approve paying the operating, maintenance, and insurance costs for the structure out of state highway funds rather than from tolls.<sup>3</sup>

The state legislature reluctantly agreed to these terms but the resulting combination of state and federal fiscal conservatism caused the construction of a more cramped Bay Bridge than a less cautious financial arrangement might have allowed. Approaches to the structure were very limited on both the San Francisco and East Bay sides, and the traffic lanes on the Bridge were narrow. The double-decked span carried automobile traffic only on the upper level. The inner lanes which carried cars moving in opposite directions were not separated by any physical barrier. Moreover, there wasn't any space provided for disabled vehicles so that accidents, especially during rush hours, were very difficult to reach and quickly paralyzed traffic. The upper deck fell short, then, of meeting the highest traffic engineering and safety standards. The lower deck carried commercial vehicles, trucks and buses, and the Bridge Railway.<sup>4</sup>

The Railway made the Bay Bridge a fascinating multimodal transportation facility. The two sets of Bridge tracks ran directly into a Transbay Transit Terminal located on the fringe of the San Francisco Central Business district. The California Toll Bridge Authority (CTBA), the state-created agency that built and managed the structure, owned the Railway, the Terminal, and thirty-seven articulated electric streetcar units. It also had the statutory power to operate a transit service within fifty miles of the Bridge. The Railway and Terminal had immense capacity: they were designed to carry fifty million passengers per year. Automatic controls allowed Bridge trains to travel 63.5 seconds apart;

17,000 persons could be transported across the Bridge during the peak twenty-minute period.<sup>5</sup>

When the Railway facilities opened in 1939, three private transit companies provided interurban electric streetcar service between East Bay points, an Oakland ferry dock, and downtown San Francisco via ferry. Ferry service was abandoned as soon as the trains started rolling; within a few years two of the three carriers had abandoned the field entirely. The Sacramento Northern Railway, which provided service from central Contra Costa County to San Francisco, was replaced by Pacific Greyhound buses. The Interurban Electric, which was a subsidiary of the Southern Pacific, made a deal with the remaining carrier, the Key System, to turn over some of its routes through the East Bay to Key, and then withdrew.<sup>6</sup>

As these abandonments would indicate, Bridge rail patronage was very disappointing, falling well below expectations. Designed to carry fifty million people per year, in 1941 the rails handled just fourteen million. Even during the war, when automobile traffic was restricted, twenty-seven million were transported during the peak year of 1945, just fifty-four percent of capacity.<sup>7</sup> The CTBA's pricing policy encouraged automobile traffic by rapidly reducing the toll from an initial sixty-five cents per car in 1936 to twenty-five cents in 1940. The toll collected by Key System and paid to CTBA was set at 2.5 cents per passenger in 1939 and remained at the level until 1945, when it was lowered to one and three-quarter cents.<sup>8</sup> Assuming two people per car, the Authority collected five times as much money per auto passenger than per transit passenger in 1940 and seven times as much in 1945. Clearly, assuring a financially successful project meant stimulating auto use.



One outcome of this traffic pattern was that auto users subsidized the transit operation. In only one year, 1945, were Bridge Railway toll revenues sufficient to meet even the interest costs on the rail portion of the Bridge.<sup>9</sup>

In 1945 rush-hour motorists were already experiencing serious delays; traffic tie-ups on the approach ramps were everyday events. On October 30, 1945, the CTBA, whose Board of Directors included the Governor and Lieutenant Governor, the heads of the state Departments of Public Works and Finance (both of whom were appointed by the Governor), and a fifth member who was also a gubernatorial appointment, approved a study to be made by the Department of Public Works (DPW) of an additional crossing of San Francisco Bay. The CTBA action was supported and encouraged by numerous business, labor, and civic groups, led by the recently created San Francisco Bay Area Council (BAC).<sup>10</sup>

BAC was the Bay Area equivalent of the Allegheny Conference on Community Development, organized by Richard King Mellon in Pittsburgh in 1943. Mellon brought together the top officials of the leading Pittsburgh corporations to plan the postwar renaissance of the smoky, grimy Steel City. These executives committed themselves and their corporate treasuries to the environmental cleanup and other infrastructural projects necessary to make Pittsburgh competitive in a changing world.<sup>11</sup> BAC was likewise an effort to get the region's big business leadership to organize itself for the competitive struggle ahead. As Francis V. Keesling, chairman of BAC's executive committee told a conference discussing peacetime reconversion issues, "...What we are trying to do is to solidify the Bay Area against the inroads which Los Angeles might make. We want to protect ourselves against the activities of the South,

and I take my hat off to them for they are certainly doing a job." The BAC was the only functioning regional organization in the Bay Area, with committees operating in each of the nine counties comprising the region.<sup>12</sup>

Traffic and transportation issues were crucial ones for the Council. It saw a need for huge amounts of transportation infrastructure to accommodate Bay Area population and economic growth. All kinds of transport facilities; freeways, bridges, airports, seaports, truck and rail freight terminals, and transit, were necessary if the region was to remain competitive. The concern was that insufficient transport capacity would "strangle" the region, "choking off" potential growth, driving business elsewhere, and causing the regional economy to "stagnate" and then decline. Insufficient capacity created congestion which in turn created inefficiencies in the circulation of people and goods. Congestion-caused bottlenecks increased the transport costs of doing business, placing a region with deficient capacity at a competitive disadvantage in the never-ending competition for population and economic activity.

Organizations like BAC and the Allegheny Conference were active throughout the nation. They supported and were in turn supported by professional planners and engineers who were concerned with these issues. One purpose of organizations and professional groups like these was to supply early warning indicators of impending congestion; to propose programs of minimum sufficient interventions to relieve it; and to mobilize business and political leaders all over the region to support the programs. They sought to convince all branches of private capital and all political jurisdictions of the general benefits of programs that would cause the least possible disruption to the private market forces normally structuring location decisions, while at the same time making

it possible for those forces to operate in a more efficient manner.

Bay Bridge congestion was a serious bottleneck threatening to reduce the region's rightful share of postwar population and economic growth that the West Coast, and California in particular, were surely going to experience. United region-wide action was necessary to remain competitive in the face of challenges from Los Angeles, Portland, and Seattle. However, intra-metropolitan competitive pressures were extremely intense; every transport project was bitterly controversial. Each improvement in capacity would advantage some branch of capital and some political jurisdiction as against others. A unified regional program for the Bay Area was highly problematic. Relieving Bay Bridge congestion was one such controversial project which triggered hostilities all around the Bay. These hostilities would spread to other issues.

The main protagonists on the Bay crossing issue were the cities of San Francisco and Oakland, although the rest of the region would become implicated in the conflict. There were two major points of contention. First, San Francisco wanted to see mainline transcontinental railroad tracks included on the next crossing. A low-level structure would be required to support mainline trains at acceptable grades. The major rail freight and passenger terminals were on the Oakland side of the Bay; San Francisco business, labor, and political leaders wanted to bring rail traffic directly into the city. Local proposals for a union passenger rail terminal downtown were advocated along with plans for expanding the San Francisco airport. Both, of course, were intended to attract additional traffic to San Francisco.<sup>13</sup> Just as obviously, downtown Oakland's leadership opposed this effort to divert its traffic.

Downtown Oakland saw the central issue as the immediate relief

of existing motor vehicle traffic congestion. A high-level structure near the Bay Bridge in the established transbay travel corridor appeared to offer the best prospect of accomplishing this goal. This was the second contentious issue. San Francisco argued this was too narrow a view, reflecting short-term thinking. The need was for long-term planning to accommodate future Bay Area growth. Industry and people were moving south, down the peninsula and into southern Alameda County. (Oakland was in northern Alameda County). The goals of relieving congestion on the existing bridge and serving future development would best be served by a crossing in a location several miles southerly of the present bridgeheads. Such a southerly location would also provide the conditions necessary for a railroad-supporting low-level structure.

A southern crossing, then, was a multipurpose project from San Francisco's point of view: 1) A means for bringing railroads into town; 2) A much more convenient connection between the city and rapidly growing southern Alameda County. Traffic from this part of the region currently had to travel a circuitous route to get to San Francisco; either north; past central Oakland to the Bay Bridge, or south; into the middle of San Mateo County via the small Hayward-San Mateo Bridge; and 3) San Francisco planners hoped a southern crossing would divert traffic that was destined down the peninsula away from the city center. Since the existing Bay Bridge approaches were limited, traffic entering San Francisco from the East Bay was soon flowing on the city streets, as was traffic heading from the peninsula to the northeast. If a southern crossing were available then this through traffic could be removed from the streets, freeing the space for central city-bound movements.

San Francisco officials were also deeply concerned with the

possible negative impacts of a parallel bridge on downtown traffic problems; the two bridges would channel an increasing volume of traffic through the city's central core. Technical and political leaders argued that an elaborate and extremely expensive network of approach and downtown freeway distribution structures would be required to protect the downtown streets from paralyzing congestion. The city leadership was distressed at the prospect of locally financing these expensive structures.<sup>14</sup> The East Bay would not likely favor including these costly structures as part of the bridge project; the DPW would also likely be concerned with the effect of including the structures on the project's financial feasibility.

It seems to me that Oakland's relation to the crossing issue was primarily a defensive one: to protect its competitive position as a regional center and to secure its relation to its East Bay hinterland against San Francisco designs. The railroad issue was clear. Moreover, Oakland wanted southern Alameda County's growing population to focus on Oakland; not on San Francisco. Another bridge in the existing transbay traffic corridor would facilitate further residential development in those parts of Alameda and Contra Costa Counties close to Oakland. Perhaps many of these people would commute to San Francisco to work, but Oakland would be closer for shopping and other activities.

San Francisco worried about the fact the DPW was doing the study about an additional Bay crossing. City leaders were concerned that the DPW shared the Oakland view that the only legitimate issue involved was the immediate relief of existing Bridge traffic congestion.<sup>15</sup> Therefore, San Francisco asked one of its United States Congressional representatives to seek a study by the national military establishment.

In March, 1946, Richard Welch introduced a measure in the House Naval Affairs Committee to have the Navy and War Departments take up the problem, and in April the full House approved a resolution creating a joint Army-Navy investigative Board (JANB). The Navy was cool to the subject. The military had studied the question of additional crossings in 1941 and concluded that increased capacity was not necessary for defense purposes. Moreover, the Navy pointed out that it was not possible to build another bridge while bonds that had been sold to finance construction of the original were still outstanding. President Truman, however, was said to be favorably disposed to the study.<sup>16</sup> Congressman Welch told an appreciative San Francisco Board of Supervisors that any plan for a second crossing should include railroad tracks. Oakland Mayor Herbert Beach condemned Welch, saying he would oppose any low-level structure that would blockade the Oakland Port. The Oakland Chamber of Commerce stood behind their mayor, attacking this blatant move to steer traffic into San Francisco.<sup>17</sup>

The joint Army-Navy Board came to the Bay Area to conduct public hearings during the summer of 1946. The military engineers asked the California State Chamber of Commerce to coordinate presentations by the interested parties.<sup>18</sup> This choice of a business organization to orchestrate the proceedings was unexceptional. All discussions of such questions were joint private capital-government efforts, reflecting the fact that urban transportation issues were at the center of business politics.

The San Francisco delegation to the Board was led by Supervisor Marvin Lewis, who had staked out the transportation area as one of his main governmental concerns. In addition to getting out in front on the

bridge issue, Lewis frequently attacked the management of the San Francisco Municipal Railway on grounds of incompetence, calling for either selling or leasing the Muni to private operators. He was also interested in a downtown subway for his city. The San Francisco Supervisors sent Lewis to the Board hearings armed with a unanimously adopted Lewis-sponsored resolution stating that the best interests of San Francisco called for a mainline railroad connection to a Union Depot over any second Bay crossing.<sup>19</sup> Lewis reported back how proud he was that San Francisco had been able to present a united front on the need for trains; downtown interests, labor groups, and improvement clubs all supported the position. Unfortunately, Oakland opposed.<sup>20</sup> However, new alliances were emerging around this issue. Cities in southern Alameda County were breaking with Oakland on the question of bridge location and agreeing with San Francisco on the advantages of a southern crossing.<sup>21</sup> Moreover, San Mateo County was likewise interested in additional transport capacity closer to San Mateo. The Oakland-supported crossing would be less desirable for cities there, and they were lining up with San Francisco, too.

Through the end of 1946 the region tensely anticipated the outcomes of the state and national studies underway.

On January 25, 1947, the JANB reported its findings. The Board proposed the immediate construction of a southern crossing of San Francisco Bay, but found there wasn't any need for railroad tracks on the structure. Moreover, the Board had directly questioned the major rail carriers on this question; they all unequivocally denied any interest in extending their passenger facilities in the Bay Area. San Francisco was pleased with the decision on location but dismayed at the rejection

of the railroad idea. The Board agreed that a southern location would best facilitate future regional growth. They also noted that while there wasn't any need for an additional crossing from a national defense standpoint, security precautions dictated that bridge structures be dispersed to decrease their vulnerability to enemy attack. The military engineers also pointed out that a parallel crossing close to the existing one would have a harmful effect on downtown San Francisco, worsening traffic congestion there. This was crucial because the relative ability of crossings to enable peak hour commuters to get into and out of the San Francisco central business district was a major location criterion.<sup>22</sup>

The Army-Navy Board surprised everyone with a companion recommendation to its call for a southern crossing. The soldiers broadened their field of vision to consider transit issues in relation to motor vehicle traffic and told the Bay Area that it would be impossible to continually construct highway crossings and related parking facilities. At some point automotive congestion would become so severe that the area will be forced to increase its use of transit. The Board proposed that the Bay Area begin to plan now for this eventuality. They noted that extensive street rail capacity was already available, but was seriously underutilized. This, the Board argued, was because the existing service was very poor. In the East Bay the rails were in the streets, so the streetcars were slowed by congestion and red lights. Speed on the Bridge Railway had to be reduced because the equipment had deteriorated. Once in San Francisco the streetcars made only one stop, so continuing passengers had to transfer to the local streetcars, which had all the same problems as those in the East Bay. The solution was



a fully integrated rail rapid transit service using grade separated exclusive rights-of-way in San Francisco and the East Bay, and an underwater tube to make the connection.<sup>23</sup>

The Board feared that unless a really excellent service were provided, it would not be patronized. Automobile users had to be "convinced" to ride transit vehicles. The Board noted how "rational" a shift from auto to transit would be from the point of view of increasing traffic capacity. A lane on the existing bridge could carry 1,450 cars, or 2,460 passengers per hour, whereas a single subway track had a capacity of 40,000 people per hour. The Board even went so far as to consult with various tunnel and other transit engineering people on a tentative plan of routes and estimated costs for such a rail system. The total cost came in at \$208 million, with the centerpiece tube costing \$74 million. Constructing a tube had an additional benefit; the existing Bridge Railway could be abandoned and paved, thereby increasing Bay Bridge motor vehicle capacity.<sup>24</sup>

This transit proposal did not create much of an immediate stir, however. San Francisco still wanted those transcontinental railroads, and Oakland was upset at the choice of location. The transit idea receded further into the background when the state Department of Public Works reported its findings just a few days later; they recommended the immediate construction of an identical bridge parallel to and three-hundred feet north of the existing structure. Traffic and revenue studies done for the DPW by the consulting firm of Coverdale & Colpitts (they had done the same kinds of studies for the original Bay Bridge project) indicated that this parallel crossing was the most likely to divert enough traffic from the existing bridge to make it a sound

financial investment. Moreover, existing rail facilities were considered adequate for transit traffic.<sup>25</sup>

The conflicting reports spurred feverish activity all around the Bay. In Oakland the City Council, Chamber of Commerce and Real Estate Board declared their allegiance to the parallel bridge. The southern Alameda County cities grouped in the Committee for a Southern Crossing over San Francisco Bay agitated for their choice. San Francisco got Congressman Welch to intervene with the Secretaries of the Army and Navy, asking them to delay their final reports until additional studies could be made of the costs of including railroad tracks on a crossing. The Bay Area Council appointed a Transportation and Traffic Committee to attempt reconciliation. Finally, DPW undertook a second look at the issues.<sup>26</sup>

In late August, 1947, the Secretaries of the Army and Navy released their final report. They agreed with the Joint Army-Navy Board in all particulars, including the transcontinental railroad question; no train tracks were warranted on a southern crossing.<sup>27</sup>

Marvin Lewis was disappointed to lose the trains, but his County, State and National Affairs subcommittee of the San Francisco Board of Supervisors approved a resolution from him calling for construction of a southern crossing of the Bay even without the railroads. The resolution went to the full Board for consideration.<sup>28</sup>

While it was there BAC's Traffic and Transportation Committee released its report on additional Bay crossings. This Committee voted 18-6 in favor of a parallel bridge. The majority argued that relief of congestion on the existing bridge was the chief priority, and a parallel bridge would accomplish this more cheaply and effectively than a southern

crossing. The Committee took note of the transit aspect of the question; they commented that commuters should be induced to use transit as much as possible, and the JANB rapid transit proposals would likely provide a superior service. However, the Committee majority pointed out that the cost of the tube alone was estimated at \$74 million and the total project at \$208 million. The Committee "...believed that the difficulties of organizing and financing such a system within the near future would be insurmountable, and in view of the other great needs of the communities that it would be better to postpone such an undertaking, at least until such time as existing facilities are overtaxed." A vote by the one-hundred member BAC Governing Board on the issue was, however, delayed.<sup>29</sup>

The San Francisco City Planning Commission criticized the BAC group for downplaying the transit alternative. The Commission pointed out that the Bridge Railway could carry double the number of passengers it was currently handling, so an improvement in transit facilities would render an additional highway crossing in that corridor unnecessary. The BAC Committee apparently wasn't aware that the idea was to move people in an urban area, not just vehicles, they said.<sup>30</sup>

The BAC Board of Governors, however, refused to take a vote on the recommendations submitted by its Traffic and Transportation Committee. Even though the Committee had produced a clear majority, the issues were so intensely controversial that the Governors were unable to reconcile the differences.<sup>31</sup>

In October the San Francisco Board of Supervisors adopted Marvin Lewis' resolution calling for the immediate construction of a southern crossing.<sup>32</sup> This was the first time official San Francisco declared

itself about the location of the next bridge.

It was now time for the California Toll Bridge Authority to release its report. In November the Authority declared its policy would be to build both bridges. The DPW was to proceed with plans and right-of-way acquisition for both structures. DPW Director Charles Purcell, Chief Engineer on the original Bay Bridge project, announced he would appoint a special Bay Toll Crossings Division to recommend which bridge ought to be built first.<sup>33</sup>

The San Francisco Supervisors voted to call a series of mass meetings to mobilize support for its southern crossing. Marvin Lewis was going to chair these gatherings at which some 800 civic, business, labor and governmental groups would organize to implement the full Joint Army-Navy Board plan: block the parallel bridge, build the southern crossing, and get to work on an integrated regional rapid transit system. The full package deal proposed by the military engineers, including the transbay transit tube which would allow paving the Bridge Railway for motor vehicle traffic, eventually became official San Francisco's Ultimate Plan. The city would press for implementation of all the elements for the next decade. Lewis wanted to follow up these mass meetings with a "march on Sacramento" to convince the governor of the rightness of their cause.<sup>34</sup>

However, the united front in San Francisco in support of a southern crossing soon began to crack. In December the San Francisco Real Estate Board announced it liked the idea of building both crossings and supported the prior construction of a parallel bridge. Marvin Lewis and outgoing Mayor Roger Lapham rushed over to see what had happened. The officials were told the Real Estate people wanted all the

traffic downtown it was possible to bring. They wanted to keep downtown San Francisco the center of the region and figured that a parallel bridge was more likely to keep the traffic coming downtown than was a southern crossing. Moreover, the Real Estate Board thought it highly unlikely that a transbay transit tube could ever be built, economically speaking. Existing bridge transit facilities were only fifty percent used; who would finance a new tube under such circumstances?<sup>35</sup>

In November, 1948, Ralph Tudor, chief engineer for the Bay Toll Crossings Division, released his report. Tudor said to build the parallel bridge first. He pointed out that traffic and revenue studies done by Coverdale & Colpitts said the parallel bridge should have priority because more than eighty percent of the vehicles crossing the existing bridge would be served by it, while only twenty percent would be attracted to a southern crossing. Tudor noted that at the present twenty-five cent toll, \$171,700,000 was the upper limit that could be borrowed. At thirty-five cents, \$194,800,00 could be raised. "Either of these amounts is in excess of any single issue of revenue bonds heretofore marketed in the United States."<sup>36</sup> The Bay Area did not shy away from monumental projects.

Official San Francisco really got angry now. Mayor Elmer E. Robinson would consult President Truman during a trip East the Mayor was making.<sup>37</sup> However, his city's defense began to splinter even more. The Oakland Tribune gleefully reported the North Central Improvement Association had thrown its support behind a parallel bridge. This group included giant San Francisco businesses who were major downtown employers. The Tribune soon rang up another one for its side when the San Francisco Building Owners and Managers Association switched to the parallel

structure.<sup>38</sup>

In February, 1949, the executive committee of the BAC declared for a parallel bridge and notified the governor and the CTBA of its stand.<sup>39</sup> In March the desertion by San Francisco's major business organizations turned into a stampede when Henry North, a director of the San Francisco Chamber of Commerce, announced that the Chamber, from the very beginning a leader in the southern crossing movement, was going to abandon its historic support and get in line behind a Bay Bridge twin.<sup>40</sup> Official San Francisco was left with very few friends, the San Francisco Labor Council and the newspapers remained loyal. Even these friends were divided: they favored a southern location but differed as to exactly where the bridge termini should be. The Tribune could barely contain its gloating.

There seem to me two reasons why the major business organizations changed their minds on the bridge location issue. The more important one was that they were never really committed to a southern location. The important things were the transcontinental trains and a downtown passenger terminal. Only a southern crossing could accommodate trains, so the business community supported a southern crossing. When it became clear there weren't going to be any railroad passengers coming downtown, the business groups looked to other short-range alternatives that would bring people to the city core. A parallel bridge appeared more appropriate for this. The second reason was that it looked like a parallel bridge was going to be built anyway. This was what the state wanted to do; the bridge was a local matter. The military engineers had already said there wasn't a need for another bridge from a national defense standpoint. Moreover, as the Real Estate Board and the BAC

Committee had pointed out, construction of an underwater transit tube was unlikely given the cost and current transit patterns. If additional freeways were necessary to avoid congestion caused by the increased number of motor vehicles in central San Francisco, then these ought to be built.

A San Francisco Chronicle writer thought he had found some allies for official San Francisco's cause when the United States House of Representatives Armed Services Committee Chairman made public Correspondence between himself and the Secretary of the Navy. Included was a warning from a Navy Vice-Admiral that the parallel bridge "...Violated the fundamental strategic principle of dispersion." The Chronicle reporter felt the Navy was politely trying to tell CTBA to give up the parallel bridge.<sup>41</sup>

This message was lost, however, on the Authority; a few days later it voted unanimously to construct a parallel crossing of San Francisco Bay. The San Francisco Examiner reacted angrily to this decision. The paper editorialized that "Warren and Purcell, having jammed their plan down our throats, apparently are willing to let us choke to death."<sup>42</sup>

However, the forces favoring a southern crossing were granted a reprieve when the state Assembly passed a delaying resolution sponsored by Richard Dolwig of San Mateo County. The resolution created a special committee to hold hearings, employ consultants, and recommend to the Assembly on the bridge crossing question before CTBA and DPW were allowed to spend any more money on parallel bridge engineering plans. In addition, DPW would have to respond to the special committee's recommendations before the Assembly would allow it to proceed one way or another.<sup>43</sup>

In June the Dolwig Committee experts reported their findings.

This prominent group included a city and regional development consultant and two of the world's leading bridge and tunnel engineers. They pinpointed the problem: "Excessive centralization and congestion can readily reach a point where decay becomes imminent. Prudent examination of the degree of congestion already existing in San Francisco and rapidly approaching in Oakland indicates that a certain degree of preventive decentralization should now be encouraged in an orderly way before congestion and decay become critical and before random decentralization takes place, with most disadvantageous effects on both cities." They concluded: "Construction of a parallel bridge...would manifestly increase concentration rather than serving the purposes of orderly decentralization."<sup>44</sup>

The Dolwig Committee consultants called for the immediate construction of a southern crossing, but a smaller version than the Joint Army-Navy Board had recommended. They also proposed abandoning the Bridge Railway and substituting buses on a reconstructed Bay Bridge. This would allow for an increase in motor vehicle capacity on the existing structure. Finally, they called for increasing the motor vehicle capacity of the Bay Bridge still further by building cantilevered wings on the structure to carry additional lanes.<sup>45</sup>

While the relevant parties were pondering these proposals, the scene shifted to Washington, D.C. The Bay Area would do battle in Congress over legislation sponsored by U.S. Senator William F. Knowland, who supported a parallel bridge. The Senate Armed Services Committee was the terrain; a parallel bridge would need a permit from the military to establish a bridgehead on military property in the middle of the Bay. The parallel bridge forces were led by Bay Area Council executive



vice-president and general manager Frank Marsh.

Hearings were held in the nation's capitol during July, 1949. Parallel bridge supporters tried to convince the Senators this was a strictly local issue; no federal money was going to be involved so Congress should let California take care of its own location decisions. The Bay Area Council told the Senate Committee the fight against the parallel bridge and for a southern crossing was a "self-interested" one by people who wanted to see their property values in the southern part of San Francisco and down the peninsula increased. The Council declared the general interest in the relief of congestion on the existing bridge must take precedence over any "promotional" projects. The executive vice-president of the San Francisco Chamber of Commerce said that obviously the major business groups in his city that supported the parallel bridge would not be doing so if it would harm their downtown investments. Engineer Ralph Tudor stressed the folly in abandoning the Bridge Railway; who would ever finance construction of an enormously expensive tube? This would result if the parallel bridge were blocked and the southern crossing built; the Bay Area would still be forced to increase Bay Bridge motor vehicle capacity. Then it was San Francisco Mayor Robinson's turn.<sup>46</sup>

According to the Oakland Tribune, "Mayor Elmer E. Robinson of San Francisco...pulled out all the stops from fear to patriotism in an effort to transfer from California to the Federal Government sole judgment in locating a second crossing of the Bay."<sup>47</sup> The Mayor pointed out the great problem that San Francisco shared with all other U.S. cities; the people were having difficulty coming downtown. San Francisco was trying to make improvements. Robinson told the Senators San

Francisco knew "that growth brings decentralization, but ordinary growth, even reasonably rapid growth, does not bring rapid decentralization, and I have in mind cities in these United States of ours which have been victims of rapid decentralization." Robinson was gathering momentum.

"I have in mind, Mr. Senator, cities that relied on their downtown properties for their tax support, the backbone of the cities' economy...completely destroyed because of rapid decentralization." The Mayor concluded this portion of his brief by pointing out that "...When people cannot come downtown reasonably and stay there and do business, they are going elsewhere, and when they go elsewhere those property values come down and will be destroyed and our tax base is consequently materially affected." Then Robinson really got into what he came to say.

"Mr. Senator, can you envision an emergency happening on the San Francisco peninsula? Can you imagine more than a million and a half human beings trying to jam themselves, their babies and their baby carriages, their birds and their cats and their dogs, their automobiles and on foot, the lame and the halt and the blind, trying to force themselves through a bottleneck in conflict with the military trying to get across this bottleneck to do a job of national defense? Can you envision that scene? That is not what we want in any part of this Nation of ours. That is not what we want in California. That is not what we want in San Francisco; and the people out there, I assure you, Senator, are speaking by the thousands and hundreds of thousands..."

Senator Knowland intervened here to ask a question: "Mr. Mayor...You are not contending, are you, that in the event of such a catastrophe that you mention, that the people from Palo Alto on up would all

normally flow into...San Francisco when there is a great land connection..." Mayor Robinson responded: "I will answer you in this way, Senator Knowland. If you can tell me where the enemy is going to strike, I will tell you where the people will flee. When evacuation comes, they run away from the bullets, not towards them, and if the enemy comes from the South or strikes at the South, which he may logically do down in this area, and if he comes up that way, they are going to run to the bottleneck."<sup>48</sup>

The Tribune reported that Robinson shouted his statements concerning national defense aspects of the bridge question.<sup>49</sup>

A few weeks later San Francisco was vindicated; Secretary of Defense Louis Johnson affirmed the unequivocal opposition of the national military establishment to a parallel bridge.<sup>50</sup> The Senate turned down Knowland's bill to grant an easement over Federal property after Johnson spoke. In San Francisco it was time for retribution. The city budget would contain \$16,000 less for the San Francisco Chamber of Commerce in the next fiscal year. City officials were angry with the Chamber for deserting them on the bridge issue. Some wanted to cut the Chamber off entirely, but cooler heads prevailed.<sup>51</sup>

The Oakland Tribune editorialized a call to continue the fight for a parallel bridge, adding, "The unsubstantiated statement of a 'military preference' is being used in an effort to prohibit consideration of the crossing problem from the only proper standpoint, the best interests of the people who must cross the Bay."<sup>52</sup> Note the irony of the Oakland Tribune accusing San Francisco of inappropriately using the national defense issue to create a climate of hysterical opposition to the parallel bridge. Publisher Joseph Knowland and his U.S. Senator

son William Knowland were top level leaders of the right wing of the Republican Party at state and national levels. The Tribune was among the most vicious anti-communist, anti-progressive newspapers in the country, although, of course, the Bay Area Hearst papers were not far behind in this regard. The interesting point here, though, is to see how easily ideology is adjusted when "concrete" business political issues are at stake.

DPW was deeply disturbed by Congressional rejection. They still had to reply to the Dolwig Committee consultants, however, if they were going to carry on with crossing studies. Ralph Tudor disagreed with everything the consultants had recommended. He argued that a southern crossing wouldn't provide the necessary traffic relief; the Committee consultants as much as admitted this when they proposed building extensive additional capacity on to the Bay Bridge. The consultants defended their proposal to abandon the Bridge Railway and substitute buses by arguing they supported the eventual construction of a transit tube as the Joint Army-Navy Board had suggested. In the meantime the buses would be able to fan out to all parts of the East Bay and San Francisco to pick up and discharge passengers, thereby providing an integrated bus transit system.

Tudor doubted that buses alone could adequately handle the traffic if wartime passenger volumes would ever return to transit. This would require an exclusive lane on the bridge and expanded terminal facilities, neither of which Tudor thought feasible. Moreover, Tudor thought the Joint Army-Navy Board never contemplated abandoning the Bridge Railway before a tube were in place.

Tudor went on to argue that with new equipment and some signal

changes, railway speed on the Bridge could be greatly increased. Together with some improved distribution facilities in the East Bay, none of which the military engineers had considered, an effective rapid transit system could be had at a much lower cost than that of a tunnel. The crucial point was that Tudor thought it would be impossible to finance construction of a transit tube. The cost was astronomical; the Toll Bridge Authority certainly couldn't build it. Abandoning the Bridge Railway meant throwing away the only chance the Bay Area had for a rapid transit system.<sup>53</sup>

There is another irony here. The California Toll Bridge Authority will indeed finance construction of a rapid transit tube. Ralph Tudor will himself participate in the joint venture that will build it. However, by the end of 1949 the bridge question had reached a stalemate; the parallel bridge was apparently blocked. However, there were as yet no means available to build a southern crossing. BAC went back to work to find an acceptable regional program.

## IV EAST BAY TRANSIT

In September, 1945, Key System President Alfred Lundberg announced that plans had been completed to finance modernization of Key. Such conservative financial institutions as Northwestern Mutual Life Insurance Company of Milwaukee, Occidental Life Insurance Company of Los Angeles and the Bank of America had agreed to purchase bonds to finance substitution of trolley coaches and buses for the remaining East Bay local streetcar lines.<sup>1</sup> Heartened by this demonstration of confidence in the East Bay, Lundberg proposed to begin the transformation on the Berkeley-Oakland College Avenue line--one of the most heavily patronized of all the East Bay local routes. Electric trolleys would be placed in service on this line, as they would be on all the more heavily traveled ones. Buses would be operated on those carrying lighter traffic loads. It would be a year, however, before any new equipment would be available; vehicle manufacturers were just in the process of converting from military to civilian production and a tremendous backlog of demands was in the pipelines.<sup>2</sup>

This impending transformation had roots buried deeply in the East Bay's past. The history of the Key System was a classic case of the intimate relationship between transit investment, land speculation and real estate development. Like many of the nation's larger interurban

electric streetcar companies, Key System was born out of a series of consolidations of smaller independent street railways. The same dynamic motivated all of these predecessor firms: "The location and construction of . . . the first electric railways . . . were directed by the potential increase in land values, growth of population and commerce, which the real estate owners, merchants, and local bankers who promoted them enjoyed as a result of their success."<sup>3</sup>

Into this ongoing process stepped F. M. "Borax" Smith, in 1893. As his nickname indicates, Mr. Smith earned his first fortune in borax mining. Like Mr. Huntington in southern California he appreciated the potential profits to be made from a comprehensive development of electric railways, real estate business, commuter passenger ferry service to San Francisco, and railway freight business. Smith began investing part of his money in East Bay electric railways, and about the same time, organized the Realty Syndicate with a few associates, of whom Mr. F. C. Haven was the most important. The main purpose of the Syndicate, in addition to serving as a holding company for their electric railway and other utility investments, was to buy, subdivide, and sell real estate in conjunction with transit line extensions. By 1902 the Realty Syndicate had bought up all of the East Bay independent electric railways, issuing, in time-honored fashion, much watered stock.

The Realty Syndicate and Key System were therefore in a good position to act when a real estate boom started in the East Bay in 1904, and lasted until 1912, with a major assist from the 1906 San Francisco earthquake. Forty-three thousand new lots were created by subdivision between 1904 and 1912, compared with just 8,000 in the previous eight years. East Bay urban population more than doubled between 1900 and 1910.<sup>4</sup>

During this period Key System undertook an aggressive program of extending new lines into undeveloped territories and sparsely settled areas, often in competition with Southern Pacific railway lines. "The construction of various . . . lines . . . were especially instrumental for rapid settling up of . . . heretofore unpopulated outlying sections . . . Within a few years new lines were constructed that had only before existed in the minds of the most optimistic, as a possibility of the dim future. Large increases in equipment was made and the car service extended as rapidly as material could be obtained. Real estate enhanced rapidly in value. New business blocks were constructed. Tracts of land, that had been farms, were subdivided, lots sold and residences built upon them and everyone was clamoring for new car lines and more service . . . "5

The City Attorney of Berkeley told the California Railroad Commission during a 1917 public hearing into a Key System application for a fare increase: " . . . at the time the Key route applied for and took its franchise in the City of Berkeley and the City of Oakland, it knew it would never obtain an adequate revenue at the prices at which it stipulated it would give service . . . Key went in there as a speculative proposition fathered by Smith and Havens, with one of its speculative objects the selling of real property throughout North Berkeley and in Piedmont and in various other places . . . The Key . . . has never earned an adequate return upon the money invested from the inception of its service, and I charge . . . that the proponents of that railroad knew that at the time they put it in and never expected to get any return . . . "

The profits came from real estate activities, and transit



construction and fare policies were designed to enhance these profits. As the President of the company operating the railways told the Railroad Commission, Mr. Smith controlled both Key System and the Realty Syndicate. " . . . the matter of operations or relations between the two companies has been very similar to the relation between the two pockets in the same man's trousers."<sup>6</sup>

By 1912, it was clear the East Bay was overbuilt with electric railways. There was much unprofitable mileage, and competition between Key System and Southern Pacific further damaged both company's financial positions. The Key System soon went bankrupt; the bondholders suffered, but the promoters came away with a great deal of money.<sup>7</sup>

Alfred J. Lundberg, a highly respected San Francisco banker, took over the job of reorganizing Key System, becoming President in 1927. Lundberg pursued two major policies to bring the transit company around. One was abandoning unprofitable railway mileage and substituting buses where appropriate. Abandoning these lines meant reducing maintenance expenditures for tracks, rights-of-way and electrical distribution facilities, street reconstruction and paving work, and taxes on privately owned rail rights-of-way. The other was introducing one-man streetcars in place of two-man operation on the remaining rail lines. The new labor policy was bitterly contested, however, by a coalition of transit workers and local governments, who argued that employment and safety concerns should be paramount. After an intense struggle with the Oakland City Council, the last local government to agree to the shift to one-man cars, Lundberg was able to complete the substitution. By 1932 there was one-man operation of all Key System streetcars.<sup>8</sup>

By 1939 Key System service in the East Bay looked much different

than it had before Mr. Lundberg. In 1925 buses carried two percent of the revenue patronage and operated six percent of the miles in East Bay local service. In 1939 the comparable figures for buses were forty-eight percent of the passengers and sixty-one percent of the miles. Revenue patronage, however, remained far below its 1925 peak level; forty percent fewer paying riders were carried between East Bay points in 1939 than in 1925. During the same period automobile registrations in Alameda County increased by more than eighty percent. Key lost money on its local lines during the worst Depression years, and barely broke even during the rest of the 1930s.<sup>9</sup>

Key System traffic on the East Bay lines surged during World War Two, as it did on transit systems all over the country, and the financial picture brightened a little bit. However, the equipment and facilities, already suffering from years of deferred maintenance and little new capital investment, took a severe beating. As in San Francisco, the remaining streetcars, tracks and rights-of-way were in especially deteriorated condition. Facing a need for major investments in new rolling stock and track and right of way reconstruction if street railway service was going to be continued, Key opted for the modernization program that Lundberg outlined in September, 1945.

Lundberg's efforts were supported by a committee of Oakland's leading business and professional citizens in a postwar plan presented by them to the city council. Substitution of trolley coaches and buses for the East Bay streetcar lines was recommended in their October report.<sup>10</sup> However, in May, 1946, Alfred Lundberg sold his controlling interest in the Key; the East Bay faced a new transit system management.

In May, 1946, control of Key System was acquired by National

City Lines (NCL), which was busy buying, selling, and operating transit systems all over California and the nation. One year previously NCL had bought control of the Los Angeles Railway Corporation, L.A.'s local transit service. The Los Angeles system was the largest operation in the NCL fold. At one point or another during the 1940s and 1950s NCL and people associated with it controlled most of the transit operations of any significant size in the state. These included, in addition to the Los Angeles Transit Lines, the transit networks of Glendale, Pasadena, Long Beach, Burbank, and Inglewood in the Los Angeles metropolitan area; systems in the valley cities of Fresno, Stockton, and Sacramento; and the operation in San Jose along with the Key System in the San Francisco Bay Area. Jesse L. Haugh, a Key System President during the years of NCL control, himself controlled the San Diego transit system, and created Metropolitan Coach Lines to take over the passenger operations of the Pacific Electric Railway in Los Angeles.<sup>11</sup>

The only large California transit properties that were missed by NCL were in the Bay Area: the San Francisco Muni, Pacific Greyhound commuter lines, and the Southern Pacific's peninsula commute service. Some of these were not missed for lack of trying, though. Jesse Haugh offered to lease the Muni from San Francisco and operate it for the city.<sup>12</sup> Another Key System President, Thomas J. Manning, tried to buy Pacific Greyhound's Marin County commuter service. The California Public Utilities Commission, however, denied Manning's bid.<sup>13</sup>

There was one important difference between the Key System and Los Angeles Railway acquisitions and the other National City Lines properties in California. The East Bay and Los Angeles operations were investments; the others were operating subsidiaries of the parent

National City Lines company. NCL acquired fifty-nine percent of the stock in Los Angeles and sixty-six percent in the East Bay.<sup>14</sup> This investment status would mean a relatively greater concern with dividend payments and other financial opportunities than with the operating characteristics of the service. This difference was reflected in the names chosen for the properties. The operating subsidiaries were given the name ". . . City Lines," whereas Key System was renamed Key System Transit Lines and the Los Angeles Railway Corporation became Los Angeles Transit Lines.

As in San Francisco there were two dimensions to the transit question in the East Bay. One was the modernization of existing facilities; the other was the provision of rapid transit. However, the fact that transit was supplied by a privately owned company that was regulated by a state agency created a very different institutional context. There were conflicts between the various departments of official San Francisco. Once a particular plan emerged from this vortex, however, and was financed by vote of the citizenry, the city could act. East Bay cities did not enjoy such direct participation in the determination of their transit future.

The movers behind National City Lines were the Fitzgerald brothers; the transit industry press referred to them as a family of transportation geniuses.<sup>15</sup> The Fitzgeralds noted that during the war transit patronage had surged. Their philosophy was to take all the measures necessary to make sure these wartime patronage gains were not lost during the peace. The major weapon in this struggle was the substitution of modern, efficient buses for deteriorated street railway facilities. Immediately after assuming control of Key System the new

management declared its intention to continue the modernization plan outlined by Lundberg. There would be one significant difference, though. Whereas Lundberg had planned to extensively use electric trolleys, NCL planned an all-bus system.<sup>16</sup>

Key went directly to the California Public Utilities Commission (CPUC) to ask for an increase in fares and to substitute buses on the College Avenue Line.<sup>17</sup> Within eighteen months and another fare increase later Key had moved to abandon all remaining East Bay street railways except the transbay rail lines and substitute buses.<sup>18</sup> Moreover, it became increasingly obvious that even if they had wanted to, Key System management would be financially unable to make the capital investments necessary to construct a rapid transit system. As in San Francisco, the Key experienced steadily declining patronage and increasing costs. The continuing series of fare increase and service cut applications to the CPUC indicated a worsening financial condition.

East Bay political leaders took action on two fronts in response to Key's modernization plan. Coalitions of local governments and citizens groups opposed Key's requests for fare hikes and equipment changes before the CPUC. They strongly argued for trolley substitution, as Lundberg had intended, instead of buses. Trolleys were considered to be cleaner, quieter and more spacious than motor coaches. East Bay officials also sought local government control over service and equipment policies. These were demanded in return for exclusive franchise agreements between the transit company and the cities it served.<sup>19</sup>

East Bay opposition to Key was supported by the nationally prominent planning consulting firm of Harland Bartholomew and Associates. Bartholomew had been hired by the Oakland Planning Commission to do the

technical work for the transportation sections of a master plan for the Oakland metropolitan area. In March, 1947, the consultants submitted "A Report on Transit Facilities and Mass Transportation in the Oakland Metropolitan Area." Bartholomew noted two interesting sets of facts. One was that existing East Bay transit service was much more oriented to San Francisco than it was to downtown Oakland. Many of the outlying bus lines were used as feeders to the Bridge Railway trains rather than converging on the Oakland central business district. The other was that automobiles were in evidence in the East Bay to a greater extent than in other similar-sized urban areas. Correspondingly, transit use was relatively low. During the evening peak hour only forty-five percent of the persons leaving the Oakland downtown zone left by transit.<sup>20</sup>

In the 1920s and 1930s downtown Oakland merchants had responded to their relative transit isolation and the large East Bay automobile population by organizing efforts to provide off-street parking facilities to attract people to the central district. The widespread use of motor vehicles was now causing congestion, however, which threatened property values and the viability of downtown Oakland business.

Bartholomew proposed to reorient East Bay transit service to the Oakland central business district. Express buses from East Bay residential areas to downtown were important innovations necessary to accomplish this. Bartholomew also recommended eliminating all local streetcar service immediately, except for five lines, which would be abandoned in a second stage. The consultants proposed using electric trolleys to replace the streetcars on the more heavily-traveled routes. Six trolley routes were projected for the first stage.

Bartholomew extended modernization to include the transbay rail

lines. Bartholomew suggested inaugurating a shuttle service across the Bridge Railway, except for the two most heavily traveled transbay routes, the Berkeley "F" train and the East Oakland "A" train. All other San Francisco bound commuters would have to transfer to one of these remaining trains to complete their trips across the Bay. The consultants realized that requiring a transfer created a major disadvantage for transit in its competition with the private auto. However, excellent transfer terminal facilities and frequent shuttle service could minimize the difficulties.<sup>21</sup>

These modernization suggestions were based on the extremely deteriorated condition of railway tracks in the East Bay. The consultants noted that the necessary rehabilitation to keep the street railways operating would be prohibitively expensive and would not return commensurate transit benefits. Interestingly, the Bartholomew plan briefly considered paving over the Bridge Railway tracks and substituting buses that would run in the former track lanes. While such service would be attractive to riders, it was not recommended because it would involve scrapping the large sunk investment in the Bridge Railway facilities.<sup>22</sup>

The Oakland Planning Commission adopted the Bartholomew plan as its own. One notable member of the Commission at this time was Sherwood Swan, who was a leading downtown merchant and transportation activist since before World War One. Swan would be a central figure in Bay Area transit politics for many more years. The Planning Commission sent the Bartholomew proposals on to the City Council, urging their approval.<sup>23</sup>

In November, 1947, the Oakland City Council approved the Bartholomew

transit recommendations, with the exception of those applying to the Bridge Railway lines. Pressure from commuters forced the Council to abandon the bridge shuttle service proposal. The shuttle idea was not dead, however. It would surface again during the latter 1950s and figure prominently in relations between the two Bay Area transit districts. The Council's adoption of the recommendation for extensive trolley use formed the basis for Oakland's opposition to the Key System's move to substitute buses for all remaining East Bay street railways. Its status as official policy also guided Oakland in its franchise negotiations with Key.<sup>24</sup>

Key System's version of modernization prevailed, however, despite all forms of East Bay opposition. Bitterly hostile franchise negotiations dragged on for more than twenty months. In addition to local government approval of service and equipment changes, Oakland demanded the Key pay franchise fees sufficient to cover the costs of street reconstruction work once the rails were abandoned. The transit management adamantly opposed granting local approval. Key argued, correctly from a legal standpoint, that cities had surrendered their regulatory powers vis-a-vis privately-owned utility companies when the CPUC was created in 1911. Key also said the franchise fees the city was demanding would bankrupt the company; they would force Key to seek fare increases in order to survive. The franchise agreement eventually signed contained no provisions for local control.<sup>25</sup>

In November, 1948, the CPUC granted the Key System permission to abandon all remaining East Bay local street railways and substitute buses. The Commission saw this as a necessary measure, enabling the private company to continue to operate. Such substitutions were, of



course, in line with long-standing Commission policies that were aimed at maintaining the financial viability of private transit.<sup>26</sup>

Based on these early postwar clashes, relations between Key System and its clients would continue to be extremely hostile until the day National City Lines was finally bought out. The Key System's corporate nature provided one of the central themes of this hostility. Within a month of the NCL takeover the Oakland Tribune published a letter to the editor from a W. H. Higginbotham, who warned fellow citizens that "The combine which took over the Key System was financed by bus builders, tire manufacturers and petroleum refiners. They propose to scrap all Oakland car lines primarily to create more outlets for automotive products . . . The city should take legal action now to prevent unwise vehicle selection for private advantage."<sup>27</sup> These charges of domination by motor vehicle-related interests would be furiously hurled at Key System throughout the 1940s and 1950s. When Key applied to abandon all remaining streetcars the Richmond Independent kept up the attack: "The affaire de la Key System is a natural result of having a local transportation company owned by a national outfit which feels no responsibility towards the people which it serves. The holding company which owns the Key System is, in turn, owned by stockholders, and these stockholders are companies which manufacture tires, buses, and gas and oil products. The operating sheets of the Key System can show a loss year in and year out, but you can bet your bottom transfer that the stockholders of the national outfit, the companies which are selling the tires, gas, and buses, aren't losing any money on their transactions."<sup>28</sup>

Ironically enough, as Key System proceeded to modernize during

the spring, 1947, the United States Attorney General announced grand jury indictments against National City Lines and several others, including General Motors, Phillips Petroleum, Firestone Tire and Rubber, Mack, and the treasurer of Standard Oil of California. There were two charges: conspiring to secure control of a substantial part of the nation's transportation companies; and monopolizing the sale in interstate commerce of motor buses, petroleum products, tires and tubes. Two years later the defendants were cleared of the first charge and found guilty of the second.<sup>29</sup>

There were two interesting and related by-products of the modernization clashes. One was that East Bay city officials began to organize themselves in order to gain leverage with Key. The first organizing effort was begun in June, 1946, when Berkeley Mayor Fitch Robertson was authorized by the Berkeley City Council to take steps to organize all the cities served by Key System into a transit commission.<sup>30</sup> The cities continued to meet during the franchise negotiations to develop strategy and tactics. The other by-product was that the possibility of municipalizing the private transit company was openly discussed. During the course of the difficult franchise negotiations and in response to continuing defeats before the CPUC, East Bay political leaders occasionally mentioned forming a public agency to take over transit in the area. Through the 1940s mentions of public takeover were employed primarily as a threat calculated to force Key System into being responsive to local demands. Most East Bay political and business leaders were ideologically opposed to public transit. Apparently the East Bay leadership didn't yet understand NCL's ultimate objectives in the East Bay; the Key offered to sell out

to Oakland at the price it paid to Lundberg, minus depreciation, plus ten percent. There weren't any takers at this time, though.<sup>31</sup>

The Oakland Chamber of Commerce and the Oakland Downtown Property Owners' Association both supported the Key System modernization plan. These groups were primarily concerned to get the deteriorated streetcars and their tracks off the streets. Once this was done motor vehicle traffic would flow more freely in around the central core. They were less concerned with whether buses or trolleys replaced the streetcars. Key System was a Chamber member, and the company advertised heavily in local newspapers; if the management said buses would help the company financially and would provide good service, the business groups supported buses.<sup>32</sup>

The Oakland Chamber was very worried, however, about the lack of interest in rapid transit. If the downtown business district was going to survive and prosper in the postwar world, it would have to be accessible to all parts of the rapidly growing East Bay region. Buses would never be able to supply the capacity for carrying people that the future development of the central business district required. The Chamber noted, in distress, that "No area has had optimum development with dependence on motor coaches." Only rapid transit could supply the necessary capacity.<sup>33</sup>

The Chamber was also disappointed with the rapid transit suggestions contained in the Bartholomew plan. Bartholomew had recommended constructing rail rapid transit lines in the median strips of several proposed East Bay freeways. However, this was a very long-term project, Bartholomew didn't say anything concrete about rail rapid transit in the near future and how to achieve it.<sup>34</sup>

The Oakland Chamber of Commerce felt the need to get started on a regional rapid transit system for the East Bay. Southern Alameda County was going to boom, both industrially and in terms of population, and so was central Contra Costa County. During the summer of 1947 the Chamber began urging the Oakland City Council to get other cities together for a study of rapid transit possibilities between Oakland and San Jose and between Oakland and Walnut Creek in Contra Costa County. The Chamber warned the city's development would be restricted if mass rapid transit linking the downtown area with the rapidly growing regions wasn't provided.<sup>35</sup> The Hayward Review noted, with more than passing interest, the Oakland Chamber's sense of urgency: "The plan was reportedly based on the assumption that Oakland can be developed as a trade center and the Hayward-San Leandro area could be developed as residential areas much more rapidly with an overall East Bay rapid transit system."<sup>36</sup>

Oakland's recently elected Mayor Joseph Smith reinforced this downtown Oakland focus when he confidently predicted that his city would replace San Francisco as the Bay Area's major metropole. Oakland had room to expand; San Francisco didn't.<sup>37</sup> The Hayward Review politely told the Oakland central business district group its rapid transit proposals did not take into account the needs of "satellite cities" like Hayward and San Leandro; Oakland was asked to attend to these needs in the formulation of plans.<sup>38</sup>

As in San Francisco, rapid transit was an issue that cut across class lines. Two citizens groups were particularly active on this question. One was the Oakland Voters League. This group had been a major factor in pulling off an Oakland political surprise during the 1947 local elections. The Oakland Voters League was a labor and

progressive citizens organization; four of its candidates won seats on the nine-member Oakland City Council following the brief General Strike in the city in late 1946. Transit had been an important issue for the Voters; the group was now calling for a regional rapid transit plan, and public ownership of transit if this was necessary to produce a rapid transit system. The Voters League argued that business ought to finance such a system, because business would benefit in the form of higher property values.<sup>39</sup>

The other group was the Bay Area Transportation League (BATL), organized in early 1947 and led by Robert B. River. He was also a member of the Oakland Voters League. River was a civil engineer; he had been a consultant to the Joint Army-Navy Board. He was also a Bay Bridge bondholder. He and his Transportation League devoted their energies to attacking the Key System, pushing for a regional rail rapid transit plan, and advocating public ownership of new and old transit facilities. River argued: "You don't have to be a Ph.D. to see that London, Paris, New York, Moscow, all the larger cities have learned it takes a mass transit system, employing electrified trains, to move people [in a metropolitan area]." <sup>40</sup>

Soon after its formation League membership was estimated at 1,500 people; by 1949 BATL claimed that 35,000-40,000 disgruntled commuters and organizations supported its efforts. Like the Oakland Voters League, BATL was a coalition of labor, small business, and professional citizens. The League called, for example, for night-time CPUC meetings, so the working people who were its members could join the paid representatives of the various parties in their deliberations. BATL spent a great deal of time testifying before the CPUC in opposition

to the Key System.

BATL also attacked the Bartholomew plan for a bridge shuttle system, arguing that it would worsen service for San Francisco-bound commuters. It was largely due to pressure from River and his group that the Oakland City Council decided to abandon the shuttle recommendation while the other Bartholomew proposals were being adopted. This was an important difference between BATL and the Oakland Chamber of Commerce on the rapid transit question: River and BATL were interested in a Bay region-wide rail rapid transit network; the Oakland Chamber was concerned with the relationship of downtown Oakland to the East Bay.<sup>41</sup>

The BATL carried the fight for public transit to the California Toll Bridge Authority. As a Bay Bridge bondholder, River sued CTBA to force a takeover of the Key System. He argued that a takeover was necessary because the Key was failing to pay its share of the principal and interest payments due on the Bridge bonds.<sup>42</sup> In 1950, however, River was fired from his job as an engineer with the Army. He charged, as he demanded an investigation, that he was fired because he worked too hard on behalf of commuters. The Tribune-led Oakland political establishment and CTBA exerted political pressure sufficient to have him removed, he charged.<sup>43</sup>

## V REGIONAL RAPID TRANSIT: THE MOVEMENT BEGINS

In December, 1947, Marvin Lewis proposed to the San Francisco Board of Supervisors a Bay Area Transit Authority to tie San Francisco, Alameda, San Mateo, Marin, and Contra Costa Counties together with rail rapid transit. Lewis was a leader in the southern crossing movement; he was now preparing to take up the other parts of the Joint Army-Navy Board's package plan. A transit tube under the Bay was key. This would allow the Bridge Railway to be paved, increasing motor vehicle capacity on the existing structure. The proposed Authority would plan and build an integrated regional rapid transit system; it would also coordinate all existing local transit systems.

The Supervisors agreed; they resolved to initiate meetings with representatives from the other eight Bay Area counties and the several cities. Mayor Robinson also favored a single Bay Area Transportation Authority that would acquire all existing systems with revenue bond monies and operate these with a regional rail system as a unit. Marvin Lewis, designated as San Francisco's representative to a regional transit committee, sent invitations to officials all over the area to participate in a meeting to discuss the issues.<sup>1</sup>

This invitation was received in the East Bay just a few days after Key System had applied to abandon all remaining local street

railways and substitute buses. It also followed East Bay discussions of an East Bay regional rapid transit system. These discussions, however, had remained vague. Oakland political and business leaders were ideologically opposed to public transit; this opposition restricted their capacity to act. The Oakland Tribune warned in an editorial criticizing a possible public transit agency, that "...the example of San Francisco does not provide a very successful example of municipal ownership."<sup>2</sup> Muni was losing money and receiving tax support. However, East Bay city officials were meeting to discuss the stalled franchise negotiations and the abandonment application; they voted to send delegates to Marvin Lewis's gathering.<sup>3</sup>

In late February, 1948, 150 representatives from all nine Bay Area counties authorized the creation of a Bay Area Transit Committee to study the issues and report on the feasibility of a Bay Area Transit Authority. Marvin Lewis told the meeting the regional rail rapid transit idea originated with the Joint Army-Navy Board. Lewis said, "There is a crying need for a great Bay Area Rapid Transit System that does not stop at county lines. The stress should be on moving people instead of vehicles."<sup>4</sup> San Francisco Mayor Robinson told the delegates his city was not trying to bypass the Bay Area Council by sponsoring the move for a Bay Area Transit Authority. BAC was actively trying to promote regional cooperation on a number of issues at this time. However, a move to put the exploratory work for a regional Authority in the hands of BAC was soundly defeated by the delegates. The Bay Area had just held its first-ever meeting attended by officials from all nine counties to discuss the subject.<sup>5</sup>

The new Committee received support and encouragement from Governor Warren. Warren told the Bay Area "...no matter how many



vehicular crossings are built, there is also an urgent need for rapid transit facilities." Los Angeles was at this very moment trying to organize itself to petition the Governor for a special legislative session call to enable creation of a metropolitan rapid transit district. Warren said he would seriously consider such a request, should it be forthcoming. He added that while a Bay Area rapid transit system was urgent, a program for it was lacking.<sup>6</sup>

The Bay Area Transportation League sent an Open Letter to Marvin Lewis and the Bay Area Transit Committee, welcoming them to the campaign for regional rapid transit. The League informed Lewis that it had been working on this issue for about a year. BATL was currently getting started on petition drives in the East and West Bays. In the East the League wanted to have the East Bay Municipal Utilities District, the agency that provided water, take over the Key System. On the West side the petition called for an election to create a West Bay Municipal Utilities District. These could be easily integrated later on. Work on a regional system could begin quickly under the auspices of these utility districts; new transit district legislation would not be necessary.<sup>7</sup>

The Hayward Daily Review editorially supported the idea of a regional rapid transit system to replace the existing patchwork of facilities. Recall that Hayward and Oakland were currently at odds over the bridge crossing issue. The editors took a swipe at Oakland as they encouraged regional transit: "Let us not be fooled either by Key System or by Oakland's 'traffic authorities.'" The ideal Bay Area traffic system does NOT hinge on getting rapid transportation to and from downtown Oakland. It does hinge on getting rapid transportation from

any one community to ANY other community in the same region."<sup>8</sup>

The downtown Oakland leadership had its own set of rapid transit priorities; it would not allow these to be submerged in the general regional euphoria. The Commonwealth Club of California held meetings on the question of a Bay Area Transit Authority in March, 1948. The Commonwealth Club was a Progressive Era organization of leading business and professional men from all over the metropolis. The Club was dedicated to getting the facts and proposing sound, businesslike solutions to pressing social and economic problems. Oakland Mayor Joseph Smith outlined his city's priorities for the Club's Highways and Transportation Section. Smith said that Oakland had a three-part view of the regional rapid transit question. There was an East Bay part; rapid transit lines in the East Bay would center on downtown Oakland. There was a peninsula part; Smith assumed these lines would center on San Francisco. Finally, there was a connection between the first two parts. Smith made it clear these were three separate issues; the last two were of much lower priority to Oakland than was the East Bay network.<sup>9</sup>

Smith's description of the Oakland view is extremely important to note. Recall that Bartholomew pointed out the existing East Bay transit system focused on San Francisco rather than downtown Oakland. Moreover, it was clear Key System would not be undertaking any new extensions of transit service in the East Bay. The downtown Oakland demand that any rapid transit lines built in the East Bay center on downtown Oakland was non-negotiable; it represented Oakland's condition for participating in a regional rapid transit movement at all.

In May, 1948, thirty-seven delegates from the nine Bay Area counties met to form a Bay Area Transit Committee. Marvin Lewis was

elected chairman, and Frank Marsh, general manager of the Bay Area Council, was elected executive secretary.<sup>10</sup> Following this meeting Oakland City Council member and Transit Committee delegate Vernon Lantz tried to get his fellow councillors to approve the concept of a Transit Authority for the Bay Area. Lantz introduced a resolution to this effect. However, Lantz's resolution was not on the Council agenda; a great deal of turmoil resulted from its introduction. It was clear there was considerable opposition to the proposal. The resolution was tabled. Marvin Lewis anxiously followed the matter.<sup>11</sup>

When the Oakland City Council next took up the Transit Authority issue the lines of conflict were clear. Mayor Smith told his colleagues what he had told the Commonwealth Club. San Francisco should take care of its own transit problems and leave the East Bay alone to do likewise. Lantz's resolution approving creation of a Transit Authority was defeated by a seven to two vote. The only other Council member voting with Lantz was Raymond Pease. These two were the only members remaining loyal to Oakland Voters League principles of the four originally elected. A substitute motion by Pease to invite the other East Bay cities to jointly investigate an East Bay transit district was, however, passed.<sup>12</sup> As he voted against a transit authority Councilmember Scott Weakley declared: "This is an attempt to saddle the whole Bay Area with San Francisco's defunct transportation system."<sup>13</sup> Marvin Lewis was now acutely worried that Oakland "misunderstood" the purposes of his regional transit committee. He asked to address the Oakland City Council and straighten out any misconceptions.<sup>14</sup>

In the middle of June Lewis told the Oakland legislators that he was only developing the ideas advanced by the Joint Army-Navy Board. This was by no means a San Francisco plot. "We're not trying to foist

upon you San Francisco's local transit difficulties nor are we concerned with the individual problems of any one of the jurisdictions involved."<sup>15</sup> Council member Clifford Rishell, who would soon be Mayor, was not convinced. Rishell referred to Lewis's proposal as a "planned attack" by San Francisco upon its neighboring communities. He linked it with the fruitless efforts of San Francisco to draw the other counties into a San Francisco-dominated form of government.<sup>16</sup> This was a reference to a remark made by then San Francisco Mayor-elect Robinson. Robinson had said he had a plan to consolidate San Mateo, Marin, and Alameda Counties with San Francisco to form a "Greater San Francisco." This new entity would have a New York-style borough form of government. Robinson didn't say so, but he probably figured his city would play Manhattan in this new arrangement.<sup>17</sup> Rishell was "...interested in transportation, but not in getting people to San Francisco to spend money they would normally spend in Oakland."<sup>18</sup>

Mayor Smith told Lewis that a study of the question was acceptable, but Oakland was not going to commit to support of one, two, or three transit authorities now. The City Council went on to agree to study Bay Area rapid transit, but no more than that.<sup>19</sup>

The Oakland leadership had several related difficulties with a San Francisco-led regional transit movement. The first and most important was its competitive desire to escape from its junior partner role in a San Francisco-dominated region. Downtown Oakland merchants and commercial property owners were supported by local political leaders, city technical officials and the Tribune in this quest. This coalition's concern was to secure downtown Oakland's relation to rapidly growing East Bay areas.

A second concern was this suspicion that San Francisco was trying to get the entire region to bail out its failing venture in municipal transit ownership. Muni was piling up deficits and continually seeking tax support. This concern was heightened by San Francisco statements that the proposed authority would take over all existing operations. Key System was obviously in bad financial shape; but it was not causing increased taxes.

The third difficulty was based on ideological opposition to public transit. While it was clear that the Key would be unable to supply the transit capacity downtown Oakland desired, the Oakland leadership was reluctant to admit that private capital had failed in this industry. Council member Rishell articulated this opposition: "Public ownership means subsidies, and subsidies mean higher taxes. The sorry past and present examples of San Francisco, Seattle, and Salt Lake City...prove conclusively that public ownership means management by bureaucrats, which again means higher costs and less efficiency."<sup>20</sup>

During the latter part of 1948 the Bay Area Transit Committee bogged down. The issues were very complex and difficult for non-technical volunteers to master while meeting on an irregular basis. Moreover, all the old inter-community competitiveness paralyzed effective action. In November a weary Marvin Lewis asked his Committee if they wanted to invite the Bay Area Council to study the transit issue and prepare a statement of the problem. The Transit Committee agreed to ask the BAC to intervene.<sup>21</sup>

Lewis took this request to the BAC. He pointed out that since BAC already had functioning groups in each of the nine counties it would be in a better position to take action. Furthermore, Lewis informed the Council that the Los Angeles rapid transit movement would be active in

the 1949 legislative session. The Los Angeles movement had been unable to organize itself to request a special session in 1948. However, they would be seeking district legislation early in 1949. This would be an excellent opportunity for the Bay Area to join with Los Angeles in seeking the necessary law; cooperation would increase the chances for favorable state legislative action. The BAC agreed to consider the Transit Committee's request.<sup>22</sup>

However, the Committee's appeal was drowned by another eruption of the bridge crossing controversy. Ralph Tudor recommended building a parallel bridge immediately and a southern crossing later. San Francisco was in an uproar; Mayor Robinson was going to talk to President Truman. The Bay Area Council had been involved in the bridge question since the beginning; the Council now decided its highest transportation priority was working to resolve the Bay crossing controversy. The transit question should wait on this resolution. BAC refused the Transit Committee's request to become involved.<sup>23</sup>

The 1949 legislature was in session, though; Los Angeles was sponsoring action. San Francisco state Senator Gerald O'Gara, supported by Marvin Lewis and Mayor Robinson, decided to introduce a bill which he hoped would include Los Angeles. It would be a skeleton measure; O'Gara intended to flesh out the measure through amendments later in the session. Perhaps in a few months the Transit Committee and/or BAC would be able to contribute something of substance.<sup>24</sup>

In March O'Gara's skeleton bill began to draw fire. The Oakland Tribune noted that "Some legislators have expressed fear that the district organization setup to be spelled out in later amendments might give San Francisco the whiphand and that the other participating counties might as a consequence be saddled with some of the costs of operating

that community's antiquated and inadequate transportation system." The Tribune editorialized its suspicions about San Francisco's motives, saying it would be a mistake to push a bill creating a district through the legislature before a thorough study was done.<sup>25</sup>

In April, though, the Commonwealth Club of California gave the rapid transit bill a shot in the arm when the Club membership voted its approval of a transit authority with power to tax property to provide a regional transit system. The City Planning Section of the Club voted that such an Authority should control all interurban rail and bus lines in the region, plus the local transit operations in San Francisco, Alameda, and Contra Costa Counties. This would involve buying Muni, Key System, and part of Pacific Greyhound. The Club's Highways and Transportation Section pointed out the difficulties involved in taking such action: "We have been informed that ownership of strictly local transit properties would be essential to improvement of less profitable interurban lines. But would voters of any county approve formation of a multi-county district which could issue bonds and increase their taxes, perhaps largely to benefit transit in another city or county?"<sup>26</sup> This was, of course, precisely what Oakland was trying to prevent.

In May amendments were moved by Senator O'Gara to flesh out the skeletal bill he had introduced in January. These amendments provided transit districts with a set of tools that would make them the most powerful transit agencies in North America. The bill was a general enabling act; a district might be formed anywhere in the state. It might lie within the boundaries of one or more counties. The district would be created when County Boards of Supervisors declared their intention to form a district, set an election, and a majority of all votes

and a majority of all cities and counties involved approved. This complex voting requirement was included primarily at the insistence of the several dozen smaller cities in Los Angeles County. They were worried that a large positive vote in the City of Los Angeles might force all the other cities in the county into a district even if they didn't want to be included.

The district board of directors would be appointed by either mayors or county boards of supervisors. The board was charged with preparing a comprehensive rapid transit plan. Rapid transit meant rail, monorail, or subway transportation; buses were included, however, in the definition of rapid transit facilities, and the district could purchase rolling stock of all kinds, including buses. The district would also have full powers of eminent domain to acquire existing transit facilities.

A district would finance its project by issuing general obligation bonds upon affirmative vote by two-thirds of the district electorate. Bonds could be issued in an amount up to twenty percent of the assessed valuation of property in the district. The directors could levy a tax on district property for all purposes including, but not limited to, paying principal and interest on the bonds.<sup>27</sup>

The financing powers granted a district by these amendments were without precedent in the transit field. An appointed board of directors would be authorized to issue tax-secured bonds without the specific approval of locally elected officials as to where rapid transit lines would be built. This same board was not limited as to what tax rate it could set; finances could be so managed that taxes could partially support operating costs allowing lower fares. A district



set up under these conditions could condemn those existing transit lines it thought appropriate for its projected system, and freely operate those feeder routes it deemed necessary to supply convenient service. No other existing public transit agency enjoyed such wide-ranging powers and such autonomy from local political forces. An appointed rather than elected board of directors was intended to facilitate a "non-political" approach to sensitive regional questions.

During the latter part of May, however, internal conflicts tore the Los Angeles movement apart and seriously disrupted the Bay Area contingent. On May 23 amendments were moved by Senator O'Gara that limited the district to the San Francisco Bay Area. San Francisco and Oakland were now necessary parts of a regional transit system; other Bay Area cities and counties could join or not as they wished. However, a majority of votes cast in San Francisco and Oakland would create the district. Since San Francisco had about twice Oakland's population, a district creation proposal could be successful even if it lost in Oakland. At the same time the financial power of the district was restricted. In place of an unlimited taxing power, the new amendments limited the tax rate to ten cents per \$100 assessed valuation of district property.<sup>28</sup>

O'Gara added a new section to the bill at this time; a legislative finding and declaration of purpose: "Private enterprise has not and cannot construct or maintain an integrated, rapid, and efficient means of transporting persons throughout the area. It is therefore necessary to create a political subdivision with the consent of the people therein, to finance, construct, operate or cause to be operated and maintain such a transit system in the interest of the people of the

State as a whole."<sup>29</sup> The language "...cause to be operated..." was intended to leave open the possibility that publicly owned rapid transit facilities could be privately operated through a lease arrangement; this maintained a potential role for private enterprise.

O'Gara also moved an amendment designed to protect existing private carriers, restricting the power of a district to design an integrated system. A district could now "...operate such feeder bus lines as are necessary to give reasonable access to the rapid transit facilities, if such service is not being otherwise provided, and existing operators in the area decline to undertake such operation." This provision would prevent the district from competing with existing companies on lines connecting to the rapid transit system. The consequence would likely be to force the district to use its eminent domain power to condemn the existing carrier and buy it out if the district wanted to assure the kind of integrated, extensive feeders necessary to provide convenient, attractive service.<sup>30</sup>

Reaction to O'Gara's finding that private capital was unable to play a progressive role in regional rapid transit was swift and hostile. Just three days later O'Gara was forced to move the elimination of this section; in its place he declared "Only a specially created district can freely operate in the seventy-eight individual units of county, city and county, and city governments located in this area."<sup>31</sup> The problem was no longer due to the incapacity of private capital; it was now the inability of fragmented local government units to effectively take action.

This new finding soon proved to be thoroughly ironic. Two weeks after the legislature found Bay Area cities unable to act

collectively, O'Gara was forced to move another amendment requiring that San Francisco, Alameda, Albany, Berkeley, Emeryville, Hayward, Oakland, Piedmont, and San Leandro were all necessary parts of a district, instead of just San Francisco and Oakland. A majority vote in each of these cities was necessary to form a district.<sup>32</sup> This provision would allow any one of these cities to veto the entire district formation process; it would prove to be the bill's fatal flaw.

There was one more significant amendment to the Bay Area transit bill before it passed. The power of eminent domain was restricted in order to further protect the interests of existing private carriers. Formerly the district could institute condemnation proceedings and buy out an existing private carrier at current market values. Now, eminent domain proceedings were subject to the plenary jurisdiction of the CPUC.<sup>33</sup>

This was not quite all, though. A statement was signed by twenty-four of the forty state senators saying they would not support what remained of the O'Gara bill unless they were given assurances that the bill's passage would not block construction of a parallel crossing. O'Gara agreed.<sup>34</sup>

The various amendments to the transit district bill were forced by Alameda County Senator Arthur Breed, Jr. Breed was a close political associate of Tribune publisher Joseph Knowland. He was concerned to defend Oakland and private transit from San Francisco's attack. He argued that "We are not ready for public ownership at this time." In Breed's view, "...regardless of verbiage, the issue here is between private enterprise and public ownership." He charged that "The effect of this particular bill would be that the San Francisco Public Transport System would gobble up the private company operating

in the East Bay. Alameda County people would have to pay for San Francisco's streetcar system. Alameda County would become the tail to the dog, and we don't propose to be wagged around by somebody else."<sup>35</sup>

O'Gara replied to Breed that the chief objections to his bill came from Key System, "...which has the saddest record in the country.... It has failed and failed miserably or this bill would not be here." O'Gara insisted the question was whether the Bay Area should take action on the problem, or postpone it as a favor to Key.<sup>36</sup> Contra Costa County Senator George Miller also attacked Key System for opposing the bill, and Breed for supporting Key: "This is not a question of socialism but whether private ownership can provide service." Miller's home city of Richmond couldn't get decent service from Key; they had concluded that public subsidy was necessary.<sup>37</sup>

Oakland and Key System prevailed, however. No district would ever be formed under the provisions of the 1949 metropolitan rapid transit district act. Oakland and San Francisco had fought each other to a stalemate on the bridge crossing issue. The 1949 Act reflected a transit stalemate between Oakland and San Francisco as well. This was not an auspicious beginning for the Bay Area regional rapid transit movement.

In San Francisco Marvin Lewis tried to get the derailed regional rapid transit movement back on track. The unworkable 1949 Act could either be amended in 1951, or entirely new legislation could be introduced. An advisory committee of concerned and influential citizens was needed to think about how to proceed.

In September, 1949, the San Francisco Board of Supervisors passed a Lewis resolution asking Mayor Robinson to appoint such an advisory committee. The Mayor vetoed the resolution. Robinson wanted

regional rapid transit, but he also wanted this advisory committee to have some money so it could do some real work. In November Lewis got the Board to approve a \$5,000 appropriation; just before Christmas the Mayor appointed a rapid transit citizens advisory group. Its members included: Henry North, of the Pacific Mutual Life Insurance Company; Alan Browne, an officer of the Bank of America in charge of municipal bonds; Arthur Dolan, a member of the Blyth and Company investment banking firm; Cyril Magnin, a leading San Francisco department store merchant; and several other prominent representatives of the banking and related finance industries.<sup>38</sup> Browne, Dolan, and Magnin would be active on this issue for many years. Dolan would be a leading activist all the way until the BART bond issue in 1962. The point to note here is where these people come from; they are all representatives of merchant and financial capital. They are the heart of the San Francisco wing of the regional rapid transit movement.

Bankers were crucial participants in every public works project that would be financed through the sale of bonds. They acted as gatekeepers to the sources of private investment capital; they determined the financial soundness of a public works project. In general, commercial and investment bankers had three major concerns in connection with financing public construction. One was a direct interest in the profits that flowed from underwriting bond issues. Since the mid-1930s only investment bankers could underwrite the sale of revenue bonds; both investment and commercial banks could underwrite general obligation bonds.<sup>39</sup> A second responsibility was to protect bondholders. Bondholders had to be protected from making unsound investments. Once investments were made, bondholders needed protection against threats

to the ability of the issuing agency to make interest and principal payments. The final concern was to prevent public agencies from undertaking financially unsound projects. An agency burdened with too much or bad debt endangered its own future, the future borrowing capacity of other agencies in the area, and the bond market generally.

San Francisco bankers had additional, particular concerns. San Francisco's financial district was pre-eminent in the western United States. As financial district firms extended their involvements regionally, nationally, and internationally, they would generate more traffic: more personnel and more business transactions. If this growth was going to be accommodated in the district, sufficient transportation capacity would be required.

This concern with traffic capacity was shared by downtown merchants, real estate interests, and the city's political and planning leadership. The downtown shopping district, like its financial counterpart, was the leading concentration of retail sales activity in the west. The merchants wanted increased traffic capacity to accommodate more financial district workers, who were also retail customers, and to provide convenient access to potential shoppers living in suburban areas. Downtown merchants faced extremely strong competitive pressures from suburban shopping centers. Congestion-free access and spacious parking lots were two of the attractive features of these suburban complexes. A few of the largest department stores responded to these pressures by building suburban branch stores. This option was not available, however, to many other downtown merchants; even for those companies that branched out the downtown store usually remained the anchor. The downtown real estate industry was interested

in the land prices and rental levels associated with the demand for office and commercial space. Central district locations faced competition from suburban office, commercial, and professional zones. Adequate transportation capacity was a critical factor in maintaining the competitive position of downtown sites.

These varied and related economic interests were mobilized and promoted by local government officials, the major newspapers, and planning professionals. Their common interests in economic growth and the level of city services were reflected in the concern of all for the value of local real property. As a textbook on the subject of real estate and city planning instructed: "It is obviously an important function of city planning to see to it that the plans are aimed at supporting and enhancing real estate values. Any loss in the desirability of a community as a location for a residence, is critical, as is any loss in its attractiveness to industry, or a decline in desirability of shopping centers resulting in the construction of new shopping centers outside the community which captures its former business. Even the smallest of such losses represents the first step toward community bankruptcy."<sup>0</sup> The value of real property affected the ability of local governments to sell bonds to finance growth-attracting improvements. Property values were implicated as both cause and effect everywhere in an urban political economy.

This same coalition of economic, political, and technical interests--minus the financial concentration unique to downtown San Francisco--was active in cities throughout the Bay Area. These coalitions were concerned to establish their economic independence from San Francisco. Transportation facilities were critical in their quest to attract investment to their areas. Regional projects

promoted by San Francisco would, as the conflicts between San Francisco and Oakland over bridges and transit made clear, be suspect.

Rapid transit was only one element in a broader transportation strategy that also included freeways and off-street parking facilities. It is important to note that the same downtown groups in San Francisco, Oakland, Los Angeles and elsewhere that led the postwar rapid transit movements also led movements for metropolitan freeways and off-street parking. The motivation was to supply the transport capacity necessary to bring as many people downtown as possible. There wasn't any conflict between transit and automotive facilities in this regard; the competitive dynamic structuring investment in transportation meant that as much as possible of both kinds were desired.

The Los Angeles Chamber of Commerce led the rapid transit forces in the state legislature in 1948 and 1949 in a failed effort to secure a transit district for their region;<sup>41</sup> the same L.A. Chamber was the leading proponent of a vast network of downtown oriented freeways, many of which would carry rail rapid transit lines in their medians, and of extensive parking facilities in the central core. The San Francisco Chamber of Commerce was likewise the leading advocate of an extensive network of downtown focused freeways for their city. The S.F. Chamber worked closely with the state highway agency, mobilizing support for the local freeway program. The Oakland Chamber of Commerce played an analogous role in the East Bay. Professional planners all over the Bay Area drew master plans proposing extensive downtown-oriented freeway networks. These groups were likewise vigorous



supporters of rapid transit systems focused on their central areas.

In San Francisco, for example, the Downtown Association declared a Market Street subway their number one priority for 1949. The Association was also one of the leading members of a group that worked to secure a state law enabling creation of local parking authorities. When the San Francisco Parking Authority was formed in 1949 Mayor Robinson appointed the Manager of the Downtown Association General Manager of the Parking Authority.<sup>42</sup>

In Oakland Edgar Buttner and R.W. Breuner led the formation of the Oakland Central Business District Association. This Association called for building rapid mass transit, off-street parking, new free-ways, and urban redevelopment.<sup>43</sup> Both of these men, an electrical contractor and a furniture merchant, respectively, would be members of the Bay Area Rapid Transit Commission. Buttner was also chairman of the Mayor's Off-Street Parking Committee in Oakland, which was urging the creation of a Parking Authority to build downtown lots. Imagine-- Buttner was accused of advocating "socialism" by private parking lot owners in the city. Marston Campbell told him: "...if we are going to provide housing for the underprivileged automobile, let's go all the way into socialism." Buttner replied, "When the early day governments first took over the toll roads somebody probably hollered socialism."<sup>44</sup> The off-street parking industry was another one where private capital would no longer supply the investment necessary to provide adequate facilities.

One group conspicuous by its absence from the rapid transit movement were manufacturers not directly involved in construction and equipment supply. Not a single such manufacturer was involved

throughout the entire Bay Area transit planning process. The reason for this was straightforward: transit was irrelevant to them. It was also irrelevant for the vast majority of their industrial production workers.

Key System traffic engineer J.R. Worthington pointed out the effects of the continuing dispersion of industrial production, workers' residences, and rising real incomes for organized workers: "At one time we could consistently figure that in any large industry that we would carry from fifteen to twenty percent of the workers. Today [the early 1950s], that figure will run between three and five percent."<sup>45</sup> At the beginning of World War Two the California Railroad Commission did a survey of the journey to work by industrial production workers. It found that in the Bay Area more than eighty percent were arriving at the plant gate by car. In the Los Angeles area the automobile figure was still higher.<sup>46</sup>

Transit had never served industrial production workers in the United States very well. Neither the horse-drawn nor the electric street railway companies built many of the crosstown lines that would link workers' residential areas with points of industrial production.<sup>47</sup> Yet even though transit disappeared as an industrial working class issue after the 1940s, one of the more fascinating aspects of the propaganda produced by downtown rapid transit activists was the benefits transit would provide for industrial workers.

The other important reason why most manufacturers weren't concerned with transit was that manufacturers, wholesalers, and shippers were interested in freight. Transit obviously didn't move any freight. Organizations promoting the interests of these groups cared about port

facilities, airports, bridges, freeways, freight terminals, and industrial parks.

The relationship between transit equipment manufacturers and downtown merchants, financiers, and real estate interests was, however, historic. Around the turn of the twentieth century Westinghouse and General Electric joined with these groups to electrify horse-drawn street railways. The attraction of electrification was clear and dramatic. The electricians would go twice as fast as the horses; therefore, they multiplied the amount of land that could be developed within the same commuting time range. The two equipment manufacturers facilitated this transformation in material ways.<sup>48</sup> Their relationship with local street railway companies was quite similar to the relationship between National City Lines and General Motors, Philips Petroleum, Firestone Tire and Rubber, and Standard Oil of California. General Electric manufactured electric trolley coaches which it actively promoted throughout the transit industry; G.E. also propagandized on behalf of electric rail rapid transit systems during the 1940s and 1950s.<sup>49</sup>

The land development process had radically altered since the halcyon days of transit line extensions. The transit vehicle no longer led the development process. Suburban population growth following the second World War took place away from existing transit lines; the motor vehicle now played the developmental role. The downtown financiers were as involved in the postwar suburban building process as they had previously been. However, new commercial and real estate interests took root in the suburbs that were in competition with the older, established business districts. The project of the downtown coalitions was to provide the transportation facilities to bring the people living

in these suburban areas downtown to work and to shop. Existing facilities were inadequate to do this. Street traffic was slow for both automobiles and transit vehicles. Caught in traffic congestion in the streets, travelers would not be able to get downtown sufficiently quickly to offset the attractions of suburban locations. Therefore, grade separation and exclusive rights-of-way were the critical elements of downtown transportation plans. Grade-separated freeways and off-street parking to speed motor vehicle travelers; grade-separated transit vehicles operating on exclusive rights-of-way for transit travelers. These would permit large volumes of suburban residents to come downtown as easily as they could reach suburban centers. As planners pointed out, both freeways and transit would be necessary; freeways and parking lots alone could never provide all the capacity to move people into and out of downtown because they were too land-intensive. Rapid transit could supplement freeways without disrupting existing land use arrangements.

The transportation facilities sought by downtown coalitions were aimed at overcoming the speed limitations of existing modes caused by increasing traffic congestion in the streets. Street facilities were no longer adequate for a metropolitan-scaled economy. If large volumes of traffic were to move over metropolitan distances, specialized facilities were going to be required. Only a rapid transportation system could both extend outwards the boundaries of settlement, opening up new territories for development, and at the same time, bring those settlers back downtown. The crucial problem faced by the downtown coalitions was the existing transit operators were not prepared to carry out their part in this strategy. By 1950 all four Bay Area transit firms

were in desperate financial shape.

The decline in revenue patronage on the San Francisco Municipal Railway between 1945-46 and 1949-50 was steep--from 244,000,000 to 188,000,000. This represented a decline of twenty-three percent in four years. The Railway management noted, though, the declines were concentrated in the off-peak hours; rush hour traffic volumes remained stable. The two fare increases in this period apparently accelerated the slide. Following these hikes patronage declined by eight and nine percent compared with three and four percent declines in the other two years.<sup>50</sup> The increases drove away short-haul riders; more people walked relatively short distances instead of riding.

Muni's financial condition worsened; tax subsidies of a few million dollars per year were common. In late 1949 the Railway management proposed a series of service cuts to save money. Some of these proposed cuts would have affected service in the West-of-Twin-Peaks area, the section of the city opened up for development by Muni a generation previously. Merchants, real estate people and homeowners loudly protested these cuts. Muni was accused of attempting to make these fast-growing neighborhoods "blighted areas." The Railway management backed down and cut service elsewhere.<sup>51</sup>

Patronage continued to decline on Muni through the middle of the 1950s; however, once patronage had fallen to about 140 million it remained there through the early 1960s. There was one more fare increase, from ten cents to fifteen cents, in 1952, but there weren't any more hikes for many years after that. Tax subsidies increased to around six million dollars yearly.<sup>52</sup> However, the defeat of Muni modernization bond issues in 1952 and 1953 forced the management to

begin leasing new vehicles in order to continue the modernization process. The new buses enable Muni to greatly expand the number of express bus routes operated. The completion of the Bayshore Freeway in the middle 1950s permitted some expresses to use the freeway for a part of their trip.<sup>53</sup> The philosophy guiding Railway management remained constant throughout this difficult period, though. The San Francisco Public Utilities Commission articulated this philosophy in several annual reports. SFPUC noted that San Francisco had the second highest level of per capita transit ridership in the United States: only New York City had a higher level. Moreover, the fifteen cent fare was a real bargain. Only two other major U.S. cities, Boston and New York, maintained a fifteen cent fare. These two, in addition to San Francisco, heavily subsidized transit. SFPUC explained the "Reason for the fifteen cent fare is the city's official policy to subsidize transit as a necessary and essential public service. The policy is based on recognition of the Muni as a virtual 'lifeline' between districts and downtown to the vital shopping and financial sections, an area small in size but giant in economic proportions since it comprises from seventy percent to eighty percent of San Francisco's tax base. If it were not for the Muni sure traffic strangulation would quickly result in rigor mortis downtown."<sup>54</sup>

These downtown-oriented priorities continued to focus Muni's limited energies where they always had been centered; the crosstown routes the Transportation Technical Committee had advocated in 1947 were never established, for example. Within its limited means, Muni tried to do its part. However, once the regional rapid transit movement moved to the forefront of transit politics, the Muni's fortunes

were tied to the regional movement's program.

Patronage declines on Key System were even more staggering than on Muni. In 1946 the transbay service carried a total of 31.5 million revenue passengers--22.2 million of these people traveled by rail, and 9.3 million by bus. By 1950 the total number of revenue passengers had declined to 18.3 million, a forty-two percent drop in four years. Rail traffic had declined relatively more than bus, to 11.8 million, or twenty-four percent of Bridge Railway capacity.<sup>55</sup> East Bay local traffic showed similar trends: patronage dropped from 121.7 million to 76.2 million, a thirty-seven percent decrease.<sup>56</sup> The Key management noted a pattern similar to that prevailing in San Francisco: patronage declines were concentrated in the off-peak hours; rush hour traffic remained steady.<sup>57</sup>

Key faced increasing costs as patronage declines cut into its revenues. The private company responded with a series of fare increase and service cut proposals. Key claimed constantly that it was losing money, and unable to extend service to rapidly growing suburban areas, or to institute many express bus operations.

In September, 1949, just a few months after the metropolitan rapid transit district act had passed, the Key System applied to the CPUC for permission to make service cuts. The Oakland City Council reacted bitterly to this announcement. Key also said it would soon be seeking additional fare hikes. Oakland Mayor Clifford Rishell was directed by the City Council to appoint a committee to study the creation of a transit authority. Rishell convened a meeting of representatives from East Bay cities late in the month. The group decided to consider the transit question independently of San Francisco. They asked for a statement of the problem from the Oakland City Planning Commission

staff.<sup>58</sup> East Bay leaders also protested Key System cuts before CPUC. The Commission supported them in their plight, ordering the Key not to make certain changes.<sup>59</sup>

In March, 1950, the city planners reported. The transit situation was clear, they argued: private capital was not interested in rapid transit for the East Bay. Key System was barely holding itself together, physically and financially; it was not about to undertake any bold new ventures. A public agency was necessary; the planners urged the formation of such a public agency in the East Bay. They advocated proceeding in the East Bay without waiting for overall Bay Area agreement. The planning staff thought, as the Mayor and Chamber of Commerce had declared in 1948 and 1949, that San Francisco ought to pursue its interests in the other west bay counties. A physical integration of East and West Bay transit systems at a later date would be physically simple. "A connection with more than adequate capacity already exists--the Bridge Railway."<sup>60</sup>

The East Bay business and political leadership reluctantly took this report under advisement. In June the Key System was once again before CPUC asking for a fare increase. An unemployed Robert River led the Bay Area Transportation League into battle against Key one more time.<sup>61</sup>

Key was joined at the CPUC during 1950 by the other two major Bay Area transit carriers, Southern Pacific and Pacific Greyhound. This was the third fare increase sought by the Southern Pacific (SP) since the end of the war. SP had been facilitating the growth of "stockbroker suburbs" down the peninsula since the nineteenth century.<sup>62</sup> Revenue patronage was slowly but steadily increasing on its trains



between downtown San Francisco and San Mateo and Santa Clara Counties. However, despite the patronage gains and the previous fare increases the railroad claimed to be losing more than one million dollars per year in out-of-pocket operating costs alone. The fare increase SP was now proposing would only cut losses in half; the company believed it had already reached the point of diminishing returns in regard to increased fares.

The concentration of traffic on rush hour SP commuter trains was virtually complete. Seventy-five percent of the total movement to San Francisco traveled during the morning peak hour. Eighty-three percent of all passengers paid commutation fares to go downtown and back home. The railroad found that two-thirds of its locomotives and coaches utilized in peninsula passenger service were used for only three hours per day. All costs were increasing, as they were for every transit operator, with the exception of fuel oil (!). The railroad argued that passenger train deficits were harming its freight business. SP faced two impossible choices because of continuing passenger business losses. Either SP raised its freight rates to compensate for passenger train losses, thereby hurting its competitive position vis-a-vis other freight carriers; or SP absorbed the losses without increasing freight rates, thereby decreasing its profits and preventing the railroad from making necessary new investments.<sup>63</sup> SP wanted relief.

A coalition of real estate interests, home builders and commuters opposed the SP fare increase proposal before CPUC. The opposition hired its own expert; he agreed that SP was losing money, but \$340,000 less than the railroad claimed. The coalition was led by the David Bohannon organization, one of the largest real estate

developers in the Bay Area. All protestants charged that increased fares would be a deterrent to home building and buying on the peninsula; property values would be threatened. The coalition argued that it was entirely appropriate for the SP to subsidize passenger train losses from profitable freight operations. This was the progressive thing to do.<sup>64</sup>

CPUC, however, pointed out that peninsula commuters enjoyed a generally excellent transit service, and among the lowest commutation fares in the nation. Moreover, the Commissioners thoroughly rejected the notion that freight traffic should subsidize passenger operations. The fare increase was granted.<sup>65</sup> It was clear, though, that SP's main concern was its freight business. In Los Angeles, the Pacific Electric Railway, which was owned by the Southern Pacific, had just been granted permission by CPUC to abandon several of its interurban railway lines and substitute buses. Pacific Electric would continue to carry freight, however, on most of these tracks. PE's freight operations were very important for SP's freight business in southern California.<sup>66</sup>

Pacific Greyhound supplemented SP down the peninsula, and took over transit operations from the Sacramento Northern Railway in central Contra Costa County and from the Northwestern Pacific Railroad Company in Marin. Pacific Greyhound ran buses between points in these counties and downtown San Francisco. The company had not had a fare increase on the latter two services since taking them over in the early 1940s.<sup>67</sup>

In 1950 Pacific Greyhound claimed it was losing so much money on its Bay Area transit services--\$1.5 million on the Marin service alone--that it would gladly get out of the business if only a buyer could be found. Perhaps Key System was interested in taking over the Contra

Costa routes? Key's President reported "profound disinterest." He told Pacific Greyhound the Contra Costa service was a heavy peak hour service, and Key was already heavily burdened with such problems.<sup>68</sup> The concentration of traffic in the peak in Marin was even more pronounced than in the East Bay.<sup>69</sup>

Greyhound faced the same kind of opposition before the CPUC as had Southern Pacific, when it went seeking financial relief. The protestants said the increases Greyhound was seeking were more than the commuters could bear; further residential development would be severely handicapped. The Contra Costa County Board of Supervisors opposed the fare increase request. The Board was led by H.L. "Jack" Cummings of the Lafayette-Orinda-Moraga area. Cummings would soon represent his county in the regional rapid transit planning process. He argued that "...it is of the greatest concern to Contra Costa County that its residents have rapid transportation at reasonable rates to their places of employment in the San Francisco Bay Area. Otherwise, we will lose the property owners who have settled here as well as the increased assessed valuation they have produced by their removal to Contra Costa County."<sup>70</sup>

Greyhound opponents suggested a subsidy for them analogous to the use of freight profits for Southern Pacific commuters. They insisted that all of Pacific Greyhound's California operations be considered for rate-making purposes, not solely the Bay Area transit routes. If Greyhound's intrastate operations as a whole were profitable, then the company should be forced to use these profits to subsidize losses on Bay Area commuter services. The opponents threatened to form carpools if fare increases were approved; this would deny Greyhound

the additional revenue anyway.<sup>71</sup>

CPUC didn't like this subsidy idea any more than it had the freight subsidy argument. However, the Commissioners were aware of the important role commuter fares had played in building up suburban areas. These areas, in turn, provided patronage for the carrier. This process took time. CPUC allowed Greyhound to increase its Marin fares much less than requested, and denied increases on the other services. Greyhound would continue to lose money on all three of its Bay Area operations.<sup>72</sup> They also continued to look for a buyer.

There was a social dimension to the financial problems of these transit carriers. Transit was no longer an industrial working class issue, but these interurban services, and similar express services in San Francisco, had a distinct class character. It seems likely that commuters to downtown San Francisco from Marin, San Mateo, and central Contra Costa Counties, and from the outlying areas of San Francisco, were mostly relatively high income managerial and professional men. It also seems likely these commuters were of a higher socio-economic standing than those intrastate riders of Greyhound buses that Marin County commuters demanded subsidize them, and who were obliged to so subsidize. A similar situation likely prevailed on the peninsula, to the extent that SP passed on higher freight rates which eventually were reflected in higher consumer prices, consumers generally were subsidizing peninsula commuters.<sup>73</sup>

All four transit carriers were plagued by the increasing concentration of traffic in the peaks. The peak hour problem was the financial devastation of a transit firm. The reason was clear: capital had to be invested in equipment and labor power sufficient to accommodate

the peak hour demand, but the large part of this physical and human capacity did not produce much revenue for most of the day. Every operator would acknowledge that peak hour service and especially peak hour express services were "socially" beneficial. However, they were very costly for the private accounting of profit and loss. Fare increases sufficient to cover the costs of peak period service were considered politically and economically not feasible.

Labor relations played a critical role in the peak hour problem, as they did in all aspects of transit operation. In the latter 1940s transit workers began attacking the use of the split shift and part-time work, and demanding overtime pay whenever they had to stay on the property for more than nine or ten hours per day. These were the main managerial techniques for dealing with the peak hour problem. Alfred Lundberg nostalgically recalled [in 1954] how things used to be in the old days on the Key: "Our long trains...were manned partly by people who worked straight tricks. That is a man that comes on, works eight hours and quits. Partly by men who worked split-tricks. That is a man who comes on, works the morning peak, goes home, comes back in the afternoon and works the evening peak and goes home again and partly by part time people. We used boys from the University of California. They worked one trick, either the morning or the evening as best suited their studies, and by and large we only paid for time worked. Today, no part time employees are permitted. The percentage of split tricks has gone down and down every year, and the result is that a vast amount of labor is paid for, but does not work because there are no passengers...."<sup>74</sup>

What happened to off-peak patronage? Several things. The five-day forty-hour work week was now common; Saturday traffic dwindled. Television consumption was growing. Fewer people were going downtown

to the movies or to the theatre anymore; evening traffic plummeted. Automobile ownership was increasing rapidly. One of its most striking effects was an explosion in recreational travel; Sunday traffic declined. Finally, shopper traffic decreased during the day. This was the result of a complex of social forces. People were moving to suburbs; shopping centers were being built in suburbs; there was a baby boom going on in the suburbs; many women who had ridden transit vehicles to work during wartime mobilization were now living in the suburbs and having babies. The shopper traffic had always been overwhelmingly female; would mothers with young children ride a transit vehicle downtown to shop when alternatives were available?

The downtown coalitions in San Francisco had thus far fought to a standstill over the major urban transportation issues of the day. However, central city property values in San Francisco and Oakland were holding firm. There did not appear to be any weakness in the market for centrally located downtown property in the two cities. Values had still not come back up to the levels reached during the 1920s, but the real estate market had been crazy during the 1920s. The demand for office space in San Francisco's financial district was particularly strong, although there had been little new office building construction initiated in either city between 1930 and 1950. Existing buildings were bargains, construction costs for new ones were extremely high. This accounted for the strength in the market in recent years.<sup>75</sup> Real estate analyst Paul Wendt thought, however, he detected "caution," and, perhaps, a "pessimistic outlook" on the part of investors in central city property. They were hesitant to capitalize much of their

property income. Wendt concluded that the shift from transit to auto had decreased the relative attractiveness of central city locations for many of their historic economic activities; this might account for the cautiousness. Improved mass transit facilities were central to the welfare of downtown Oakland and San Francisco, Wendt argued.<sup>76</sup> There was widespread agreement on this point.

The developing regional rapid transit movement confronted a set of existing transit carriers that were in worsening financial difficulties. Moreover, the steps these carriers were taking to protect their particular financial interests were jeopardizing future economic growth. Fare increases and service cuts would only cause transit patronage to decline at an accelerating pace. Failure to invest in new rapid transit facilities and in express service deeply disturbed the downtown coalitions.

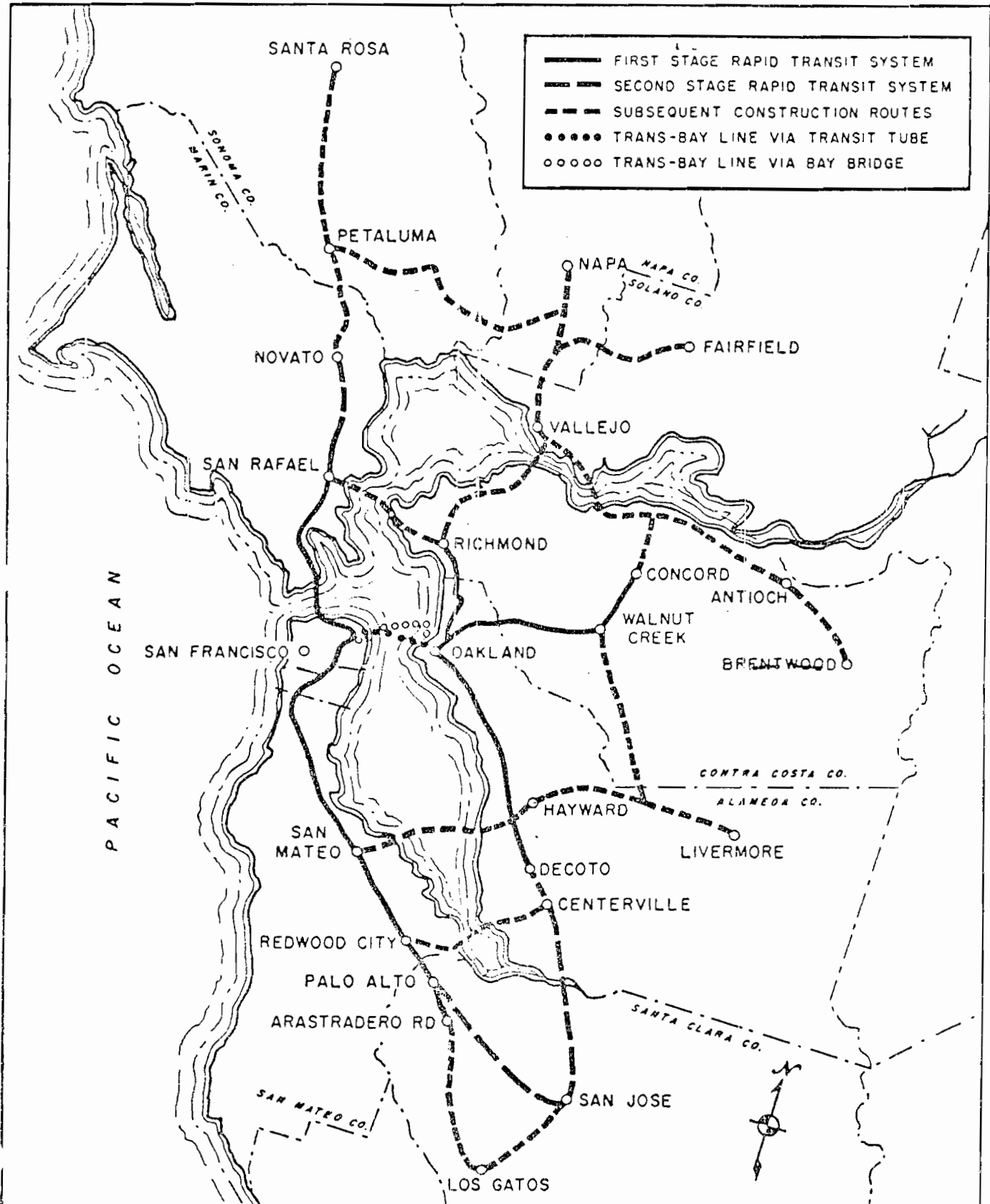
One interesting point about the movement thus far: with the exception of the Dolwig Committee consultants, there hadn't been any expert support for the Joint Army-Navy Board's proposal for a transbay tunnel as a part of a regional rapid transit system. People either thought it was far too expensive, or the Bridge Railway was considered adequate to handle any foreseeable transit traffic volume.

The Toll Bridge Authority thought a tube could never be financed. The Bay Area Council Traffic and Transportation Committee argued that Bridge Railway capacity was sufficient. Colonel Sidney Bingham planned to connect his Market Street subway directly to the Bridge Railway. DeLeuw, Cather also wanted to link their Market Street subway to the Bridge tracks, directly if possible, with easy transfer facilities if not. They pointed out, as Ralph Tudor had, that speed on the Bridge could be greatly increased with a little repair work and

new rolling stock. DeLeuw, Cather also said their traffic projections to 1970 indicated there wouldn't be any need for rail rapid transit in the East Bay. Express buses meeting Bridge trains would provide all the necessary capacity. The Oakland Planning Commission staff argued that the Bridge Railway would be adequate for any connection between East and West Bay transit networks. Even the Bay Area Transportation League, favoring as they did most of the Joint Army-Navy Board proposals their engineer-leader helped to develop, thought the Bridge Railway would do fine in any regional rapid transit system.<sup>77</sup>







SOURCE: Parsons, Brinckerhoff, Hall and Macdonald, Engineers, New York

B-1247-1

Proposed Bay Area Rapid Transit System—showing suggested stages of construction for entire system and "optimum" (via tube) and "minimum" (via Bay Bridge) routes for trans-bay segment

Map courtesy San Francisco Bay Area Rapid Transit Commission.

## VI BRIDGE CROSSINGS II

In October, 1949, the Bay Area Council recommended a forty-five million dollar program to improve the Bay Bridge and build additional approaches. The Toll Bridge Authority told Ralph Tudor to study the proposals and report on them. A month later, Tudor reported favorably on BAC's plan, stressing, as BAC had, that these improvements and additions would not eliminate the need for more crossings. They would provide, however, some temporary relief and improve safety on the existing structure.<sup>1</sup>

This compromise move was generally well received in San Francisco and Alameda Counties. The San Francisco Board of Supervisors approved a resolution supporting action to finance the additions. Mayor Robinson, however, suspected this new plan would jeopardize financing for a southern crossing; he vetoed the resolution. Governor Warren called on the Bay Area communities to sit down with state engineers and agree on a plan. The East Bay was willing to go along, but Mayor Robinson held San Francisco back. The Bay Area Council patiently continued its conciliation work.<sup>2</sup>

In October, 1950, BAC released a Master Plan of Bay Toll Crossings, which included both northern and southern bridges across the Bay (though not in the same locations as current proposals). BAC

worked to unite the Bay Area behind its short-term and long-term plans.<sup>3</sup> Mayor Robinson was finally persuaded that constructing the improvements and additional approaches to the Bay Bridge would not conflict with the major crossings; with this support from San Francisco, Alameda Senator Breed introduced legislation in the 1951 session to accomplish the improvement program.

The Breed bill authorized CTBA to continue to collect tolls to finance the construction of additional approaches and improvements to the Bay Bridge. The amount of money spent on the additions was to be the same on both sides of the Bay. In addition, the bill authorized studies to bring plans for the southern crossing up to par with the work already done by the DPW on the parallel bridge.<sup>4</sup> However, as the Breed bill wound its way through the Senate, a new element was interjected into the Bay Area bridge question. Senators from the other northern California counties decided it was about time the Bay Area settled an old debt.

Senator George Hatfield of Merced was widely regarded as the single most powerful individual in the state legislature. Hatfield had been in state government for a generation; he had been there when the legislature had given in to demands from banker Jesse Jones and the Reconstruction Finance Corporation, agreeing to build the original approaches and operate, insure, and maintain the Bay Bridge from state highway monies. The original legislation provided that the monies advanced to build the approaches be repaid to the state highway system when Bridge bonds were retired. The Breed bill provided for this repayment. However, Hatfield, supported by his associates from the northern counties, wanted any new issue of bonds to include funds

to repay all the money spent to operate, insure, and maintain the Bridge all these years. Moreover, the Hatfield group wanted the bill to provide that such expenses in the future be borne out of tolls rather than by state highway monies. The Hatfield contingent wanted highways for their constituents; they didn't see any reason why their funds for new roads should be decreased any longer to support Bay Area bridges.<sup>5</sup> Let the users pay.

Senator Breed secured amendments to his bill accommodating Hatfield. San Francisco, though, was upset by this turn of events. Senator O'Gara sought further amendments eliminating the repayment of operating, insurance, and maintenance expenses. When these failed O'Gara appealed to the Assembly to bottle up the bill until more hearings could be held. The Assembly went along with O'Gara and killed the Breed bill.<sup>6</sup> San Francisco feared these additional expenses would threaten southern crossing financing. BAC went back to work rounding up support.

Mayor Robinson held a meeting with Oakland Mayor Clifford Rishell, the Oakland Chamber of Commerce president, and a few technicians; this group worked out a proposal which they planned to take directly to CTBA. They were hoping that legislative action would not be necessary; the conflict that broke out during the 1951 session could be by-passed. The agreement called for a bond issue to include funds for the following four major actions: (1) repay the highway monies used to build the original approaches; (2) repay money advanced by the state for studies on additional crossings already done; and fund additional southern crossing studies; (3) construct improvements and additional approaches, the same amount being spent on both sides

of the Bay; and (4) pay future operation and insurance costs on all Bay toll bridges from tolls.<sup>7</sup> Note what is not included: repaying the state highway fund for historic maintenance, operating, and insurance expenses; and payment of future maintenance costs from tolls.

BAC was very pleased that Oakland and San Francisco had agreed on a plan and wrote to the Governor to tell him.<sup>8</sup> Everyone prepared for a November, 1951, meeting of the CTBA.

The Toll Bridge Authority meeting of November 27 was an interesting exercise in California politics. DPW presented a plan for an eighty million dollar bond issue based on the agreements worked out by San Francisco, Oakland, and BAC. Bay Area activists said the legislature could straighten out the repayment issues at its convenience. Congestion on the Bay Bridge and the increasing number of accidents on the structure demanded immediate attention, however. The Governor supported the plan for action to provide improved safety and traffic relief.<sup>9</sup>

Senator O'Gara was disturbed. He told CTBA how it was he, with his city's support, who delayed action on the Breed bill. O'Gara wasn't involved in this deal between San Francisco, Oakland, and BAC, though. He didn't want to antagonize Senator Hatfield and the other northern California people, causing them to bring litigation against CTBA action or pass legislation harming the cause of bridge construction. O'Gara counseled delay by CTBA until the state legislature had a chance to resolve all the issues and offer direction to the Authority.<sup>10</sup>

Hatfield then addressed the meeting. He patiently recalled for his younger colleagues the deal with Jesse Jones and the RFC; how the other northern California legislators had helped out the Bay Area

during those troubled Depression years; and the essential justice of their current demands for repayment and future financing mechanisms. His people needed highways the same way Bay Area folks did.<sup>11</sup> Senator Randolph Collier--with Hatfield these two men were the leading figures in the state's freeway program--was angry at what he saw as an attempt at manipulation and back room politics. Collier warned the Bay Area group, "Don't affront the legislature." The legislature had to take the lead in any Toll Bridge Authority action; this attempt to by-pass the legislature was ill-advised.<sup>12</sup>

CTBA heard what Hatfield, O'Gara, and Collier were saying; they adopted a resolution approving the eighty million dollar bond issue, but authorizing only twenty-one million dollars for immediate sale. This would refund the Bay Bridge's remaining debt, allowing tolls to be collected; and repay the state for the original approaches. Authority directors voted not to sell any more bonds until the legislature had an opportunity to deal with the other issues.<sup>13</sup>

During its First Extraordinary Session in 1952 the state legislature studied the DPW-BAC-San Francisco-Oakland proposals. The legislators were asked to enable CTBA to issue bonds to finance the additions and improvement program. This enabling legislation, lacking the provisions requested by the northern California senators, was defeated. The Authority then asked the legislature to specifically validate the bridge approach additions for both sides of the Bay. This, too, failed of passage. In case CTBA remained unconvinced of its proper role, in December, 1952, the California Supreme Court told the Authority that it "...was and is without power to authorize [bonds for additional approaches] and that power to that end must come from the Legislature."<sup>14</sup>

It was now three years since the Bay Area Council first proposed fixing up the Bay Bridge; this compromise program hadn't gotten very far. Mayor Robinson decided it was time for bold action. With the support of Marvin Lewis, Mayor Robinson announced in late November, 1952, he had "...come to the conclusion that the impasse with reference to the building of additional Bay crossings must be terminated." The Mayor and Marvin Lewis now supported "simultaneous" construction of two additional bridges, one northerly and one southerly of the existing one. San Francisco should decide where the terminals would be on its side; the East Bay cities should do likewise. Robinson noted the Bridge Authority had already determined that both additional crossings were necessary. He stated that he was satisfied there wouldn't be any problem in financing construction of both projects simultaneously.<sup>15</sup>

The Bay Crossings Committee of East Bay Communities, led by the Oakland Chamber of Commerce, applauded this statesmanlike behavior by San Francisco's mayor. The Committee resolved its approval of the simultaneous construction proposal and urged immediate action to implement the program. BAC informed the Governor of the new initiative.<sup>16</sup> This new found optimism did not, however, long survive.

In early December DPW Director Frank Durkee informed Governor Warren of a conversation he had had with Mr. John Inglis, of the Blyth and Company investment banking firm. In a confidential memo Durkee told Warren that "Mr. Inglis volunteered the statement that, in his view, there might be considerable difficulty in financing, under existing conditions, two additional crossings of San Francisco



Bay if the crossings were to be undertaken simultaneously." Inglis felt that sufficient revenue bonds to finance simultaneous construction could not be absorbed by the money markets. Durkee wrote that he didn't know if Inglis's views accurately reflected those of other bond houses, but the DPW Director reminded the Governor that "...as you know, Mr. Inglis has been interested in practically every issue of revenue bonds heretofore put out by the California Toll Bridge Authority."<sup>17</sup>

Just before Christmas San Mateo County Assemblyman Richard Dolwig conducted a hearing about this new proposal for simultaneous construction. Dolwig, of course, was a southern crossing champion. State Legislative Auditor Robert Stelmack told the hearing that investment houses have stated that revenue bond financing for simultaneous construction could not be secured. Both bridges would cost \$360 million.<sup>18</sup> Berkeley Planning Director Corwin Mocine asked the Auditor if financing such a huge sum was likely to use up the source of bond investments for a Bay Rapid Transit System. Stelmack replied he hadn't thought of the connection, therefore, he couldn't say.<sup>19</sup>

The Mayor's proposal was also running into trouble in his own backyard. Just after Christmas Marvin Lewis introduced a resolution before a Board of Supervisors subcommittee approving simultaneous construction. The resolution was obviously controversial. Lewis explained he wasn't abandoning the city's commitment to a southern crossing; both bridges would eventually be needed. If only one bridge could be built, Lewis was still for the southern. However, it was imperative to break the stalemate.<sup>20</sup>

Several Supervisors spoke against the resolution, as did several city Department heads, including Planning Director Paul Opperman. The chief planner said the best package deal was still regional rapid transit plus a southern crossing. He considered a parallel bridge an excessive expenditure of public funds. Lewis asked Opperman if two bridges weren't better than none. Opperman replied that this question assumed the most appropriate thing couldn't be done. The Director added that he was considering the issue from a planning, or technical point of view, whereas the Board was considering the matter as "politicians." Several Supervisors took exception to the implications of being called "politicians."<sup>21</sup> It was clear this proposal faced a rocky road.

Early in January, 1953, Mayor Robinson intervened in the Supervisorial proceedings to propose a compromise measure--another committee to meet with East Bay interests to discuss simultaneous construction. George Johns, Executive Secretary of the San Francisco Labor Council accused the Mayor and the Supervisors of selling out the city by accepting this compromise. The legislators pointed out the Board would not be bound by anything this new committee would propose. Many city leaders were worried about simultaneous construction because plans for the southern crossing were still underdeveloped relative to those for the parallel; the southern crossing was also the more expensive of the two. The East Bay could not be trusted to not exploit those advantages.<sup>22</sup>

Mayor Robinson and Supervisor Lewis were unable to unite San Francisco behind their plan. Meanwhile, Assemblyman Dolwig picked up the bouncing ball and ran with it to the 1953 state legislative session.

The 1953 Dolwig bill provided that tolls should be continued on the Bay Bridge even after all the bonds were paid off; all surplus revenues accruing therefrom were to be used to finance a southern crossing of San Francisco Bay. A set of approaches and terminals on both sides of the Bay were included as part of the project. CTBA was instructed to take all necessary steps including securing the necessary federal legislation and permits to build the southern crossing. Dolwig was sure to include the conditions requested by Senator Hatfield and his associates: the state highway fund would be repaid for historic Bay Bridge expenses, including maintenance, insurance, and operating costs; and all such future costs would be paid from tolls.<sup>23</sup>

The state legislature had finally spoken, giving San Mateo, San Francisco and southern Alameda Counties the green light on their favorite bridge. However, as in 1949, a battle had been won, but the war was far from over. Oakland felt betrayed by San Francisco because San Francisco abandoned the idea of simultaneous construction. Moreover, Oakland still had a few Washington, D.C., options available.

The national government had to give its permission to continue toll collection on the Bay Bridge to help finance additional construction. Senator William Knowland was said to be seeking an amendment to the necessary federal legislation that would guarantee building a parallel bridge after the southern crossing was finished. San Francisco worried that its victory at the state level was in jeopardy.

Marvin Lewis, acting Mayor of San Francisco in Elmer Robinson's absence, discussed the Washington scene with city lobbyist

Francis V. Keesling, Jr., in June, 1953:<sup>24</sup>

- Lewis: "Its a Hell of a mess, isnt' it?"
- Keesling: "Yes, it is a mess. Knowland is very definite about this. Now this is off the record-- Knowland feels San Francisco ran out on getting the state to build two bridges, even if the southern crossing was built first.... Now, Knowland says 'he is not inclined' to go along, and it is pretty clear he will not change his mind. He may be preparing some legislation himself."
- Lewis: "If one Senator objects, it won't pass the Senate?"
- Keesling: "Well, as far as Knowland is concerned, he can prevent it from going through."
- Lewis: "Now from a strategy standpoint, couldn't we put it in the other [California] Senator's hand?"
- Keesling: "As Knowland goes, the Senate goes.... We may be sorry for all time if we get into a hassle.... The only possibility is our coming up with some assurance there will be a twin bridge which will not interfere with the building of a southern crossing."

On June 23 the United States House of Representatives Committee on Public Works held a hearing on proposed legislation authorizing the continuance of tolls on the Bay Bridge. In 1949, when the CTBA wanted to build a parallel bridge, Oakland told the Congress this was a purely local matter. San Francisco now said the same thing. Moreover, the conflict between the two cities was as obvious in 1953 as it was in 1949. The House Committee chairman noted the bitterness; he offered Bay Area leaders the use of his conference room to get their act together rather than come before Congress dis-united.<sup>25</sup> The chairman pointed out one of the well-known rules of legislative procedure: a higher level of government was

loathe to enter into conflicts at a lower level. It was much preferred that local people work out their differences without outside intervention. This procedural rule was operative at the state level in relation to local areas as well as at the national level. State legislators frequently told Bay Area people, for example, to stay away from Sacramento until it was possible to present a consensus program.

Oakland Mayor Rishell angrily told the House Committee that there had already been two agreements with San Francisco, but San Francisco had run out on them. Oakland was now supporting an amendment offered by an Alameda County Representative that would specify in the federal legislation that a parallel bridge be built following the southern crossing. The House, however, was obviously reluctant to write something so specific when the state legislature had declined to do so.<sup>26</sup>

On June 30 Marvin Lewis called Oakland Tribune publisher Joseph Knowland. Lewis said he was unable to get the rest of San Francisco to support the Oakland amendment. The furthest San Francisco would go was to join with Oakland in going to the state legislature when the southern crossing was completed to ask for construction of a parallel bridge if it could be demonstrated that a need for it still existed. San Francisco wanted the federal government out of the picture entirely once it approved the continuation of tolls. Lewis pointed out to Knowland that the national government didn't want anything to do with local location conflicts; it was unlikely to pass an amendment specifying a location.<sup>27</sup> Lewis asked that Knowland to "...use your good offices, so that there can be no question about the granting of the permit from the Secretary of Defense..." to facilitate

a southern crossing, and to consider accepting the San Francisco proposal. Knowland said he would speak to his son in Washington, and would call a meeting of East Bay leaders that afternoon to consider the San Francisco initiative.<sup>28</sup>

Later that day Lewis received a letter from the Bay Crossings Committee of East Bay Communities rejecting his suggestion. The proposed amendment to the federal legislation would be the East Bay's demand.<sup>29</sup>

Lewis's analysis proved to be correct, though. The Congress passed legislation authorizing continued toll collection but refused to include a provision mandating parallel bridge construction.<sup>30</sup> The next step, which Lewis asked publisher Knowland to facilitate, was a permit from the Army to cross navigable waters. It looked like smooth sailing ahead for the southern crossing.

In August, 1953, the Navy shocked the celebrating southern crossing proponents by opposing DPW's request to the Army for a permit. The Navy gave a flat "No" to the West Bay location specified in the Dolwig act because the Navy had plans for possible seaplane developments in the area. These plans were so new and so secret that the Bay Area Navy official who made public the opposition did not know any of these details. This was a decision taken at the top level of the Navy command in Washington; the local Navy people were as surprised as everyone else.<sup>31</sup> The San Francisco Examiner editorially charged that "political" considerations motivated the Navy action. Moreover just as the Tribune had argued that military concerns were inappropriately being put forward in 1949, the Examiner now felt the Navy had gotten out of line.

"...[When] the Navy attempts to grab off a vast expanse of

the Bay waters for some possible future need, when the Navy springs its demands as a complete and patently intentional surprise that prevents city officials from cross-examining to develop the facts, when the Navy would so casually kill a multimillion dollar civilian bridge project, we say the Navy has overreached itself."

The Examiner noted Navy admissions that its proposed seadrome runways would be in use at most only three months in the year. They may never be used at all, in fact, because they were just in the proposal stage; the Navy wanted the new planes, but no commitments had as yet been made. The newspaper suspected inter-service rivalries were at the heart of the matter; the Navy wanted to build its air power. "The Navy is greedy for air power, and is going to do favors for any powerful Senator--we [the Examiner] have one in mind--who could help it get appropriations for more planes." This San Francisco representative of the William Randolph Hearst journalism family concluded that the Navy was not "...justified in laying down their claim as a sort of fiat, something we civilians should accept without question just because it came from the Navy."<sup>32</sup>

San Francisco mobilized to wring concessions from the Navy. Mayor Robinson led a delegation to Washington including representatives of the Downtown Association and the San Francisco Chamber of Commerce to negotiate. The San Francisco Chamber had, since 1949, seen the error of its ways in supporting the parallel bridge; the Chamber was back on the winning team. Under this intense pressure the Navy bent sufficiently to allow a modified southern crossing project. The bends, however, increased construction costs and presented significant engineering difficulties.<sup>33</sup> During the 1954, though, DPW was able to

secure the necessary Army permits; the state engineers then settled into the detailed design work necessary to develop a financing and construction program.<sup>34</sup>

Seven years after the Joint Army-Navy Board proposed it, a southern crossing was finally at the top of the Bay Area transportation agenda. The 1953 Dolwig Act declared the southern crossing should be the next transbay transportation facility. The crossing was granted exclusive access to surplus Bay Bridge revenues; a source of income for the project was thereby assured.

The success of the southern crossing proponents would be extremely consequential for the future history of the regional rapid transit movement. In the Joint Army-Navy Board plan the crossing and regional rapid transit were complementary elements in a comprehensive solution to Bay Area transportation needs. These elements would, however, increasingly come into conflict with each other; financial relationships were central to this conflict. In addition, the final defeat of the parallel bridge changed the character of the Oakland leadership's participation in the regional rapid transit movement; they became more interested in the movement's progress.



VII THE BAY AREA RAPID TRANSIT COMMISSION (BARTC) AND  
PARSONS, BRINCKERHOFF, HALL AND MACDONALD (PBHM)

Through 1950, Marvin Lewis worked with the San Francisco Advisory Committee to develop a workable regional rapid transit program. This group approached the 1951 state legislative session with a two-pronged strategy. One approach was embodied in a package of three bills that were introduced without the sponsorship of Alameda Senator Breed. These would eliminate those provisions of the 1949 Act that made it unworkable, and establish a functioning transit district. The second approach was contained in a bill introduced with Senator Breed's support. This bill called for the creation of a regional study and planning commission.

The set of bills aimed at overcoming the obstacles built into the 1949 Act included the following provisions: (1) The veto power granted each of the several East Bay cities was eliminated. San Francisco could form a district with any other city or county in the Bay Area. If any city voted against inclusion in a district, though, it would be excluded. San Francisco, however, would have to be part of any transit district established under this Act; (2) District eminent domain powers were broadened, while CPUC's role in eminent domain proceedings was limited to fixing just compensation; (3) The district was authorized

to issue special property tax-backed assessment bonds to pay for facilities servicing specific areas within the district; (4) The district was empowered to levy a ten cent per one-hundred dollar assessed valuation property tax to finance engineering studies and for administration; and, (5) The definition of rapid transit was changed to include trolley coaches, motor coaches, or any other type of transit equipment that ran, in part, on grade-separated rights-of-way.<sup>3</sup>

The bills containing these San Francisco-sponsored provisions were all buried in the legislature. Senator Breed attacked San Francisco's attempt to dominate the rapid transit proceedings. He was angry that any district formed would have to include San Francisco; the East Bay would be prevented from acting on its own. The old charge that San Francisco was trying to unload its deficit-ridden local transit system on the rest of the Bay Area was once again broadcast in the Oakland Tribune. The Oakland Chamber of Commerce reminded the state Senate committee that was discussing the legislation of its long-standing and intensely held views on regional rapid transit; East Bay transit lines must center on downtown Oakland; the Chamber assumed downtown San Francisco would be similarly situated on the west side; and a connection was a relatively secondary matter. However, the Oakland Chamber demanded the veto power be retained until it was absolutely clear what form regional rapid transit would actually take.<sup>4</sup>

Senator O'Gara and Marvin Lewis were disappointed but not surprised by Oakland's position. Lewis charged that downtown Oakland business interests were sabotaging the development of Bay Area rapid transit: "[P]rovincial and selfish interests..." were blocking legislation.<sup>5</sup>

The fourth, Breed-supported bill passed, however. In its original form the bill created a regional transit commission with forty-four members appointed by the governor; the members were charged with investigating rapid transit needs and helping other agencies to do so. The Commission was also to develop a master plan for submission to the voters, and inform area residents of its work. A \$50,000 appropriation from the state budget was granted.<sup>6</sup> Marvin Lewis despaired at the idea that \$50,000 would be enough for even a beginning on a plan. Lewis wanted at least \$300,000 and more importantly, an agency that could implement a plan.<sup>7</sup>

In its final, amended form, Senate Bill 549 created the Bay Area Rapid Transit Commission (BARTC) with twenty-six members, \$50,000, and did not allow the Commission to do any public relations work.<sup>8</sup> The \$50,000 was very grudgingly given. The state legislature wanted to see some local agreement and financial commitment to this project before spending significant sums of state money.

Once again, Oakland's self-protective action slowed the progress of the regional rapid transit movement. The downtown Oakland leadership had retained assurances that no action could be taken without its approval. A concrete plan would have to precede an implementing agency. At least, however, an organization encompassing all nine Bay Area counties was in place and set to function. Among the appointed Commission members were several people, particularly those from San Francisco and Alameda Counties, who had been involved in transit issues for several years. Now all that was needed to begin was a quorum.

It was difficult to get a quorum during the first year of the BARTC. Most of the members were extremely busy business and professional

men; they had trouble taking the necessary time away from their private activities. Retired businessmen would come to play an active role in the rapid transit movement. The Commission was, however, able to divide itself into subcommittees and to appoint a Technical Advisory Committee (TAC); the TAC was composed of city and regional planners from the Bay Area counties.<sup>9</sup> The Commission also took up the serious business of contracting with a private consulting firm to do what it could with \$50,000. DeLeuw, Cather and Company was hired;<sup>10</sup> they already had substantial experience with Bay region transit issues, gained during their recent San Francisco work.

Commission members heard mainly from planners during their first year, whose ideas expressed both the political and conceptual background to the regional rapid transit project. San Francisco Planning Director Paul Opperman called attention to the need for a regional land use and transportation plan; he lamented the regrettable absence of a suitable regional agency to prepare such a plan. The Commission would have to proceed on its own in this regard. Opperman also presented his own and San Francisco's view of the desirable form of future regional growth and the role of rapid transit in achieving this objective: "[Rapid transit] should allow an interdependent specialization where each community, with the entire area as its market, could specialize on its best main function."<sup>11</sup>

The Planning directors of Marin and San Mateo Counties complemented this analysis of regional development. They stressed that rapid transit was necessary to allow their suburban counties to achieve their full potential population size. Additional motor vehicle capacity was necessary, but such capacity would never be sufficient to accommodate

all the growth that was possible and desirable.<sup>12</sup>

Charles DeLeuw pointed out the kind of transit system that was necessary to support this specialized form of regional organization. He noted it was not financially feasible to provide rapid transit service directly to each segment of all the rapidly growing suburban residential areas. "With the wider distribution of population we are getting these days...the only solution is the creation of trunk lines and then satisfactory feeder distribution lines."<sup>13</sup>

This idea of regional form expressed the potential alliance between central business district interests in San Francisco and Oakland and suburban developers. However, as will become clear over the course of the movement's life, functionally specialized areas connected by transportation lines was not the only concept of regional organization popular around the Bay.

While planners continued to develop the need for rapid transit, the Commission's Legislative Drafting Committee, led by Marvin Lewis, was busily considering what to do to make the Commission more than a paper tiger. The \$50,000 appropriation would prevent DeLeuw, Cather from doing more than reviewing existing studies and restating the problems. Moreover, the 1949 Act still structured the transit movement; the 1951 legislation was passed as amendments to the 1949 district law. The local veto power still blocked effective district action.

The Drafting Committee recommended the 1949 Act be scrapped as unworkable; BARTC should call for the state legislature to create an authority for the Bay region. Lewis' committee wanted the state to loan the authority \$500,000 for studies and administration; this would be repaid when the authority issued its first series of revenue bonds.

Lewis stressed the need for immediate action by the Commission so that a legislative program could be presented to the 1953 state session.<sup>14</sup>

Downtown Oakland's Sherwood Swan, however, opposed the authority proposal. The Alameda County Rapid Transit Committee, which Swan recognized as his constituency while he sat on BARTC, opposed the formation of any agency until after a concrete plan had been formulated.<sup>15</sup> Marvin Lewis' group returned to the Commission with a compromise proposal: the state should create an authority; and the state should give BARTC a loan to prepare a master rapid transit plan. The Commission would go out of existence when the authority adopted the master plan. This compromise was likewise rejected by Swan and his Alameda Committee;<sup>16</sup> the East Bay leadership was opposed to any agency creation proposal.

Opposition to the Lewis-sponsored authority idea came from another source, too. Investment banker Arthur Dolan argued that a district would be necessary on financial grounds. Among the more important differences between these two public agency forms was the capacity of a district to levy taxes on property, while an authority had to finance all costs, capital as well as operating, from fare revenues. Dolan pointed out that rapid transit would not generate enough income, especially during its early years, to cover all operating costs plus earn sufficient surplus to also pay the costs of construction. It would take time, according to Dolan, for a transit system to establish itself financially: "The people will have to be educated to use rapid transit. It hasn't kept up to the needs of the people. We must get them away from their automobiles to using rapid transit."<sup>17</sup>

The discussion regarding authority versus district forms of public organization was an interesting one. The Commission members would certainly have preferred an authority to a district. The main advantage of the authority form was, of course, its alleged autonomy from politics. An authority could be managed by a small group of business and professional men who would run the operation according to sound business principles. Since an authority lacked access to property taxes, it would have to stand on its own financial feet, reinforcing its business orientation. The authority would gain certain advantages as a public agency though, regarding income and other taxes on its own operations. An authority would be able to act without the approval of local governments; it was an "adult", strong and independent.

The price of its strength and autonomy was its lack of access to the property tax base. As Arthur Dolan pointed out, in the case of transit, this price was too high. If fares had to be charged to cover total costs, transit patrons would be driven away; this would defeat the entire purpose of the transit project. Therefore, the decision by BARTC a few years later to seek a district rather than an authority was entirely a pragmatic one.

Dolan and Marin County electrical engineer Jack Beckett proposed an alternative program: BARTC should seek money to plan; nothing should be said now about an organization. Senator O'Gara had warned BARTC that its financial future was in jeopardy unless local money were forthcoming to support the project. Dolan and Beckett moved the state and the Bay Area counties share in the costs of developing a master plan. BARTC voted its approval of going to the 1953 state legislative session with

this request.<sup>18</sup>

In its December, 1952, Preliminary Report to the state, the Commission outlined a \$750,000 program of regional planning, origin and destination and engineering studies. These were recommended by DeLeuw, Cather and the Technical Advisory Committee.<sup>19</sup> In January, 1953, legislation embodying the BARTC program was introduced by all nine Bay Area senators. The original bill called for a grant of \$400,000 from the state, which was not contingent of the nine counties raising the remaining \$350,000.<sup>20</sup> A sample letter was drafted for Commission members to send to the state Senate Committee on Transportation that expressed the political alliances BARTC was attempting to forge: "...Traffic congestion and unsatisfactory transportation are having an increasing detrimental effect on property values in the urban areas and is retarding the suburban areas in the development of which they are capable... A solution to the problems of highway and street congestion and unsatisfactory travel could not be solved by the building of additional highways and facilities for the movement of automobiles alone, but that there must also be a satisfactory system of mass rapid transit developed on the principal of moving people, not moving cars."<sup>21</sup>

The state legislature passed the BARTC-sponsored bill after two amendments were added: the \$400,000 of state money would be a loan, to be repaid with interest; and the state funds were contingent on a prior commitment by the Bay Area counties to come up with an additional \$350,000.<sup>22</sup> BARTC would now be a full-fledged planning agency, but was still without the capacity to implement a regional rapid transit plan.

An interesting aspect of the 1953 legislation was the warm support for both the state loan and the county commitment from Alameda



County. One element in this was the apparent defeat of the parallel bridge; the southern crossing won legislative priority and a financial commitment during the 1953 session. If another bridge in the established transbay travel corridor was no longer a good possibility, then a rapid transit line in that corridor was potentially a viable substitute. Alameda County still retained its veto power if the overall regional transit plan was not to its liking. Another very important development was the continuing deterioration of Key System in the East Bay. In November, 1952, BARTC was informed Key System was going to apply to CPUC for permission to abandon two of the five remaining transbay rail lines, the two going between San Francisco and East Oakland.<sup>23</sup>

At the end of 1951, the transit industry trade journal Passenger Transport reported that National City Lines had made definite or tentative proposals to sell at least half of its forty-one wholly-owned subsidiaries to the cities in which they operated. This proposal would eventually be made to all cities. NCL offered to accept revenue bonds at 4% interest, which would be paid off in twenty years. NCL would retain a majority on the new municipal directing body, and would get a management fee for operating the system. This proposal was similar to a plan that New York's Colonel Sidney Bingham was promoting for the nation's transit industry. Bingham reasoned this plan would combine the virtues of efficient private management with the tax and other financial benefits resulting from public ownership.<sup>24</sup>

Key System was not a wholly-owned NCL subsidiary, it was controlled through majority stock ownership, but the owners had been indicating their willingness to sell out for several years. All transit observers in the Bay Area know that when Key applied for permission to

abandon two Bridge Railway lines and substitute buses, it was just the first step toward complete rail elimination; eventual abandonment of all transit operations by the private company was probably not far behind. BARTC passed a resolution opposing abandonment, arguing the Bridge Railway may be an essential link in any system of regional rapid transit developed by the Commission.<sup>25</sup>

CPUC denied Key System's request for abandoning the two rail lines. The Commissioners were very disturbed Key would propose a bus substitution plan while the company said nothing about reconstructing the San Francisco transit terminal for bus use. Without such reconstruction the additional buses would have to use the downtown streets around the terminal; San Francisco loudly protested these additional buses would worsen already very bad traffic congestion in the central core. CPUC's staff noted the Key System application was obviously the first step in a complete abandonment process. Eliminating two rail lines would increase unit costs on the remaining three, worsening their financial standing. Moreover, decreasing the number of trains using the Bridge would lead to pressures for paving over the tracks and reconstructing the entire Bridge for motor vehicle use. The staff saw a need to have a comprehensive plan to deal with these issues.<sup>26</sup>

The owner of the Bridge Railway, the California Toll Bridge Authority, saw also paying attention to the situation. The Bridge Authority was Key System's application as the first act in a larger drama; CTBA contracted with Coverdale & Colpitts for a quick study of the question. These long-time Bridge consultants concluded the Authority must be prepared to take steps to keep the Bridge Railway in operation at least until BARTC had a chance to complete its transit studies.

Coverdale & Colpitts noted the Railway could easily be adapted to extend through the East Bay cities either in subways, on elevated structures or both. Moreover, the consultants thought that "...The Bridge Railway, modernized, could be integrated into a rapid transit system at a substantial saving in construction costs over some other transbay crossing..." Therefore, CTBA ought to seriously consider shuttle train service across the Bridge if a period developed where it was necessary to do so pending action on a regional rapid transit plan. Coverdale and Colpitts were here proposing a shuttle arrangement similar to the one suggested by Harland Bartholomew in 1947. A shuttle service would be only an interim operation; it would not be attractive as a permanent facility because it involved a transfer. However, Coverdale & Copitts felt that with a well-designed transfer terminal service quality would not suffer too much. In addition, shuttle service revenues would probably exceed out-of-pocket costs.<sup>27</sup> CTBA took this study under advisement; the Authority decided a larger investigation of its own was necessary.

BARTC finally had some real money to spend as a result of the 1953 legislation and favorable responses from the Bay Area counties. Once again, it was time to hire a consultant. This time, however, whichever firm got the job would embark on a pioneering venture in United States regional transportation planning. The Commission requested proposals from all over the country; the most prestigious private consulting firms in the nation responded. The selection process was a lengthy and extremely interesting one.

The final decision came down to a choice between two organizations: Coverdale & Colpitts, who of course had been involved with Bay

Area transportation issues since the beginning of the Bay Bridge project; and a New York-based firm, Parsons, Brinckerhoff, Hall and MacDonald (PBHM). Sherwood Swan told BARTC one of the major considerations in the choice of a consulting firm was the reputation of the firm in the eyes of large financing institutions. Swan had checked around with his financial friends and had been told that throughout the United States, Coverdale & Colpitts was considered number one and Parsons, Brinckerhoff, Hall and MacDonald was considered number two.<sup>28</sup> Arthur Dolan said that he had also been talking with friends and financial associates and had been told that Coverdale and Colpitts and PBHM were both outstanding firms, were so considered by the financing houses, and financial interests would be satisfied with either one.<sup>29</sup> By a close vote the Commission Engineering Committee chose PBHM. BARTC accepted this recommendation, but the Commission was so impressed with the credentials of both firms that they voted to try to get them to work together, with PBHM in overall direction.<sup>30</sup> This joint effort was not feasible, though.

BARTC's Technical Advisory Committee had likewise closely studied the consultant hiring question. The planners narrowed the choice to four candidates. Two of these were Coverdale & Colpitts and PBHM. In addition, the Committee considered DeLeuw, Cather and Company, who had been consulting with the Commission during its first year, and a joint venture composed of three New York firms: Knappen-Tippets-Abbett-McCarthy, McHugh-McCroskey, and Singstad-Baillie. McCroskey and Singstad had previous Bay Area experience as consultants to the Dolwig state Assembly committee on the southern crossing in 1949.

The Technical Advisory Committee rated the consultants according

to three criteria: experience in transit surveys; experience in city and regional planning; and organization to undertake the study at hand. The planners differed sharply in their evaluations from the BARTC Engineering Committee. The TAC rated Coverdale & Colpitts "unsatisfactory" on all three counts. PBHM was considered "fair" on each of the dimensions. DeLeuw, Cather received "excellent" scores on transit surveys and city and regional planning experience, but its organization was considered "unsatisfactory" in its present state to carry out the study. Knappen, et al, McHugh-McCroskey, and Singstad-Baillie were the first choice of the Technical Advisory Committee; they received "excellents" down the line.<sup>31</sup>

As BARTC executive secretary Angus Cohan commented in a memo to Commission Engineering Committee leader Jack Beckett however, the Engineering Committee had had more information available to it than had TAC. The Advisors had only considered written proposals, whereas the Engineering Committee had also had the benefit of verbal answers to questions. The Engineering Committee also had to take into account "...The acceptability of the firm to financing organizations";<sup>32</sup> on this score the Engineering Committee's choices were apparently held in higher regard than were TAC's.

Parsons, Brinckerhoff, Hall and MacDonald was a large, well-staffed organization that had designed and built massive engineering projects, in transportation and other fields, across the United States and throughout the world. William Barclay Parsons had designed New York City's first subway line around the turn of the century; the firm he founded had been active in transportation work ever since. Prior to World War Two, Henry Brinckerhoff had made the traffic studies on which

revenue bond sales for the Pennsylvania Turnpike were based. The firm was therefore in a good position to take up highway planning work when the war ended.

PBHM served as engineers for the New Hampshire Turnpike, sections of the New York State Thruway and Connecticut Turnpike, and did traffic and revenue projections for the Ohio and Indiana Turnpikes. PBHM's major achievement during its postwar highway planning period was the Garden State Parkway; the firm served as supervising consulting engineers for the entire project.

PBHM was also a major defense contractor. During the war the firm designed all the the Navy's drydocks, both fixed and floating. PBHM also designed and supervised the construction of the Joint Army-Navy-Air Force Communications Center near Camp David. Their most important military project was the North American Air Defense Command (NORAD) center, buried deeply in granite under Colorado Springs. PBHM had a great deal of experience in underground construction work as a result of defense assignments.<sup>33</sup>

At the same time PBHM would be engaged in the San Francisco Bay Area, the firm would be involved in similar, though not nearly as extensive, rapid transit studies for the Delaware River Port Authority. These studies would include rapid transit service between southern New Jersey and Philadelphia.<sup>34</sup>

Walter Douglas and Rush Ziegenfelder would be the firm's leaders for BARTC's project. Ziegenfelder was a highway planner and engineer. He had many years experience working with agencies created by Robert Moses in the New York region.<sup>35</sup> Walter Douglas was the firm's rapid transit expert. Douglas joined PBHM in 1940; his father had been a partner in

the firm. Douglas later became Senior Partner and Chairman of the Board.<sup>36</sup>

There are two important and related points to note about the consultant selection process. One relates to the general question of why such transit planning work was contracted to private consultants in the first place. The answer is that existing governmental agencies were incapable of doing the work; they had neither the organizational resources of professional staff and money nor the political support necessary to carry out such tasks. Almost all of the longer-term, more creative aspects of Bay Area transportation planning, and elsewhere, were done by private consulting firms. There were a few partial exceptions to this pattern. In California, for example, DPW did most of its own planning work for freeway projects. DPW had a very large, professional organization and enjoyed a continuing flow of money and widespread political support. Yet even DPW contracted with private consultants like Coverdale & Colpitts when it needed studies related to the sale of revenue bonds involving traffic and income forecasts. In general, government agencies were not capable of doing serious planning work in-house. Why?

The answer is the second important point relating to consultants. Private financial capital, the source of funds for many public works projects, didn't trust general governmental agencies to do serious planning work. Such agencies, enmeshed in politics from start to finish, were not thought capable of carrying out objective, businesslike studies of massive projects. Investment and commercial banking institutions served as regulators of access to capital funds for public works spending; private consultant firms served as the "eyes and ears" of financial institutions. Private consultants working with specially created

authorities and districts were the most trustworthy arrangements possible at state and local levels. This was why the reputation of a consulting firm with financing houses was such an important criterion in consultant selection. Throughout the entire public works planning process the main objective of both those promoting the investment project and those financing it was to structure planning and management so that the outcome was geared as closely as possible to their political and economic interests. The Port of New York Authority was the most revered example of this planning practice in existence.<sup>37</sup>

Through the latter part of 1953 BARTC negotiated a contract with PBHM. Marvin Lewis and a few others were dissatisfied with the outcome of these negotiations; they felt the projected program of studies included too much "theoretical" work, which would generate "professor" theories. Lewis was especially concerned that too much emphasis would be given to the preparation of a generalized regional land use and development plan; he feared this would be done at the expense of transit planning and engineering work.<sup>38</sup> However, a BARTC majority supported the regional plans. A PBHM representative pointed out that such land use plans were necessary to provide the basis for forecasting future levels of transit demand.<sup>39</sup> Ironically, Lewis was objecting to the pioneering aspects of the rapid transit planning process. Walter Douglas gave an interview to San Francisco News political reporter Mary Ellen Leary in mid-1955 which brought out the significance of what was being done in the Bay Area:<sup>40</sup>

Leary: "How dramatic a pioneering thing was this study? How much was known before you started?"

Douglas: "Nothing. No, I exaggerate. But I will say that this study is a 'first' in two regards:



1. It is the first time that the procedures and techniques of regional planning have been integrated with the procedures and techniques of engineering to develop the need, and the requirements for interurban transportation on a regional basis;
2. It is the first time that the problem of fulfilling interurban transportation needs has been approached as a search for the most economical total solution to fulfilling those requirements.

This has involved a definition of the proper roles of the private motor car, bus, and interurban rapid transit."

By early 1954, studies were underway in earnest. PBHM sought advice from the city and regional planning consultant firm of Adams, Howard and Greeley regarding the regional land use planning phase.

The early history of relations between the BARTC and its consultants was a troubled one. In August, 1954, the Commission sent a letter to PBHM complaining that progress reports were very inadequate; they did not enable the Commissioners to understand what progress was, in fact, being made. Only someone closely associated with planning, traffic engineering or related fields would be able to understand the reports PBHM had submitted; even then it would be questionable if such a person would have an accurate picture of what was happening. BARTC felt the reports were too short, terse and technical. Moreover, PBHM had not submitted any material suitable for press releases in three months.<sup>41</sup> Such difficulties were, of course, common in organizations where non-technical people supposedly made policies to be followed by technical experts.

Relations worsened, however, when PBHM made its first substantive report to the Commission Engineering Committee in late September. The consultants described a yardstick system they had developed: a least-cost option against which to judge more elaborate proposals. It included the Bridge Railway plus lines in downtown San Francisco and

Oakland. These lines extended into the outlying areas of the region. The system would be a conventional electric railroad, with trains capable of top speeds of eighty mph and average speeds, including station stops, of forty-five mph. In keeping with the concept of a regional system, very few station stops were located within the major central cities outside of the downtown areas.<sup>42</sup> The Engineering Committee members were depressed.

R.W. Breuner, the downtown Oakland activist who was representing Contra Costa County, thought this proposal quite unimaginative. It could have been developed in 1909.<sup>43</sup> Cyril Magnin was likewise disappointed. Forty-five mph was not very impressive; it was not much different than Southern Pacific service or even good bus service. Magnin was certain a glorified Southern Pacific or Key System could not be sold to the voters. If it wasn't revolutionary you could throw rapid transit down the drain. Magnin told the consultants that, "Nothing is impossible if we try. If they can develop the atom bomb and the hydrogen bomb, then they can develop a transit system that is in keeping with our times."<sup>44</sup> Norma Westra, one of the project regional planners, reminded Magnin that, "You have untold billions for atomic research."<sup>45</sup> Jack Beckett added to the gloom by commenting that if the preliminary plans were any indication of the capability of developing a transit system, it would be better to drop transit and concentrate on freeways.<sup>46</sup>

PBHM responded this preliminary plan was necessary so the BARTC could tell critics that a low-cost system was studied and rejected.<sup>47</sup> The Commission would see more expensive varieties.

There are several interesting things to note about Magnin's bomb statement. First, of course, it highlights the cold war context in

which this transit planning process was taking place. The thoroughly conservative business and professional men of BARTC were not, however, having any ideological difficulties with a revolutionary, and expensive, public transit system. Another thing was the historic faith in technological solutions to social and political problems expressed in the comment. A few years later, in keeping with the changing times, space exploration and moon voyages will replace bomb imagery in urban transit discussions; the underlying theme will, however, remain the same. Finally, in the case of Magnin himself, Marvin Lewis, and a few others, their disappointment reflected a design issue. Magnin and Lewis were attracted by monorail as an alternative to conventional electric railroads; they were worried that this design concept was not being seriously considered by the consultants. A monorail would have the extra benefit of being a tourist attraction. Indeed, the monorail idea was causing a stir not only in the Bay Area but in many other cities as well. A very vigorous monorail movement was active in Los Angeles, for example.

Planner Norma Westra's response to Magnin likewise provides a commentary on national priorities during these times.

Three weeks later Walter Douglas met with the Engineering Committee for another progress report. Douglas outlined a plan that basically followed the proposals made by the Joint Army-Navy Board back in early 1947, with one important difference: Douglas discussed a rapid transit tube under the Bay as an alternative to another bridge crossing; the southern crossing and the transit tube were complementary projects in the military version.

Douglas argued a tube would allow use of the Bridge Railway space for motor vehicles; the resulting expanded Bridge motor vehicle

capacity would eliminate the need for a \$300,000,000 southern crossing. Douglas added that a transit tube would cost far less than that. Moreover, a tube was necessary because it would not be possible to develop the speed on the Bridge Railway to make rapid transit sufficiently attractive. This was crucial; speed was the critical variable. Douglas went on to describe underground downtown distribution arrangements and possible integration with the local transit system in San Francisco.<sup>48</sup>

Cyril Magnin told Douglas what he had said at the previous meeting: people could not be expected to buy a warmed-over Southern Pacific or Key System. People had to be brought in from the suburbs to maintain downtown, but if people weren't pleased by the system they wouldn't use it.<sup>49</sup> Breuner commented that local transit service between residential areas within the major cities and downtown was crucial and should be built first. Breuner recommended building twenty percent of the proposed system and seeing how things went.<sup>50</sup> Douglas had difficulty with Breuner's comment. Douglas responded that PBHM had not been assigned the task of working on local transit plans and provisions for feeder service; it wasn't in the contract.<sup>51</sup> BARTC executive secretary Angus Cohan disagreed; Cohan was correct.

Section 6.3 of the contract between PBHM and BARTC called for "Plans and analyses covering an over-all system of mass rapid transit for the Bay Area adequate to service requirements to 1990." Section 6.4: "Inventory and evaluation as to effectiveness of existing mass transportation facilities and of transportation facilities which are currently planned as they relate to the rapid transit plan." Finally, Section 6.5: "Correlation of existing transit facilities with the overall system developed in accordance with section 6.3...and

recommendations of methods of integrating the facilities or absorbing them into the system developed in accordance with section 6.3..."<sup>52</sup>

The contract seems clear enough; the consultants were expected to pay attention to local transit issues as these related to the regional system. Douglas, apparently, did not see this as a priority. PBHM's lack of concern for this subject would be reflected in their final report: this document contained just a few very general paragraphs on the issue. However, as I will take up in more detail in a later section, the proposed system design assumed the existence of high-quality coordinated feeder services, along the lines described by Charles DeLeuw when he addressed BARTC in 1952. Why, then, would PBHM devote so little attention to this question? Several reasons seem likely.

One reason was the regional nature of the system and the related need for large distances between station stops in order to build up speed. Increasing the number of stops outside downtown terminal areas would increase travel times, especially for long distance commuters. Another reason was cost. PBHM was well aware their project would be extremely expensive; if existing local transit facilities were to be acquired this would add substantially to the cost. Any additional local transit service built as part of the regional project would likewise increase costs. Finally, it seems likely the consultants' awareness of the political history of this project would encourage them to steer clear of the local transit issue. The Oakland leadership had been warning San Francisco for years to keep its local transit worries to itself. Furthermore, the East Bay was at the moment intensely involved with its own local transit concerns; the East

Bay leadership preferred to see to its own situation.

By early December, 1954, the regional land use planning phase of the project was essentially complete. Planning Consultants Adams and Howard met with the Commission Engineering Committee to discuss the results of their efforts. The planners expressed their pleasure at being associated with this pioneering project: "If we don't come up with the first transit facility of its kind in the world, it will be, at least, the first rapid transit plan that will be based on a regional plan of this sort."<sup>53</sup>

Adams and Howard emphasized the importance of the transbay tube connecting the San Francisco and Oakland central business districts as the key link in the entire project. The tube would make the two sides of the Bay into a unified core area; this was essential for the continued survival of the downtowns as functionally specialized zones of activity. Downtown San Francisco and downtown Oakland needed each other if they were to remain competitive with rapidly growing suburban areas. They were really parts of one great center, not two separate entities. Planners and engineers agreed, they stressed, on the need for a transbay tube; without it, efficient operations would not be possible.

Construction of a transbay tube was necessary to allow the Bay Area to reach its full potential population. With a tube and accompanying rapid transit lines in place, the planners projected a 1970 regional population (which in turn formed the basis for the regional plan and consequent traffic projections) of 4,800,000. This would mean a sixty percent increase from the currently estimated population of 3,000,000. Without the tube it would take the Bay Area perhaps

two more decades to reach this total.

Finally, Adams and Howard pointed out, as Douglas had at the previous meeting, that tube construction combined with repaving the Bridge Railway lanes would provide sufficient transbay transport capacity to postpone the need for an additional bridge crossing until at least 1970.<sup>54</sup>

The regional plan presented by the consultants embodied a set of philosophical and political assumptions regarding the role of planning, desirable regional form, and the relationship of transport facilities to that form. Melvin Webber, who worked as a regional planner with PBHM, articulated several of these assumptions in a paper he presented at the second annual University of California Conference on City and Regional Planning in 1954. Webber's main point was the desirability of a pattern of regional land use based on functionally specialized but interdependent centers of activity. This particular regional form required an adequate system of transportation to integrate specialized areas; accessibility was critical. The absence of a comprehensive transportation system would disrupt the capacity of specialized zones to efficiently interact with each other. Those region and nation-serving activities centralized in highly concentrated core areas were particularly vulnerable to such disruption.

Webber described the leverage transportation facilities would exert on the regional political economy: "By making the regional core immediately accessible at high speed to all parts of the region, the greatest inducement to its growth would be realized. By making all parts of the region immediately accessible to all other parts, the maximum degree of choice would be afforded to the employee in seeking

employment and the employer in establishing new stores, offices and plants. It is the present limitation on choice which is now coercing the businessman and the home seeker alike to accept sites which are other than they would prefer. The present restrictions on choice resulting from congestion on our transportation system may, by default, be inducing a regional pattern of development which no one in the Bay Area prefers...The installation of a comprehensive transportation network would help to create a free and competitive market for the location of offices, stores, factories, and homes..."<sup>55</sup>

The assumption clearly expressed in this philosophy of planning practice was that "uncoerced" private market competition led to a socially optimum arrangement of land uses and activities. The significance of regional transport investment was this: transport exerted a powerful influence over location decisions and it involved minimal direct interference with private decision-making. Webber wrote a few years later, in a discussion of the Bay Area regional plan, that transport facilities would play the major role in making the plan a self-fulfilling prophecy.<sup>56</sup>

Transport investment was a democratic intervention; generalized accessibility would liberate capital and labor to seek their maximum competitive advantage. Webber emphasized the expanded range of choices that would be available to all. This emphasis closely corresponded with the slogan trumpeted by the Chamber of Commerce-led Los Angeles rapid transit movement during the latter 1940s: "Live where you like. Work where you please."<sup>57</sup> This planning philosophy dovetailed neatly with a political economy where there wasn't any support for the direct social allocation of activities in space.



The Oakland leadership probably found the planners' discussion of unified cores and of the need for close cooperation between their downtown and San Francisco's a bit mystical. After all, it was Oakland's major goal to distance itself from San Francisco's historic domination and establish its own hinterland in the East Bay. The tube idea, however, was likely very interesting for other reasons: as an alternative to the defeated parallel bridge; and the tube was connected to a network of East Bay rapid transit lines that converged on downtown Oakland before plunging under the Bay. This had, of course, been Oakland's demand and condition for participation since the regional transit movement had gotten started. The planners apparently agreed with Oakland's analysis of regional development patterns. Moreover, Oakland must have enjoyed discussing a tube when such discussions were linked to the possibility of eliminating the need for a southern crossing. Senator Breed was sufficiently impressed with the planning work done thus far that he sponsored legislation in the 1955 session that would permit the BARTC to do public relations work;<sup>58</sup> the region had to be informed about the importance of the regional rapid transit plan.

However, while these planning proposals were being considered, East Bay initiatives regarding its local transit situation threatened to split the BARTC. The Key System had finally forced the East Bay to begin organizing for a buy-out. The East Bay leadership (BARTC members Sherwood Swan and Clair MacLeod were central figures) had very reluctantly started the process that would result in a public transit agency for their area. By the end of 1954 they had made substantial progress. San Francisco BARTC members and Senator O'Gara were very

alarmed, in fact, about how much progress had been made; they feared a threat to the survival of the regional rapid transit movement.

## VIII ORIGINS OF THE ALAMEDA-CONTRA COSTA DISTRICT

Political and business leaders had been talking about a public transit operation in the East Bay for years, of course, while Key System deteriorated. However, for ideological and competitive reasons these discussions had never gone past the stage of threatening Key. Key System apparently got tired of waiting for the East Bay to overcome its internal conflicts; Key moved to prod the leadership along the municipalization path.

During the summer of 1953 Key System workers struck the company; the strike lasted for 2.5 months. Sherwood Swan told BARTC that downtown business had suffered badly during the strike, especially the smaller merchants. What upset the East Bay leadership most was its inability to do anything about the situation.<sup>1</sup> The workers offered to submit to arbitration. Key System, however, refused. The events were distressingly similar to what had happened in 1947. At that time Key management also refused a union offer to submit to arbitration; a crippling seventeen-day strike resulted.<sup>2</sup>

The Oakland City Council appealed to the California Toll Bridge Authority to operate the transit system during the emergency, but CTBA refused to intervene.<sup>3</sup> Key's intransigence was widely interpreted as an effort to force a buy-out. The transit industry journal

Bus Transportation reported National City Lines' interest in selling Key. Key's President Glen Stanley was quoted as saying: "We have a large investment in the transit company here on which we have never realized anything. We are willing to sell to any group, cities, or utilities district." A San Francisco public relations firm had been hired to sample public reaction to a sale. Key figured ten million dollars was a fair price.<sup>4</sup>

Clair MacLeod, a railroad lawyer and elected official in the wealthy East Bay community of Piedmont led a movement to form a permanent East Bay Transit Committee; this group would consider forming a public transit agency. The leadership vowed never again would it be caught in such a helpless condition as it was during that long, hot summer.<sup>5</sup> By the end of November, 1954, Senator Breed had a draft of a transit district bill ready for discussion. However, all this came as a shock to San Francisco; no San Francisco BARTC members were involved with the East Bay Committee's work, or were even well-informed about it. Moreover, the plans developed so far for a proposed East Bay transit district did not consider service to San Francisco.<sup>6</sup>

Senator Breed thought that transbay service was not the concern of people working on the East Bay district. "Probably the BARTC will come up with a plan for service between the East Bay and San Francisco. That is the kind of think they are studying." The East Bay needed to take action now; the problem was a local one.<sup>7</sup>

Sherwood Swan agreed this was a local matter. Swan said Key System wanted to get out; the East Bay had to be prepared to take over. "It will be a practical, useful mass transit system for our East Bay area; and we are dealing with it from the point of view of

downtown Oakland. If the values of our property are going to be sustained, we must do it by a system which serves our area well--but this bears no relation to traffic to San Francisco." Swan thought perhaps CTBA would take over transbay operations; or, maybe, BARTC would end up with it.<sup>7</sup> Either way the East Bay had more pressing problems.

In early December Swan brought Robert Nisbet, assistant Oakland city attorney and legal advisor to the East Bay Transit Committee to a BARTC meeting to discuss the proposed transit district legislation. Nisbet explained the East Bay's need to be in a position to act on this local issue; he saw no conflict between this East Bay initiative and regional rapid transit. The San Francisco contingent was very disturbed. Arthur Dolan asked Nisbet how it would be possible to tie in an East Bay district with the envisioned regional operation. Nisbet repeated the East Bay operation would be a strictly local one, just like San Francisco's Municipal Railway. There was no conflict. Alan Browne said he saw possible difficulties in working out an arrangement. Dolan agreed with Browne that forming an East Bay district would make it more difficult to finance a regional system. Swan responded he could not conceive of any other objective than integrating the proposed East Bay district with any overall operation. Alameda representative Buttner asked why an East Bay local system would harm financing for a regional system when San Francisco's local system wouldn't. In any case, Buttner thought that local transit would remain locally operated even after the regional system began operating; he didn't see any integration problems. Dolan replied it did not seem unlikely to him that studies currently underway would indicate the desirability of having San Francisco and East Bay local transit lines

operated by the same agency that ran the regional system. Alan Browne said that a separate East Bay district would confuse the financial community. Cyril Magnin stepped in to propose that a special committee be formed composed of members from San Francisco and the East Bay to try to work out an accommodation. BARTC voted its approval of this motion.<sup>9</sup>

Just before Christmas Senator O'Gara held a hearing about the proposed East Bay district. O'Gara was angry; he saw more than six years of frustrating work on behalf of regional rapid transit being wasted because the East Bay had decided to go it alone. He was upset the East Bay apparently didn't care about transbay service; he was depressed about the lack of a sense of history revealed by the East Bay's action. O'Gara recalled some history for the hearing. He recalled it was Alameda Senator Breed who was responsible for the provisions in the 1949 Act and later legislation that prevented the formation of an effective transit district. Breed had always insisted that study must precede action. Now, O'Gara charged, Breed apparently had had enough study and was ready to act; in doing so he was willing to abandon the entire regional project.<sup>10</sup>

Sherwood Swan told O'Gara transbay transit was specifically left out because the East Bay did not want to encroach on BARTC's territory. Moreover, Swan did not consider the planned East Bay service "rapid transit," and he was upset when people called it that. It would be strictly East Bay local service. However, Swan was willing to see transbay service included. He just hadn't thought that anyone in San Francisco was interested in his local problems. That was why no San Franciscans were invited to participate in the legislative

drafting process.<sup>11</sup>

Marvin Lewis was bitterly disappointed with the East Bay initiative. Lewis had hoped the nine Bay Area counties were at last thinking of themselves as one unit. It came as a shock to him that some BARTC members had been working on this East Bay plan. Lewis voiced his despair that if a second district were created then financing would be almost impossible; the years of BARTC work would go down the drain.<sup>12</sup> Clair MacLeod pointed out the East Bay mayors had all endorsed the proposal; they felt compelled to act. MacLeod, like all the other East Bay leaders, insisted that integration would not present any problems.<sup>13</sup>

On 6 January 1955, a special committee composed of BARTC members from San Francisco, Alameda, and Contra Costa counties met to try to repair the rift. The San Francisco members stressed the need for unity and for making sure the East Bay action did not jeopardize the larger project. The East Bay contingent protested their sincerity, emphasizing their allegiance to regional goals. The summit was able to reach agreements on language that was acceptable to San Francisco.<sup>14</sup> At the January 13 BARTC meeting the special committee reported they had decided on the inclusion of two provisions in the transit district legislation: (1) the district would not be able to "interfere" or exercise any control over another transit agency's facilities in its area without the consent of the legislative body of the other agency; and (2) the district would be allowed to enter into agreements for joint use, through routes, joint fares, transfers of passengers, and pooling arrangements with other transit agencies. These two provisions were acceptable to the entire Commission; BARTC then voted its

endorsement of a transit district for the East Bay.<sup>15</sup>

The financing concerns expressed by Dolan, Browne, and Lewis went to the uncertainties that would exist for bondholders if two autonomous agencies provided service in the same territory. Without some kind of understanding it would be possible for one agency to take action that would jeopardize the revenue generating capacity of the other; this could threaten the security of the bondholders. Interestingly, however, the provisions finally agreed upon were vague and did not provide any concrete guidelines for future relations between agencies. The leaderships on both sides of the Bay informally agreed on a division of labor. However, nothing specific would ever be legally adopted. The East Bay had decided it wanted a transit district. In the interests of the larger regional project San Francisco was forced to accept this.

On 18 January 1955 Senator Breed introduced SB 987. As originally submitted the bill was a general enabling act; local areas anywhere in the state could form a district under its provisions. The procedures called for the creation of a district by a vote of the people in the proposed area. In addition, the people would elect the district board of directors by ward. The district would be able to provide any and all transit facilities, including rapid transit, and would be able to employ any and all forms of transit equipment.

The board of directors would adopt a resolution declaring the need for a bond issue to either acquire or construct a system; they would submit the question directly to a vote of the electorate. Two-thirds affirmative vote would be necessary to authorize sale of any general obligation bonds. The district would be able to sell bonds



for an amount up to twenty percent of the assessed valuation of district property. Furthermore, the district was authorized to levy a property tax for any district purpose; no limit was set on an allowable tax rate. The district was exempt from control over rates and service by CPUC; it was also empowered to initiate eminent domain proceedings without CPUC's having jurisdiction. The provisions agreed to by BARTC were also included.<sup>16</sup>

The only controversial aspect of the legislation at this point was its provisions dealing with transit labor. The East Bay was divided on the question of whether a civil service-style merit personnel system or collective bargaining procedures ought to govern. The original bill called for a merit system. In addition, the bill did not say anything about what would happen to transit workers in firms that were acquired by a district.

At the end of March a new set of labor provisions were amended into the bill. Collective bargaining between a transit union and a district was mandated. Moreover, to the extent necessary for service, all workers of a utility that was taken over by a transit district would get the same jobs with the district and would not suffer any decline in status. District workers were, however, forbidden to strike. Apparently the more conservative elements in the East Bay were persuaded that things would go more smoothly, politically and economically speaking, if these concessions to organized labor were made.<sup>17</sup> A month later the labor provisions were once again amended, further protecting the rights of affected private sector workers.<sup>18</sup>

There was one other important change in SB 987 as it moved through the senate. Los Angeles Senator Richards moved an amendment

limiting the transit district to Alameda and/or Contra Costa counties.<sup>19</sup> Richards motion reflected intense controversy surrounding the rapid transit movement in L.A.

Given the long history of strong anti-public ownership and anti-labor sentiment in the East Bay the relatively smooth legislative passage of this transit district bill was extraordinary. Within its domain the elected board of directors would govern as no other transit directing body could anywhere on this continent. The Alameda-Contra Costa transit district Act was a pioneering piece of legislation in several ways.

The unrestricted and unlimited property taxing powers granted to the district directors were unique. No other public transit agency had any taxing power of its own at all. These powers would allow the district a great deal of flexibility in financing operations from a variety of combinations of fare box and property tax revenues. The twenty percent of assessed valuation limit on bonding capacity was extremely generous. Furthermore, the fact the district did not have to seek approval from other governmental agencies before submitting a bond issue to the electorate represented a grant of formal autonomy that many other transportation agencies, including authorities, did not possess.

The labor provisions were likewise pioneering. This was the first time agencies of government in California were allowed and mandated to recognize labor unions and sign collective bargaining agreements. While they gave up the right to strike, nevertheless, the local unions involved were more concerned with gaining recognition and bargaining rights. Public sector labor organizing received a boost. The provisions establishing protection for private sector

workers--supervisory employees were not similarly protected--were also precedent-setting in the California transit industry.

In an oral history interview Senator Breed told a story which indicates how much his politics on this issue had changed with the times. He recalled Key System came to him with a request for an amendment to his bill: Key wanted a provision requiring the district to buy it out. The private company's fear was that a public agency would come into its territory and competitively drive it out of business. This was not what Key System, or any other private transit company seeking to abandon the field, had in mind. They wanted to get paid the best possible price to exit the industry. Breed told Key System, "No, I will not stand for that; I'll kill the bill before I do it. If I do it, I'll put you on the front page of the paper. I'll tell the people of the world exactly what you're trying to do--you're trying to put a gun at the head of a newly-formed district. You'd be in a position of naming any price if the law said that they have to do business with you." Key System apparently backed down; they didn't oppose the legislation.<sup>20</sup> However, they weren't about to make the transition a pleasant one for the new district when the inevitable time came.

After the passage of the legislation the East Bay transit leadership re-organized itself to campaign for district formation. Sherwood Swan told BARTC in 1956 that the committee preparing for the election in November included three BARTC members, Buttner, MacLeod, and another Alameda representative. Swan said these three were there to guard against the possibility of East Bay objectives conflicting with those of the regional movement.<sup>21</sup> As an integral part of

their election propaganda Robert Nisbet, Clair MacLeod, and others speaking on behalf of an East Bay district stressed the complementarity between the local effort and the regional system proposed by BARTC. The East Bay would provide local service and also operate feeder lines in coordination with the regional network; the two systems were entirely different.<sup>22</sup>

In July, 1956, Robert Nisbet told the Highways and Transportation Section of the Commonwealth Club that "It is our opinion, and that of most of the experts who have given serious thought to this matter, that the creation of an Alameda-Contra Costa Transit District will not interfere with the plans for an eventual nine-county system of rapid transit, as envisaged by the SFBARTC.... The ACTD, responsive to the present and future needs of the people within its boundaries, both as to local and transbay transit, would hasten the development of the nine-county system and not impede it." Nisbet said the district would provide all forms of transportation now, and feeder and local service in the future. Nisbet also pointed out, "Another, and perhaps even more important consideration, is that the longer you let a facility deteriorate and lose the patronage and confidence of the people [as Key System was doing], the longer and more expensive will be the period during which that confidence and patronage can be regained with a modern transportation system."<sup>23</sup>

Joseph Knowland, the arch-conservative Oakland Tribune publisher, supported the creation of an East Bay transit district. Knowland concisely and precisely explained his reason for supporting this venture; his comment summed up the relationship between business politics and ideology. Knowland told a meeting of Oakland leaders that

"I am not an advocate of public ownership, as such. But we are here confronted with a condition, not a theory."<sup>24</sup>

In the middle 1950s the great majority of transit operations in the United States were privately owned, even in the larger cities. The mass municipalization of transit that was beginning to happen during this period represented the first large-scale intervention by government into a failing private industry; "lemon socialism" was coming to the United States in a transit vehicle. People like Joseph Knowland and their merchant, financial, real estate, and political associates pragmatically orchestrated this process.

The Alameda-Contra Costa Transit District was created by vote of the people in 1956. Eugene Cadenasso, a former leader of the Bay Area Transportation League, ran for a seat on the board of directors; he finished a poor third out of three candidates in his ward.<sup>25</sup> His defeat reflected the different character of transit politics than had prevailed in the latter 1940s when the League claimed 40,000 members. However, some things hadn't changed much at all. Important people in Contra Costa County opposed district formation because they feared domination by downtown Oakland. The new district would soon face a serious challenge from within its own midst.

This Contra Costa challenge was not the only one the new board of directors would confront. In January, 1956, FBHM presented a regional rapid transit plan. During the spring the California Public Utilities Commission opened hearings on Key System's application to abandon all Bridge Railway operations. Finally, late in the year the California Toll Bridge Authority announced that bonds for a southern crossing were not saleable. All of these developments were related;

1956 was an extremely important year in Bay Area transportation political history.

IX PARSONS, BRINCKERHOFF, HALL AND MACDONALD, AND  
REGIONAL RAPID TRANSIT

In January, 1956, PBHM presented the BARTC and the metropolitan area with Regional Rapid Transit.<sup>1</sup> The plan embodied the ideas discussed by the consultants and the Commission Engineering Committee in late 1954. It was essentially a three-part system, closely following the conception put forth by downtown Oakland early in the movement's history. There was a network of East Bay rapid transit lines radiating from the Oakland central business district through Berkeley to Richmond in western Contra Costa County; through the Berkeley Hills to Concord in central Contra Costa; and to the Union City area south of Hayward in southern Alameda County. There was a network of West Bay rapid transit lines radiating from the San Francisco central business district south, through San Mateo County and into northern Santa Clara County; and north, across the Golden Gate into central Marin County. There was a connection between the Oakland and San Francisco downtown areas.

The consultants provided a truly regional transit plan: there were very few stops in San Francisco and Oakland outside the central cores. In San Francisco there were only five residential area stations. Two of these were along the peninsula line; three were on the Marin route.<sup>2</sup> The volume of traffic projected for the peak hours on the

peninsula trains would be sufficiently great to prevent San Francisco residents from boarding the cars heading downtown during the peak. One of the Marin line stations was located in the Presidio, a large area owned by the U.S. military near the Golden Gate Bridge. The Presidio was maintained as a military reservation; civilians did not live there. Why a Presidio station? The Report did not explain. When the other San Francisco stations were mentioned there was an indication of which neighborhoods would be served by it. On the Marin line, for example, the Green Street station would serve the North Beach residential and commercial area; and the Van Ness station would serve the Marina district.<sup>3</sup>

It seems to me the Presidio station was one small illustration of the larger purposes the rapid transit plan was designed to accomplish. San Francisco had been lobbying hard for years at the national capitol to get the military to turn over Presidio lands for commercial and residential development; this was a choice location. After the second World War San Francisco's lobbyist in Washington, D.C., Francis V. Keesling, Jr., was working to get the Presidio declared surplus Federal property so it could be released to the tax rolls and privately developed. In 1948 a House of Representatives committee agreed the Presidio would be perhaps the most desirable residential area in the entire city; they recommended the Army reconsider its plan to utilize the territory for military housing.<sup>4</sup> In 1956 the city was still trying to get the lands declared Federal surplus. Marvin Lewis had resigned his seat on the Board of Supervisors and taken up Keesling's job as city lobbyist. It seems likely that Lewis, who was still an active BARTC member, was working on an opportunity to use transit for classic real estate



development purposes.<sup>5</sup> This was, however, a very small, very unusual part of the overall design.

A 1955 Status Report from Walter Douglas to the Commission Engineering Committee clearly articulated the foundations on which the regional rapid transit plan had been erected. The conceptual underpinnings were familiar ones: "The basic characteristic of this plan is that it represents an interurban main line, trunk system, designed to receive the vast majority of its inbound passengers at stations to which they must be delivered by private motor car or local mass transit . . . This is in sharp contrast to an infinitely more extensive system--a neighborhood system--that would be required to bring interurban rapid transit within walking distance of the homes of the majority of the citizens in the Bay Area . . ."<sup>6</sup>

Douglas then proceeded to outline the reasons why a main line system was chosen: (1) "The regional plan . . . which confirms the present pattern and forecasts the continuing trend of low density residential areas characterized by the single family home; (2) The certainty that success of interurban rapid transit will depend upon its competitive posture in relation to the private automobile . . . ; (3) The certainty that potential patronage of interurban rapid transit lines which draw only from residences within convenient walking distance of their stations, will never justify the short headways, the regular service, that is necessary to compete with the automobile . . . ; (4) A conviction, accordingly, that success in diverting motor vehicle passengers to interurban transit lies more in reduction of waiting time at convenient transfer points on a trunk system over which short headways can be maintained, than in neighborhood interurban transit extensions

which reduce the length of initial automobile travel, but increase waiting time because of the longer headways dictated by smaller tributary population; (5) A conviction, also, that impairment of speed by the many station stops necessary to provide neighborhood service will be a much greater deterrent to patronage than the necessity to use a private car to a trunk line system with a few stops and high speeds; (6) A conviction that the same prerequisites for attracting to interurban rapid transit the patronage of those who have automobiles at their command, namely, short headways and speed, limit the destination areas to be served to the major centers of employment and commerce.

The foregoing considerations compel in our minds a recommendation for a main line, trunk system, even without taking into account its much lower capital and operating costs as compared to a neighborhood system."<sup>7</sup>

Douglas saw that such a main line system had certain important consequences: (1) "In its outer reaches, interurban rapid transit can not function, can not develop patronage, of itself. It must be fed by private motor cars and buses. Generous parking and convenient transfer facilities at stations will be mandatory; and (2) Delivery in the urban cores must be made within convenient walking distance of the major centers of employment and commerce. This requirement derives from the simple realization that a private automobile driver will not be disposed to leave his car behind at one of our tributary parking lots if, at the end of his transit ride, he must transfer to a local mass transportation vehicle to make the last lap of the journey."<sup>8</sup>

Douglas then took up the question of what kind of patronage a main line system could develop. "If, as I have set forth above, the

very nature of interurban rapid transit in relation to a successful competitive posture with the private automobile, dictates the type of system it must be, it equally clarifies the type of patronage it can develop. Clearly, a system inherently designed to receive so substantial a portion of its passengers from private motor cars, and to discharge them at fixed destinations along its route, contemplates their return via its facilities." Douglas anticipated a great volume of "kiss-and-ride" patronage in addition to those leaving their cars at station parking lots; ". . . if his wife has driven him to . . . a station, she will be looking forward to picking him up."<sup>9</sup> In general, rapid transit patrons would be those making regular round trips. Who were they?

Douglas answered they were two types of patrons: commuters and shoppers. "Of these, from the point of view of demand on rapid transit equipment, the commuters are dominating, for it is they who create the striking concentration of trips during the morning and evening rush hours . . ."<sup>10</sup>

PBHM's regional rapid transit system was designed to lure peak hour commuters out of their cars. Frequent, high speed service were the main attractions. The patrons were to come willingly, and in very large numbers. Rapid transit was not intended, however, as an alternative to freeway construction. On the contrary, the regional plan assumed an extensive freeway network would be in place; an extensive freeway network was, in fact, the region's top transportation priority.<sup>11</sup> The role of rapid transit would be to handle peak hour loads the freeways could not accommodate. While the transit planners recognized the priority of freeway construction to handle those commuters who

could not or would not leave their cars at home, they argued it was not feasible to construct the freeway capacity necessary to carry the total volume of peak period travel. The costs and disruption that would be caused by the construction of so much freeway and related parking capacity would kill the major employment and commercial center patients the planners were trying to save. "The primary advantage of a system of interurban train rapid transit, complementary to the regional highways, lies in its ability to vastly amplify the delivery capacity of highways and the reception capacity of downtown business and shopping centers without usurping land from highly productive business activities."<sup>12</sup> This virtually unlimited capacity was the central goal of the regional rapid transit movement.

However, PBHM had some difficulty in finding out exactly where the projected network of Bay Area freeways was going to be built; the Division of Highways was reluctant to talk about its advance plans because they feared escalating right-of-way acquisition costs in the proposed freeway corridor.<sup>13</sup> However, with a little help from their influential sponsors the consultants were able to secure enough information to plan a transit system that would supplement the freeways.

Several of the assumptions in Douglas' outline are especially noteworthy. Transfer behavior is one. Travelers would willingly make one transfer: they would change from a car or a local bus to a rapid transit vehicle to complete the trip downtown. A commuter would either park his car at an outlying station parking lot, or his wife would drive him to the station and leave him off; she would then have the car available for suburban housewifely errands. However, these commuters had to be able to walk from the rapid transit vehicle to their

final destinations; they would not willingly make two transfers.

With this standard of maximum one transfer in mind, consider the propaganda BARTC's public relations consultant, Herbert Cerwin and Company, started circulating in the San Francisco public schools during 1956. Cerwin and his staff pointed out the tactical significance of spreading the word through the educational system: "The interest of these young people is contagious. They bring their lessons and their discussions home to their families. This is an excellent way to make Rapid Transit a subject of wider discussion."<sup>14</sup> Nestor Barrett, BARTC's member chairing the Commission's Public Relations Committee, wrote to Cerwin, "I am extremely interested in the success you have had in getting our material into the school system in San Francisco. I regard this as one of the most important things that we can do from a public relations standpoint since, despite what I know we all hope for, I am certain it will be a long and difficult struggle before our Transit District finally comes into being. Many of these young people that are being educated today will be voting on these bonds tomorrow."<sup>15</sup>

The approach taken was to hit impressionable children where they were vulnerable and, at the same time, attack one of the pressing social problems of modern America: the consequences of the absentee father. BARTC told the following story:<sup>16</sup>

Mary Brown walked across the schoolyard. She was very sad. The reason she was sad was because earlier in the day Jimmy Foley had told the other students in her class how his father played all sorts of games with him after work.

Mary liked to play games too. She lived in San Francisco. But, whenever she tried to play games with her father he said that he was tired and that he had to get up early to go to work.

Her father worked in San Mateo, in one of the industrial plants. He often said he liked living in San Francisco and working in San Mateo.

The reason he was tired at night was because he had to travel so far to get to and from work. Because of this he

had to get up much earlier and of course he got home later, too. Mary wished that there were some way he could get to and from work much faster . . . Then he wouldn't be so tired and could spend more time playing with her.

The promise that transit would improve the living conditions of the industrial working class was a truly historic one. Wherever transit lines were built in industrializing cities, in Europe, Latin America, all over the United States, their promoters held out the promise that workers would be able to abandon filthy, stinking crowded neighborhoods located in the shadows of industrial plants. They would be able to leave behind the slums where crime, vice and revolution were bred for clean, healthy living in suburban quarters. This was the moral dimension of transit policy;<sup>17</sup> it was still being promised in the mid-twentieth century, much as it had been one and two generations ago. The cost of auto transport was said to be too high for the working man; rapid transit would lower these costs, allowing a larger portion of wages to be spent on family necessities.

Marvin Lewis told BARTC organized labor would even support a sales tax to finance rapid transit, (labor historically opposed sales taxes because of their regressivity) because labor was currently "paying through the nose" to travel by car between home and work; labor had a great deal to gain from transit.<sup>18</sup> Recall the theme of living and working wherever one chose; rapid transit promised to vastly expand the range of employment opportunities open to workers.

The choice of a San Francisco resident who worked in an industrial plant in San Mateo County to represent the kinds of San Franciscans who would benefit from the regional rapid transit project was, to say

the least, a strained one. The number of stations in San Francisco and in San Mateo and their location were such as to guarantee a worker traveling to an industrial plant a tortuous, time-consuming journey involving at least two transfers, with no guarantee at all there would even be any transit connection from the San Mateo County station to the plant. If the worker were traveling during usual daytime hours, he would be traveling opposite to peak hour traffic flows; he could drive on uncongested freeways.

The continuing movement of industrial production, particularly larger plants, to dispersed suburban locations and to rural-urban fringes was a widely discussed phenomenon during this period. The Urban Redevelopment Study, which was conducted between 1948 and 1951 by some of the leading city planners in the nation, did a major survey of patterns of industrial location through 1947. For the Pacific region the Study cited data showing that while the number of manufacturing production workers in central cities had declined between 1899 and 1947, the number of such workers in industrial peripheries, areas outside of central and other large cities but within the metropolitan area, had increased dramatically during this time. Pacific region industrial peripheries increased their share of area manufacturing production employment significantly during the 1939-1947 period;<sup>19</sup> the location policies followed by the War Production Board accentuated this trend.

During World War Two the nine Bay Area counties plus Los Angeles County accounted for eighty-one percent of all the investment in California plant and equipment authorized by the War Production Board. However, the city of Los Angeles received just twenty-five percent

of the total invested in Los Angeles County. San Francisco received about fifteen percent of the total Bay Area investment. Alameda County received the same share as San Francisco; Oakland received thirty-six percent of the Alameda County investment.<sup>20</sup>

In its 1947 report the San Francisco Transportation Technical Committee predicted that industrial production would continue to diffuse throughout the Bay Region. PBHM itself projected a similar pattern of industrial location, although they hoped enlightened local agency planning would group manufacturing plants into spatially concentrated industrial zones. The costs of providing utilities and transport facilities to such concentrations would be less than the costs of servicing scattered sites.<sup>21</sup>

Industrial consultant Stuart Walsh, in a paper presented to the first annual University of California Conference on City and Regional Planning (Melvin Webber addressed the second Conference), analyzed the California pattern of industrial location: ". . . the industrialist often feels that if he got out to a place where people don't have so many job opportunities, where they cannot readily go from one employer to another, he would have a better break in his labor problems, through lower turnover . . . It is the reason why the Rohr Aircraft Company recently established its new plant at Riverside . . . They were seeking a new source of labor away from a metropolitan center."<sup>22</sup>

Walsh then described the kind of employee the industrialist was attracted to in such areas: ". . . you could cite case after case all over California and the West, where the desire to employ stable people who have roots in the community, who own their homes and have a garden to work in on the longer week-ends, is the overwhelming consideration



in regard to plant location."<sup>23</sup>

Walsh said a little bit more about Rohr, who would build the trains for the Bay Area Rapid Transit District; the Rohr personnel manager, " . . . said that the thing that pleased them most in their new plant at Riverside was that they were hiring so many farmers, so many agriculturists, so many folks who had orchards a little too small to live on, and orange groves a little too small to support the family, who would come to work for Rohr because they 'belonged' in the community. That's not the kind of labor that you find in Oakland or in San Francisco, but it is the kind of labor that many industrialists want."<sup>24</sup>

The Bay Area rapid transit system was not being built to transport workers to dispersed industrial plants. Interestingly, this issue would surface in the late 1960s as the racial problem of unemployed and underemployed central city black workers unable to use regional rapid transit to reach suburban industrial production jobs. Transit never fulfilled the moral promises its proponents made; it couldn't. The claims, however, were valuable symbolic political capital.

Another set of important assumptions are the ones concerning future living arrangements and the consequences of these for rapid transit patronage. PBHM explicitly embraced a continuing pattern of single-family home building all over the region. As a corollary of this residential pattern, PBHM did not expect significant numbers of transit patrons to walk to the stations. Since most commuters would live in widely dispersed single-family homes, they would drive their cars (or be driven and kissed) to widely-spaced station parking lots.

PBHM did anticipate high-density residential concentrations located near centers of employment and commercial activity. These high-density zones would be attractive primarily to younger and older people. They would, however, supply a relatively small proportion of all regional transit riders.

The central logic of the regional transit plan was to allow dispersed, single-family residential development to continue after the regional freeway network was saturated with automotive commuters. Regional rapid transit would enable vastly more suburban commuters and shoppers to conveniently travel to the region's major employment and commercial centers--downtown Oakland, downtown San Francisco, and Berkeley--than would be possible via freeways alone. PBHM never intended rapid transit to alter or even challenge regional development patterns based on the private automobile, although they did hope that subdividing would be guided by local government planning to create full communities rather than scattered tracts. As with spatially concentrated manufacturing plants, utility and public service costs could be reduced by such a subdivision program,<sup>25</sup>

Transit had blazed the land development trail until World War One; the Key System, Pacific Electric and the Muni were pioneers. That era was long gone. Bay Area rapid transit would trail behind as the automobile continued to open up new lands for development, picking up those settlers the automobile couldn't, and shouldn't, carry. PBHM's attitude toward the modern land development process was clearly illustrated in their treatment of the transportation needs of southern Alameda and Santa Clara Counties.

The regional rapid transit plan contemplated construction in two stages. During the first stage, assumed to be complete by 1962, the

peninsula line would not extend beyond Palo Alto in northern Santa Clara to reach into the San Jose area. The East Bay line would not extend into and through the Fremont and Milpitas areas. However, extension of both East Bay and peninsula lines into San Jose was planned for second-stage construction, target completion date: 1970.<sup>26</sup>

PBHM forecast large increases in intra-peninsula traffic volumes between 1954 and 1970 as the result of a large expansion of commercial and industrial employment south of San Francisco. Commuter travel into central San Jose would rise accordingly. However, until 1970 the consultants projected relatively few San Francisco-bound commuter trips from south of Palo Alto. "The San Jose area is still, trafficwise, an entity in large part separate from the San Francisco-Oakland area." PBHM noted that the Santa Clara Valley was already characterized by a dispersed pattern of urbanization; dispersed patterns of traffic flow were already in evidence as a result. "Thus the urban pattern in the Santa Clara Valley is not at present compatible with fixed-rail, rapid transit service; and the area's immediate relief appears to lie in surface transit and in the improved highways that are being planned." However, by 1970 highway congestion would have advanced to the point that rail rapid transit service would be necessary to expand transport capacity in the Valley.<sup>27</sup> PBHM did not anticipate any problems for transit in this area, even though the land use structure of the Valley would have grown up around the motor vehicle. Santa Clara County's Planning Director disagreed with this analysis.

Santa Clara County Planning Director Karl Belser wanted all of his county included in the first-stage transit plan. "It seems to me that those of us who are charged with the responsibility for looking

ahead would be remiss in our duty if we did not advocate such services for our area as seemed essential, even if it is in advance of public pressure and support. That, in my opinion, is what the job of planning in local government is. We see development coming . . . The advent of rapid transit to us seems inevitable. We see the three-way linkage of the San Francisco, San Jose, Oakland area by rapid transit as the means of melding these three great major population concentrations together into one great metropolitan complex . . . Nothing, in my opinion, would be worse than to have an area whose population was oriented and distributed on a pattern to be accommodated by an auto-freeway type facility as a service area for a fast rail system of transit. The two types of transit are dynamically competitive and it is difficult enough to overcome tradition and habit without having such bents built into the physical pattern. In Northern Santa Clara and in Southern Alameda County the possibility of changing the direction of development and orienting it specifically to the transit system is still open. It would be possible to provide a type of urban living facility which would be primarily based on the transit system for mobility."<sup>28</sup>

Belser felt that rapid transit must be within walking distance of the homes of the thousands of people who would be streaming into the County, particularly the industrial production workers who would be unwilling or unable to support the luxury of a car. "Yet, if industry locates itself hit or miss, without regard to rapid transit, it becomes impossible, as it is today in the Los Angeles area, to locate effective desire lines upon which to locate the line. It might be said that rapid transit is the backbone of the development pattern. In all

propriety, it should come first and govern many aspects of development."<sup>29</sup>

Regional Rapid Transit represented a rejection of Belser's transit-led development process. PBHM's stance regarding southern Alameda prospects was similar. PBHM forecast that the area between the end of the first-stage line south of Hayward and San Jose would undergo rapid urbanization between 1962 and 1970. The transit planners recommended construction on this line to San Jose for the 1962-1970 period. They noted that in 1970 freeway capacity in the area would not yet be congested; lack of highway capacity was not the reason for the extension. "Rather, it is the opportunity to construct the backbone of a high-capacity transportation system during the area's formative period."<sup>30</sup> This backbone construction opportunity, however, was not intended to counteract the urbanization pattern established during the period prior to construction.

The important point, the *raison d'etre* for the regional rapid transit movement, was that existing transit operators would not be able to play their role in this regional development process. The final report urgently expressed this concern: "Of dramatic significance . . . is the fact that patronage on existing interurban mass transportation has been at a stagnant level or actually declining during recent years while the Bay Area has been growing rapidly and automobile traffic increasing in record proportions. Indeed, the deficits being experienced by private operators of existing interurban mass transportation facilities give clear warning that the region cannot depend on a continuing availability of these services." PBHM stressed the significance of these private transit difficulties: "Without . . . interurban mass transportation . . . the region's centers of commerce must wither for

lack of accessibility."<sup>31</sup>

Highway capacity tests and transit diversion ratios were at the center of Regional Rapid Transit's technical analyses. Highway capacity tests were crucial for determining where transit capacity would be necessary. Highway capacity was defined by PBHM as the "practical" capacity for free flow of vehicles, without congestion or slow-down below the normal and reasonable speeds of interurban auto movements. This was clearly a high standard of movement; congestion would be ubiquitous. PBHM projected the future regional highway system and determined its peak hour capacity. Test lines were then chosen in critical corridors: across the Golden Gate into San Francisco; between Oakland and San Francisco; the boundary between San Francisco and the peninsula; and into Oakland from the East Bay region. Traffic volumes were projected in the corridors based on the regional land use plans and a 1954 origin and destination study. Deficits were established where projected peak hour traffic volumes exceeded highway capacity. PBHM determined that critical deficiencies existed where deficits were greater than 2,000 people per hour; critical deficiencies signalled a need for rapid transit in that corridor.

Like the uncongested, free-flow standard adopted to measure highway capacity, 2,000 persons per hour critical deficiencies established a very low threshold level for rapid transit need. Such a low threshold level was consistent with a focus on supplying capacity.<sup>32</sup>

Once corridor automobile traffic volumes were forecast and capacity-deficient areas determined, ratios were calculated expressing the proportion of auto drivers who would be diverted to the proposed rapid transit system. Calculating these transit diversion ratios was

another one of the pioneering aspects of PBHM's work. The idea of supplying transit service that was so attractive that commuters would willingly transfer from a car did not originate with PBHM. However, there was virtually no literature on the subject of "modal split"; there was precious little experience either. No other area had the kind of rapid transit system PBHM was planning. PBHM's Henry D. Quinby worked up the diversion ratios to project rapid transit patronage; he was breaking new ground every step of the way.

Quinby had the origin and destination survey that was done in 1954. In order to provide an empirical basis for estimating the division of traffic between transit and autos, Quinby chose to analyze conditions on the peninsula. The peninsula was relatively well-supplied with transit service; Southern Pacific and Pacific Greyhound provided peak-hour and off-peak service between peninsula points and downtown San Francisco. Moreover, peninsula transit service paralleled a major freeway route into central San Francisco. Finally, Southern Pacific commuter rail service was the closest thing to what PBHM was proposing in the Bay Area. The SP suffered in comparison with the regional rapid transit system; the SP downtown San Francisco terminal was poorly located and its speed was compromised by numerous grade crossings and occasional conflict with freight trains. However, it was the best available.<sup>33</sup>

Quinby's transit patronage assignments were based on several assumptions. Speed, which determined travel time, was the critical variable. In addition, Quinby assumed the complete elimination of all transit service in the Bay Area competitive with the proposed system, and a ban on all future provision of transit facilities likewise competitive. These conditions were built into every forecast made by

the transit planners, including patronage, costs, revenues and rolling stock requirements.<sup>34</sup>

The PBHM system would be much faster than existing Eastern and Midwestern operations. Scheduled average speeds on these older systems ranged from eighteen to twenty-six miles per hour for most. The Bay Area system would average forty-five miles per hour. A major factor in the much higher Bay Area average speed was the much greater distance between stations on the planned system. Station-spacing on the older rapid transit lines ranged from less than one-half mile to a little over one mile. The Bay Area lines would have an average spacing between stations of almost two and one-half miles. One other important difference was the absence of significant parking facilities on the established systems; large capacity parking lots were critical features of the PBHM plan.<sup>35</sup>

Speed was the crucial factor in diverting auto commuters to transit. Speed was also the main reason why PBHM thought their system would have a far more favorable operating financial situation than existing transit companies; higher speeds meant lower unit operating costs because each transit worker and each piece of transit equipment would perform more service in a given period of time.

The 1954 traffic survey revealed the three major private interurban transit carriers continued to carry a large share of the peak-hour traffic volumes even as they slid financially and quality-wise downhill. During the peak-hours, sixty-four percent of the people making trips between the San Francisco central business district and peninsula points made them by transit. From all of San Francisco fifty-six percent of the peninsula-bound rush hour travel was by transit. On the transbay



crossing, fifty-two percent of the people traveling during the peak traveled in transit vehicles. Finally, forty-one percent of the people crossing the Golden Gate into Marin during the peak were carried by buses. These were the established transit corridors.<sup>36</sup>

However, the regional plan forecast tremendous growth in the southern part of Alameda County and in central Contra Costa County east of the Berkeley Hills. The level of employment would increase substantially in these areas, but a large expansion in the Oakland business and industrial districts would generate a large increase in the volume of commuter traffic into the central East Bay zone. There was little existing transit capacity in these areas; this was reflected in the division between auto and transit use during the peak in these corridors.

Only four percent of the people heading into southern Alameda County from the north during the peak traveled via transit. Through the Berkeley Hills only nineteen percent of the peak period travelers were transit riders. Regional Rapid Transit warned that unless transport capacity in these corridors was vastly increased their growth would be severely restricted. In these areas the proposed first-stage regional transit system would play a significant developmental role.

The total volume of traffic heading into southern Alameda County during the peak, assuming regional rapid transit was in place, was projected to increase by 104 percent between 1954 and 1970. The proportion of this total traveling by transit was projected to increase from four percent to forty-five percent. Through the Berkeley Hills into central Contra Costa the increases were even more dramatic: the total traffic forecast for 1970 was 205 percent greater than in 1954.

The proportion of transit travelers increased from nineteen percent to sixty-three percent. The attractiveness of frequent, high-speed rapid transit service in these two corridors would be so great that about eighty-five percent of the total increase in rush hour traffic would be diverted to transit.

The absolute number of people involved in these projections, however, provides some perspective on the underlying dynamics of the regional transit movement. The projected 1970 volume of transit patronage in the southern Alameda corridor was about 7,800 people in the peak hour. In the Berkeley Hills corridor the analogous figure was 9,700. Recall the 40,000 persons per hour figure that had been a piece of transit movement scripture since the Joint Army-Navy Board mentioned it in 1947; the 1970 figure represented the level of "seasoned" transit demand on the proposed system. The goal was to provide transportation capacity to facilitate growth. The fact that future transit volumes would fall substantially short of the maximum capacity figure was not a cause for alarm; grade-separated transit on exclusive rights of way was necessary to effectively supplement freeways and parking facilities.

The San Francisco situation was somewhat different than in the East Bay. The total number of people leaving San Francisco during the peak period for Marin, the peninsula and the East Bay was projected to increase by forty-eight percent between 1954 and 1970, about 21,000 persons. The text of the final report said that most of this increase would result from commuting between San Francisco and the West Bay counties. "Only a negligible increase is expected from the East Bay."<sup>37</sup> According to the charts in the report about sixty-three percent of the increase in peak period travel from San Francisco would be to Marin and

the peninsula; the remaining thirty-seven percent would travel transbay.

Since relatively high proportions of San Francisco-bound commuters already used transit, the increases in these proportions projected for 1970 were not nearly as spectacular as the analogous Oakland-focused figures. The transit proportion for peak period peninsula-bound traffic was forecast to rise from fifty-six percent to sixty-seven percent; the regional transit system would, however, accommodate almost ninety percent of the total peak period traffic increase in this corridor. The Golden Gate corridor peak hour transit patronage was projected to increase from forty-one percent to fifty-five percent; the PBHM system would likewise handle about ninety percent of the total traffic increase going to Marin. The absolute number of peak period travelers was as interesting in these two corridors as in the East Bay: 20,625 people would be riding transit on the peninsula line and about 5,300 on the Marin route. The peninsula figure was substantially higher than that projected for any other segment of the system; the Marin projection was by far the lowest.

The treatment of the transbay crossing was the most fascinating, and controversial, part of the regional rapid transit plan. Recall that PBHM forecast the increase in commuter travel between the East Bay and San Francisco would be "negligible." Indeed, analysts had been noticing for some years the Bay Bridge corridor had not been participating in the general upsurge in traffic occurring throughout the region.

In a 1954 report the state Division of Highways noted the traffic saturation point had been reached for some time on the Bridge during the peak hours, and that ". . . no appreciable increase in private vehicular traffic seems practicable . . ." In the last several years

the increase in the total number of cars crossing the Bridge had been extremely small; it was smaller than traffic increases in other Bay Area travel corridors and was lagging far behind the increase in motor vehicle registrations in the Bay Area counties. The total number of cars crossing the Bridge increased from about 21,750,000 in 1946 to twenty-seven million in 1954; this was an increase of twenty-four percent in eight years. However, sixty-five percent of the increase had occurred in the first four years. The standard assumption at the time was 1.8 persons per auto; the number of people crossing the Bridge by car increased from roughly thirty-nine million in 1946 to about 48,750,000 in 1954.

The increase in auto passengers, however, was more than offset by the precipitous decline in transbay transit traffic. Figures for Key System showed a decline in patronage from 31.5 million in 1946 to eleven million in 1954, a sixty-three percent drop. Putting the transit and auto figures together meant the number of people crossing the Bay Bridge had declined by about twelve percent to thirteen percent since 1946; since the transit declines were much larger in the earlier years the total number of people crossing the Bay had remained about the same for the latter part of the period.<sup>38</sup>

The Division of Highways analysts suggested several reasons for the stagnation in Bay Bridge traffic. One, of course, was insufficient motor vehicle capacity. Another was that the quality of transit service was decreasing while fares were increasing. A third reason was that new patterns of dispersed suburban development had made transit non-competitive. Real estate development was no longer being located with the idea of convenient access to transit in mind; the density of

development was lower than in the past. Finally, the East Bay was said to be becoming more self-sufficient; there were fewer reasons to go to San Francisco to work, to shop or to play.<sup>39</sup> The highway planners thought travel to and from the San Francisco central business district would increase moderately in the coming years, perhaps twenty-five percent by 1970.<sup>40</sup>

The San Francisco Department of City Planning noted similar traffic trends. In a 1955 study of travel patterns they pointed to the decline in the total number of people crossing the Bay Bridge since the end of the war, and the stable number of cars crossing the Bridge during the peak period. The San Francisco planners agreed the East Bay was becoming more self-sufficient. They noted, however, that trips from Marin and the peninsula had been increasing roughly in proportion to the population increases in these two areas.

Indeed, forty percent of the employed residents of Marin and San Mateo Counties worked in San Francisco; these figures were much higher than anywhere else in the Bay region.<sup>41</sup> Most of these people, as well as those commuting from the East Bay, worked downtown, mostly in the financial district. Seventy percent of these financial district-bound suburban commuters used transit for their journey-to-work. These figures emphasized the crucial importance of regional transit for the financial district.

However, just twenty-five percent of the people working in all of downtown San Francisco, and thirty percent of those working in the financial district were suburban commuters. The rest, of course, lived within San Francisco; the city planners were concerned over the downward trend of transit utilization by these local downtown commuters.

The proportion of financial district work-trips made via Municipal Railway had declined from seventy-one percent at the end of the war to about sixty-three percent in 1954. Moreover, between 1947 and 1954 the total number of people leaving downtown during the peak hour by auto increased by nineteen percent while the number of transit riders declined by nineteen percent. These changes balanced out to mean that roughly the same number of people left downtown in 1954 as had left in 1947.<sup>42</sup> This stagnation was what worried the San Francisco planners.

Yet even though the regional plan forecast large travel volume increases within the East Bay and an increasingly self-contained East Bay area; even though relatively small increases in commuter travel were projected between the East Bay and San Francisco; and even though commuting between San Francisco and the peninsula represented the largest transit movement in the Bay Area, Regional Rapid Transit made the connection between downtown San Francisco and downtown Oakland the key part of the entire proposal. "By whatever alignment or structure this connection be made, it is the single, most important link in the entire system. We [PBHM] are certain that the region's transportation demands cannot be met without a rapid transit crossing of the Bay." The consultants expected a " . . . reduction in travel time across the Bay will have a profound influence in creating a single metropolitan center."<sup>43</sup>

Regional Rapid Transit presented the BARTC and the region with two alternative ways of connecting the Oakland and San Francisco central business districts. One was called the Optimum Plan; the other was the Minimum Plan. The Optimum proposal called for constructing a

transbay tube and underground stations in the San Francisco and Oakland downtown areas. The Minimum option called for continued use of a modernized Bridge Railway and elevated lines through the San Francisco and Oakland central areas. The Optimum was estimated to cost seven hundred and sixteen million dollars, and the Minimum \$586 million. The tube accounted for about sixty-seven million of the 130 million dollar difference; underground construction in the downtown areas took the remainder. The choice between these two alternatives was the centerpiece of Regional Rapid Transit; PBHM express its unqualified preference for the Optimum Plan.<sup>44</sup> It seems clear to me that PBHM structured the choice between these two alternatives to guarantee the rejection of the Minimum Plan.

The final report put forward the following as a standard to be used in evaluating the two options: "Travel time between downtown Oakland and downtown San Francisco should not exceed fifteen minutes." No explanation was offered as to why this particular criterion was relevant.<sup>45</sup> It is important to note the Minimum Plan clearly failed this test. Even though the Minimum Plan called for using the Bridge Railway, PBHM used travel times from downtown Oakland to the San Francisco terminal to compare the two connections. Using a tube it would take eleven minutes to make this trip; the Bridge Railway route would require twenty-two minutes. Key System currently made this trip in forty-three minutes.<sup>46</sup>

The point is that all travel from the East Bay to San Francisco was routed to and through downtown Oakland before reaching the transbay connection. This represented a major change in East Bay transit patterns;

transit was formerly focused on downtown San Francisco. Trains from Berkeley, the rest of northern Alameda County, and from all of Contra Costa were routed first to downtown Oakland and then to the Bridge Railway for the trip to San Francisco. The Berkeley-northern Alameda Key trains currently transported the largest volume of passengers between the East Bay and San Francisco. The portion of the trip between downtown Oakland and the Bridge Railway accounted for most of the eleven minute difference between tube and Bridge-route running times. Interestingly, the Minimum Plan contained a direct link between the Berkeley trains and the Bridge Railway which would be used during the peak hour; these commuters would not have to go to San Francisco via downtown Oakland. However, PBHM never offered a comparison between the travel time for this direct Bridge Railway route and the tube. Such a comparison would have greatly increased the attractiveness of the Minimum Plan. A direct link for commuters from central Contra Costa County, enabling them to avoid the circuitous trip to downtown Oakland, would have further enhanced the Minimum Plan's appeal.<sup>47</sup>

Furthermore, elevated stations in downtown San Francisco (on Mission Street, one block from Market) and Oakland were not the only choices available for Bridge Railway connections, as was specified in the Minimum Plan. PBHM had itself explored the possibility of a direct connection between the Bridge Railway and a subway under San Francisco's Market Street. A Technical Report by Rush Ziegenfelder in April, 1955 (revised August, 1955) concluded that the Bridge Railway could be adapted for use by modern, high-speed, light-weight rapid transit trains; he discussed the particular merits of rubber-tired,



guided vehicles that were then being tried on the Paris, France subway. Ziegenfelder did not see any problems with a direct connection for such trains to a Market Street subway.<sup>48</sup> The final report also noted the possibility of a Market Street subway connection to the Bridge Railway at a cost of \$45.5 million more than the Mission Street elevated line.<sup>49</sup> A subway connection to and through downtown Oakland was never thought to be any problem. Yet Regional Rapid Transit did not formulate this option as a midway alternative to the other two connecting link proposals. This Bridge-subway combination would save at least the sixty-seven million dollar cost of the tube; it would also preserve the existing Bridge Railway investment.

The transbay crossing traffic projections forecast an increase of about fifty percent in the total volume of people crossing the Bay during the peak hour between 1954 and 1970. Separate projections were made for the Optimum and Minimum Plans. The Minimum Plan assumed that a southern crossing would have been built by 1962. Bridge Railway transit was expected to account for fifty-six percent of the increase in total peak hour traffic, far below the figure for diversion in other corridors. The peak hour transit proportion would increase from fifty-two percent to only fifty-four percent. The Optimum Plan assumed a southern crossing would not be built and that the Bay Bridge would be reconstructed for motor vehicle traffic. With a tube in place transit would take eighty percent of the increase in total traffic; the transit proportion would increase from fifty-two percent to sixty-one percent of all trips.

Once again, the absolute number of people traveling transbay during the peak is interesting. With the Optimum Plan there would be

about 15,625 transit riders. Note the relation of this figure to the capacity of the Bridge Railway, 17,000 in the peak twenty minute period and 50,000 people per hour. As traffic analysts had been pointing out for years, this capacity would be adequate for any future growth in transbay transit traffic.

PBHM had determined, however, that the Optimum Plan was necessary. Recall they had indicated their preference for an underwater crossing as early as late 1954. At that time they had argued two main points on behalf of a tube. One was its crucial role in unifying the Bay Area centers, allowing maximum regional growth and downtown competitiveness. The other was the possibility of reconstructing the Bay Bridge for motor vehicle traffic, thereby eliminating the need for another bridge crossing for at least fifteen years. Regional Rapid Transit called BARTC's and the region's attention to this important tube fringe benefit: the region would be able to postpone additional bridge construction projects until after 1970.<sup>50</sup>

Proposing elevated trains downtown would have been sufficient to bury the Minimum Plan forever. At a time when New York and other cities were busily ripping down their ancient elevated lines the mere thought of elevateds was enough to curdle the blood of every downtown merchant and commercial property owner on both sides of the Bay. Sherwood Swan told BARTC he feared to even contemplate it.<sup>51</sup>

There were three main reasons, it seems to me, why the Optimum Plan was necessary. First, recall downtown Oakland's condition for participation in the regional transit movement: the East Bay lines had to converge there. Both plans accomplished this. However, the Minimum Plan did so at a substantial cost in time for San Francisco-

bound transit travelers from the East Bay. A tube would minimize the additional time travelers from Contra Costa and northern Alameda Counties would have to spend going to and through downtown Oakland before they arrived in San Francisco. Second, the cost of the regional transit system was enormous. If a tube would eliminate the need for a southern crossing, then perhaps the transit project could claim the surplus Bay Bridge revenues that were currently reserved for the southern crossing. These toll revenues would ease the burden of financing the regional transit system; the tolls could pay for the tube. Finally, the tube-reconstructed Bay Bridge option would concentrate additional transbay transportation capacity around the existing central business districts. Recall the number of people entering central San Francisco from the East Bay was stagnating; insufficient crossing capacity was an important factor in this stagnation. The tube was the concrete expression of a potential alliance between downtown Oakland and downtown San Francisco.

PBHM emphasized the Optimum Plan would provide the least-cost total solution to the Bay Area's interurban transportation needs; a tube would be cheaper than another bridge. Suburban areas would continue to grow; the major centers of employment and commerce would be unified. The Bay Area would flourish; ". . . it is very probable that among the metropolitan centers of the West the Bay Area will grow to contain the greatest variety of human activities; offer the widest choice of goods, services, occupations, and associations; claim the largest concentration of specialized skills, inventiveness, and creativity; and become the headquarters for the major industries and business enterprises serving the Western states and the Pacific. Should the Bay Area succeed

in freeing its internal communications, it may well become the World Capital on the Pacific Coast."<sup>52</sup>

Regional Rapid Transit was followed by a report on organizational and financial alternatives, prepared for the BARTC by the Stanford Research Institute (SRI).<sup>53</sup> The organizational question was straightforward, a district would be necessary. The regional rapid transit system would be built to accommodate peak hour demands; therefore, it would have to be publicly subsidized because it would not be either feasible nor desirable to charge the fares required to cover total costs. Since public subsidy would be required to pay for construction, the public would have to be given some voice in the decision to use taxes to pay for construction bonds. This was, of course the political weakness of a district as opposed to an authority; a vote of the people would be necessary to issue general obligation bonds.

The next question was what sources of public subsidy would work best. SRI considered several possibilities. One was bridge tolls. The consultants also mentioned the possibility of charging higher tolls during the peak period to encourage transit use and to relieve congestion. Another source was a regional sales tax. The merit of this was that it would spread the burden geographically and among all classes of people. This tax suffered "somewhat", however, with respect to the ability-to-pay principle. A third source was a regional gas tax. SRI thought this would be in addition to existing taxes on motor fuel. The final source was the property tax. SRI considered a special tax to be levied in those parts of the region most directly benefited by the transit lines.

SRI recommended a combination plan for tax support. The main

point was the property tax should not carry the entire burden. Loading the total cost on this one back was considered to be much too dangerous, politically speaking. SRI therefore called for a regional sales tax and bridge tolls in addition to a tax on real property. They noted, of course, the southern crossing currently had priority claim on bridge tolls; this would have to be eliminated if transit were going to make use of this source.<sup>54</sup>

The rapid transit plan was now before the region. The BARTC considered its own and other responses to it. It would then be time to create an agency to implement the plan.

## X REACTION TO REGIONAL RAPID TRANSIT

Reaction to the rapid transit plan varied across the region. One response was universal, though--the cost was staggering. Even the Minimum Plan amount was far in excess of any single public works project undertaken at a local level about which anyone knew.

Official San Francisco was caught in a dilemma. Mayor George Christopher wanted regional rapid transit. He also wanted a southern crossing; the crossing was the city's number one transportation priority. Christopher didn't want to do anything that would jeopardize financing for the southern crossing. However, the Optimum Plan eliminated the bridge; SRI had suggested using bridge tolls for transit instead. Mayor Christopher therefore turned his attention to another source of financing for transit; Christopher called for using state-collected gasoline taxes to build rapid transit.<sup>1</sup>

Indeed, a serious movement to divert gas tax monies to rapid transit took shape in the state senate in addition to the local San Francisco effort. This movement was centered among the Bay Area's senators, with Contra Costa's George Miller in the lead. The Senate Interim Committee that had been working with the Bay Area regional transit movement since the early efforts at legislation passed a resolution calling for submitting a constitutional amendment to the

state electorate permitting the use of gasoline taxes for acquiring and constructing transit facilities. The full Senate Transportation Committee, however, refused to pass the necessary legislation.<sup>2</sup> Several more efforts to divert highway funds to transit (all unsuccessful) would follow in the next few years.

San Francisco had another concern relative to the proposed regional transit system. Recall the plan would provide very little rapid transit capacity for use by San Francisco residents. In 1950 Mayor Elmer Robinson had reluctantly shelved his local rapid transit program because of the Korean War. However, in 1952 Robinson renewed his interest in an extensive San Francisco system. He asked for a report from his transit expediter, Marmion D. Mills, who, with Planning Director Paul Opperman once more made the case for a city network of rapid transit lines. The familiar concern with maintaining the dominant position and high land values in the San Francisco central business district motivated this report.<sup>3</sup>

During 1953 the Mayor and Board of Supervisors began to take action leading to a bond issue to finance construction of a local rapid transit system. Marvin Lewis, however, intervened to ask city officials to halt the process until the BARTC had completed its studies and presented a plan that would integrate San Francisco into the regional system. A Lewis-sponsored resolution to this effect was passed by BARTC;<sup>4</sup> once again, the city leadership reluctantly pulled back to wait.

In April, 1956, San Francisco technicians released a report on a local rapid transit system integrated with the proposed regional network. The report called for building a separate Market Street subway; this local line would extend as a rapid transit connection to

the West of Twin Peaks area. The city technicians also called for rapid transit lines to the Richmond and Sunset districts, and to the southeast corner of the city near the Cow Palace. In addition, they recommended to BARTC changing the number and location of station stops along the proposed peninsula line. PBHM had proposed one stop in the city's Mission district corridor through which the peninsula line would run; the city people proposed two stops north of Army Street on this line to allow for greater local use.<sup>5</sup>

This proposal that the city build its own extensive rapid transit network in addition to the regional system was exceedingly optimistic. About the same time the city technical leadership was also recommending local financing of several miles of freeway;<sup>6</sup> no city built its own freeways. Local governments occasionally purchased some right-of-way and turned it over to the state. Central city freeways were also enormously expensive; the state built those. In any case, the strategy of undertaking two rapid transit projects within San Francisco was soon abandoned, as were the local freeway projects. The city would soon enter into difficult negotiations with the regional transit agency concerning the amount of rapid transit capacity within San Francisco. The city's debt limitations put more ambitious schemes out of reach.

Official San Francisco was ambivalent regarding the Optimum Plan. The San Francisco Chamber of Commerce, however, did not suffer from any such ambiguities. The Chamber approved the Optimum Plan in March, 1956.<sup>7</sup> BARTC member Alan Browne was also a leading activist in the San Francisco Chamber.

Peninsula reaction was reserved. Recall San Mateo County had



been in the forefront with San Francisco of the movement to build a southern crossing. At a BARTC meeting one of the San Mateo County representatives said that his County Board of Supervisors was concerned regarding the lack of information about the Minimum Plan. BARTC member Allen suggested the Commission make arrangements to obtain Minimum Plan information which, he said, could be gotten at a cost of not more than \$2,500. The notes of this meeting taken by a Division of Highways official record that following Allen's motion there was "...a long moment of silence..." after which the meeting was adjourned.<sup>8</sup> This was another indication of majority support for the tube option; it also forecast an increasingly strained relationship between the peninsula and the rest of the regional transit movement.

There was one other peninsula reaction that was extremely interesting and consequential. If the Bay Area transit movement had been following the trials and tribulations of its Los Angeles counterpart it should have come as no surprise. The key was that beginning in 1954 the Southern Pacific began investing millions of dollars in the most modern commuter coaches available and the locomotives necessary to pull them. By 1957 Southern Pacific had replaced most of the coaches used in peninsula service with thirty-one special double-decked cars. In 1960 Southern Pacific was incurring yearly interest costs of \$249,000 for new coaches and \$207,000 for new diesel locomotives used in peninsula commuter operations.<sup>9</sup> The fascinating question is why, in the face of large, continuing financial losses did Southern Pacific decide to make these multi-million dollar investments? The timing is crucial; why did Southern Pacific invest in improved passenger commute service precisely when it appeared a public agency would soon willingly take over its money-losing commuter operations?

In 1949 Southern Pacific's Pacific Electric Railway Company filed an application with CPUC to abandon a large portion of its famed interurban electric railways and substitute buses. The presidents of both Southern Pacific and Pacific Electric told CPUC no more investments would be made in money-losing rail passenger operations; the parent SP would, however, help PE switch to buses.<sup>10</sup> As the Los Angeles rapid transit movement painfully learned over the next several years, Southern Pacific wanted those rails for freight; SP worked hard to keep passenger trains from interfering with its profitable freight business. The Bay Area situation was very similar to what had and still was happening down south.

In June, 1956, Claude Minard, Director of the California Railroad Association and speaking on behalf of the Southern Pacific gave the Commonwealth Club, "A Railroad View of Rapid Transit Proposals." Minard began by noting that "The Southern Pacific has made no secret of the fact in times past that given the opportunity it would be willing to abandon commutation service, which operates at a loss."<sup>11</sup> SP should have welcomed the regional rapid transit movement with open arms. Minard, however, proceeded to quote from Regional Rapid Transit; he quoted from paragraphs that outlined the proposed route down the peninsula. "Studies have shown that it would be possible to elevate the transit line over the tracks of the Southern Pacific Company on this particular section from Burlingame to a point south of Hillside Avenue and continuing to Palo Alto provided details of construction can be worked out to preserve the Railroad's present and future service requirements." PBHM had concluded Southern Pacific's route down the peninsula represented the least cost, most effective rapid transit space. PBHM did not

provide an estimate, however, of how much money and what kind of work was involved in adapting SP's route for regional rapid transit.<sup>12</sup>

Minard felt the need to "...stress the importance of the condition 'provided details of construction can be worked out to preserve the Railroad's present and future service requirements.'" Minard pointed to two main aspects of the proposed use of the railroad right-of-way: "...the requirement that nothing shall be done which will intensify the need for grade crossing separation structures on the railroad.... It must also be remembered that if this region is to have a proper balance it must have industry. The railroad has been ever mindful of the need to preserve potential industrial sites along its right-of-way. These must not be lost merely because of a demand for further passenger transport facilities."<sup>13</sup>

Minard then concluded Southern Pacific's view of their potential neighbor: "In the final analysis the function of the railroad is to provide adequate freight service. There is no doubt that Southern Pacific Company will cooperate to the degree that it is able in the securing of adequate rapid transit. This cannot be permitted to mean that the railroad shall place its ability to move the freight of this area in jeopardy."<sup>14</sup>

It seems to me Southern Pacific invested in new commuter rail equipment when it did in order to block the proposed regional rapid transit movement. SP decided it was more in the railroad's interest to sustain losses on the commuter service than to subject its profitable freight operations to outside interference. By increasing the attractiveness of its commuter runs SP would both signal its intention to stay in the commuter business and eliminate the need to invest in a totally

new system.

During the Progressive Era Governor Hiram Johnson freed the state government from political domination by Southern Pacific. However, the Company undoubtedly retained an influential voice in state and local government councils. Recall the regional plan had forecast the crucial link between the peninsula, particularly San Mateo County, and the growth of the San Francisco economy. San Mateo sent the largest proportion of its residents to work in San Francisco of any of the Bay Area counties. Most of the growth in interurban travel to San Francisco was projected to come from the peninsula; the peninsula corridor was projected to carry the largest volume of transit traffic in the region. The peninsula, especially San Mateo County, was critical to the very nature of the regional transit system from San Francisco's point of view. The rapid transit movement now faced a powerful and apparently hostile force on the peninsula.

In northern Alameda and Marin Counties the Optimum Plan was viewed very favorably. The Oakland Chamber of Commerce was as enthusiastic about it as its San Francisco counterpart. Legislators from these areas led the action to exempt a transit tube from statutory language in the Toll Bridge Act banning construction of Bay crossings within ten miles of an existing bridge with outstanding bonded indebtedness.<sup>15</sup> Southern Alameda County, however, worried about the implications for the southern crossing.

In Contra Costa County the proposed system was in general favorably received. However, the business and political leadership in the central and eastern parts of the County were more concerned with an immediate, concrete issue--the election to create an East Bay transit district and a board of directors coming up in November, 1956.

The chairman of the County Board of Supervisors, H.L. Cummings, opposed ACTD. This development oriented activist thought the East Bay district plan benefitted only downtown Oakland merchants; he also objected to the structure of representation on the board of directors, which, Cummings felt, favored Alameda County. Cummings had been active in the regional transit movement for years as a BARTC member; he stood for BARTC's plan because it offered the promise of service for Contra Costa County. The East Bay district plan was geared to taking over the Key System, which didn't serve central Contra Costa. His county's prospects for service in an East Bay district were very uncertain.<sup>16</sup>

Cummings was joined in opposition to an East Bay district by the Contra Costa Development Association and the Contra Costa County Taxpayers' Association; these groups likewise believed the new district would be dominated by Alameda, with no guarantee of adequate service to their areas. Moreover, these opponents feared the unlimited taxing power granted to the district.<sup>17</sup>

The opposition groups were not, however, successful at the polls. Harry Morrison, executive director of the Taxpayers' Association, continued to fight; his goal was to get Contra Costa County out of the ACTD. His secession movement triumphed a few years later; by 1959 the county was no longer in the district. In 1960, though, some of the cities in western Contra Costa County, including Richmond and El Cerrito, who had been receiving Key System service, came back in. The rapidly growing areas in central Contra Costa, however, remained out. Harry Morrison favored BARTC's plan; he later became a director of the Bay Area Rapid Transit District, joining Cummings on the board as Contra Costa representative.<sup>18</sup>

The political dynamics here were interesting and important. The familiar competition between local political and business groups was apparent; central Contra Costa activists did not want to help supply downtown Oakland with a transportation tool to establish a hinterland in their county. BARTC's plan offered a more attractive political and transit vehicle for Contra Costa's development aspirations. Central Contra Costa's opposition to ACTD meant that downtown Oakland needed BARTC and San Francisco in order to secure access to the rapidly developing sections of Contra Costa.

Another set of reactions came from transit experts who studied the plan. These reactions were, in general, cool toward the Optimum Plan. The Commonwealth Club began a series of meetings devoted to the proposed regional transit system; Claude Minard addressed one of these.

Retired Bay Bridge engineer George Whittle noticed that trains from the north were routed to and through downtown Oakland before they went to San Francisco; he wondered if the devious route would cool off Berkeley's enthusiasm for regional transit. Whittle pointed out that Berkeley had a very large interchange with downtown San Francisco.<sup>19</sup> R.F. Kelker, Jr., who had been "With the Transit Industry for Fifty Years," principally in Chicago, addressed the question of whether revenues would pay for operating costs of the proposed system. This was a central claim made by BARTC's consultants: tax subsidy would be needed solely for capital costs. Kelker answered with a resounding "No." Kelker argued that no rapid transit system in the country during the past fifteen years had produced the operating financial results that PBHM and SRI were predicting. In particular Kelker questioned the diversion percentages given in the final report. There wasn't

any way to check these using the published information, moreover, there wasn't any practical experience anywhere to indicate their validity. There wasn't any evidence that such a huge investment in transit as the consultants had recommended would, in fact, induce people to get out of their cars. Kelker proposed an alternative: build a version of the Minimum Plan first. The Bridge Railway operation should be improved and two short stretches of subway--to the San Francisco and Oakland city halls--should be built as a first step. If extensions were warranted they could be easily made.<sup>20</sup>

This theme of a less expensive, more experimental alternative was also argued in a set of responses to the plan done by a special committee of the San Francisco Section of the American Society of Civil Engineers. Arthur Jenkins noted the change proposed in the orientation of East Bay transit, from the San Francisco to the Oakland central business district, and how even the Minimum Plan adopted this circuitous route. Jenkins proposed taking advantage of the large existing investment in the Bridge Railway; he suggested limiting the immediate program to constructing elevated lines from the Railway to downtown Berkeley, Oakland, and through the existing San Francisco terminal into the downtown district. Jenkins stressed the present urgency was in the East Bay; the rest of the region could wait and see how this first effort turned out.<sup>21</sup>

J.G. Hunter, who was a staff engineer with CPUC, agreed with Jenkins that the East Bay was where the action ought to be. Hunter would soon represent San Mateo County on the Bay Area Rapid Transit District Board of Directors. He argued that the peninsula situation was not critical. The Southern Pacific was there, as was Greyhound. The

only thing needed for peninsula service was improved local connections between the Southern Pacific depot and downtown San Francisco.<sup>22</sup>

Interestingly, PBHM had considered two less expensive alternatives for the peninsula line. One option was extension of the SP tracks further downtown under Market Street, which would cost seventy-five million dollars. This was rejected as too costly in comparison with the cost of a separate modern system. The other option was to use the existing tracks for rapid transit service. This was rejected for two reasons: more than seventy grade separation structures would be required; and frequent rapid transit service would seriously conflict with the railroad's freight business. PBHM concluded that existing peninsula commuter service could not effectively be improved.<sup>23</sup>

Regional response to the rapid transit plan was mixed. Much of the criticism, however, went to the cost of the system. Four months after receiving the final report BARTC considered its own reaction. At its 9 May 1956 meeting BARTC voted to adopt a motion by Marin representative Jack Beckett to approve in principle the PBHM report and its recommendation of the Optimum Plan. Beckett had led the Commission Engineering Committee; he had gone over every paragraph of the final report with the consultants. Beckett and Alan Browne spoke strongly in favor of the Optimum Plan. They stressed the following advantages of it in relation to the Minimum Option: (1) Shorter travel time between downtown Oakland and San Francisco; (2) more convenient passenger delivery in the downtown areas; (3) the Optimum Plan allowed for a direct connection between the Marin line and the rest of the system while the Minimum Plan did not; (4) greater patronage and reduced operating costs due to a shorter route; and (5) Bridge Railway space would become available for motor vehicle use.<sup>24</sup>



Ten Commission members were not present to vote on the motion. However, the Optimum Plan won a substantial majority among the fourteen attending the meeting. Beckett and Browne emphasized BARTC was not in a position to go beyond general statements of policy; another agency would actually be building the system.<sup>25</sup> BARTC then turned its attention to its final task: facilitating the creation of an agency that would carry out the plan. In November, 1956, the state Senate Interim Committee on Rapid Transit in the San Francisco Bay Area held hearings on the Commission's proposal for the formation of a district and its powers. Every aspect of this proposal was intensely controversial.

Marvin Lewis, who led the Commission's Legislative Drafting Committee, presented the proposal to the hearing. Lewis outlined the long-standing objections to the 1949 District Act, with numerous cities having veto power. BARTC wanted the state legislature to create the district without any action being necessary at the local level. The district board of directors would be appointed according to a population-based formula, in part by county boards of supervisors and in part by the governor. Lewis explained that "...appointment rather than election in a case of this kind would provide a broader field of selection...."<sup>26</sup> Alan Browne later added that "...a great many very qualified individuals do not like to run for public office."<sup>27</sup> This procedure, of course, was intended to reinforce a non-political, businesslike orientation for the board. The proposed district would include San Francisco, Alameda, Contra Costa, and San Mateo Counties; and the city of Palo Alto in Santa Clara County. Marin was not included at this point because the BARTC was waiting for an official statement of opinion from the Golden Gate Bridge and Highway District, the agency that owned and operated the Golden Gate Bridge. The

transit plan proposed using the Bridge structure for trains. The rest of Santa Clara was excluded because relatively little San Francisco-bound traffic originated south of Palo Alto. Sonoma, Solano, and Napa Counties were not included because they were still relatively undeveloped territories; there was not yet any significant demand for rapid transit facilities.<sup>28</sup>

BARTC proposed unrestricted property taxing power, including the authority to issue special assessment bonds, and the authority to levy up to a one percent sales tax. Financial leader Alan Browne had decided it wasn't realistic at this point to base financing plans on either bridge tolls or gasoline taxes; the political opposition to these was too great. However, the property tax burden had to be minimized; a sales tax was thought necessary if bridge tolls were not available.<sup>29</sup>

Clair MacLeod, though, told the hearing about the intimate relationship between the southern crossing and the proposed transit system; he stressed the potentially serious conflict there. The present earmarking of surplus toll revenues of the Bridge presented a barrier to the transit project; this surplus amounted to about nine million dollars per year. This represented about twenty-five percent of the total yearly outlay needed to finance interest and principal payments on the transit construction debt.<sup>30</sup>

The district directors would be able to submit a bond issue to the voters after referring a plan to appropriate regional, state, county, and local legislative and planning bodies, and giving consideration to their recommendations. BARTC proposed the district be permitted

to bond twenty-five percent of the assessed valuation of district property. Furthermore, a fifty percent affirmative vote of the district electorate would be sufficient to authorize a bond issue.

The district would be able to provide and operate necessary feeder services. It would also be able to merge or consolidate with any public corporation after an affirmative vote by the district electorate.<sup>31</sup>

The Commission wanted a powerful, flexible, relatively autonomous agency. A few comparisons with ACTD, created by East Bay voters just a few days before these hearings, indicates its scope. ACTD was permitted to bond twenty percent of the district's assessed valuation compared with the proposed twenty-five percent. ACTD bonds needed a two-thirds affirmative vote, while BARTC's proposal was for a simple majority. An appointed board of directors was suggested, rather than ACTD's elected body. Finally, the BARTC wanted sales taxing power, which the ACTD didn't have, in addition to the unrestricted property taxing power both would enjoy. Both districts would be autonomous in relation to the local governments in their jurisdiction; the proposed district would only have to "consider" local government recommendations.

Opposition to many of the points in BARTC's proposal was widespread and deeply felt. Local governments opposed granting sales taxing power to the district; this was seen as an infringement on one of their important revenue sources. Local officials also opposed the twenty-five percent bonding capacity as much too high, arguing that fifteen percent was quite sufficient. They likewise insisted on a two-thirds vote being necessary to issue general obligation bonds instead of the recommended fifty percent; the cities themselves were

required to get a two-thirds vote. The cities were against the proposed method of selecting district directors. They didn't want the governor appointing anyone; they also objected to county supervisors having the only say at the local level. Finally, there were several calls for requiring local approval of the location of routes, stations, parking lots, and design of facilities prior to a bond issue election.<sup>32</sup>

Alan Browne tried to deal with several of these protests. He stressed the need for a sales tax to overcome opposition to the program based on inordinately high property taxes. He explained the governor appointed people because there was a possibility of getting state money in the form of bridge tolls. MacLeod added that BARTC was already considering changing the district director appointment process to accommodate the cities' complaints. Browne invoked his personal standing in the financial community to defend a fifty percent bond approval vote: "I, for one, who am quite concerned with municipal finance, and I have certainly fought long and hard for, you might say, conservative municipal finance--I do not think this is out of line. It's a matter of looking ahead."<sup>33</sup>

The southern Alameda County cities of Hayward and San Leandro protested the Commission's attitude toward the southern crossing. They argued the bridge should be built; nothing should be done to disturb its financing and its progress. As San Leandro put it, "...we feel very strongly that the question of the southern crossing is in the law. They have plans and specifications prepared for it, and this is a matter of law and a matter of program." The Hayward Chamber of Commerce was upset with the entire regional rapid transit plan and voted to oppose all of it.<sup>34</sup>

One other issue that concerned East Bay cities was the relation of the proposed district to the recently created ACTD. Oakland and Richmond, for example, thought this relationship ought to be clarified in the legislation.<sup>35</sup> So did Contra Costa County Senator George Miller, who carried on the following conversation with ACTD attorney Robert Nisbet.<sup>36</sup> Miller asked Nisbet what Nisbet thought about legislation regarding coordination between the two districts. Nisbet said he felt the legislation should be open because several alternatives were possible. They could merge; or the regional district could contract with ACTD to provide feeder and local services within its territory. Nisbet pointed out the PBHM report cited the importance of such local and feeder services. Miller then asked Nisbet if he would object to the regional district absorbing ACTD if the regional district maintained the same level of service as contemplated by ACTD. Nisbet said he had no objection to such an absorption, so long, of course, as ACTD's electorate approved such a plan. After all, the district was created by the voters. Miller wanted to know, however, why a vote of the people would be necessary if the same level of service was provided. Nisbet had trouble with Miller's idea of depriving the people of a vote. Miller couldn't understand Nisbet's trouble so long as the contemplated level of service was protected. Nisbet responded that "...the contemplated level of service is not a point on which you can derive any degree of certainty. It's something that the board of the two-county district will have to wrestle with...." Miller asked if Nisbet would mind the regional district taking over the wrestling privileges. Nisbet answered that was not what the PBHM plan had in mind. The local communities would continue to provide local and feeder services independent of the

regional district. Miller said he found it "...hard to reconcile the operation of two mass rapid transit services with more than one community involved unless you do have one absorb the other." Nisbet insisted, however, that "If you read the report of the commission that's been issued at this time, it says specifically it is not contemplated--at least, that engineering report does not contemplate this entrance into the feeder line service. That entrance is limited to the main, or trunkline services. It would leave up to the local communities, whether district-owned, privately owned or city-owned, to coordinate or fit into the nine-county plan." Miller said that Nisbet had pointed out a weakness in the report that Miller hadn't seen. Nisbet concluded by pointing out that if the regional system had to provide local and feeder service in addition to the main lines the cost would increase tremendously; it was already extremely high.

Clair MacLeod tried to calm any fears that Miller might now have concerning future relations between the two districts. MacLeod told the Senator that MacLeod had been closely involved in the process of setting up ACTD and had worked on it from both the local side and the regional side. ACTD's Act was written so the district could be integrated into the larger system. The main concern was that transit service in the East Bay threatened to deteriorate so badly there wouldn't be anything left to take over when the regional system was ready. Therefore, BARTC supported the creation of ACTD in order to hang onto some transit patronage in the East Bay. MacLeod continued, "I fully visualized...that, of course, this two-county system would be absorbed by the nine-county district when it had served its purpose. It can establish and improve the facilities to a point where, at a later

date, it can contract its responsibility and duty over to the nine-county and the two-county groups. I think that thing will reconcile itself. There's no reason to have two districts operating indefinitely."<sup>37</sup>

There would never be any legislative clarification of the relationship between the two districts, although ACTD would continue to insist that when the regional system was operational the two-county district would deliver its trunkline patronage to the regional system and limit itself to providing local service and feeder buses to the regional network. Indeed, given the political history of ACTD there wasn't any apparent need for legislation. BARTC members Sherwood Swan and Clair MacLeod had led the movement to create ACTD; both men would continue to be active with the regional project for years to come. MacLeod would even be president of both districts at the same time for a brief period. The transit movement leadership had worked together for some time, now; they had come to understand one another's situation. They didn't foresee the need for anything more concrete.

There was more opposition to BARTC's district proposal at the November hearings; peninsula counties and cities did not limit themselves to protesting various details of the district proposal, but attacked the very nature of the regional transit plan itself.

A councilman from the peninsula city of San Carlos told the hearings that his people questioned the benefits regional rapid transit would bring to them. He noted that more and more industry was locating in San Mateo County, and that cities there wanted to keep on attracting industry. These communities used to be bedrooms for San Francisco, but that was changing. The choice was whether the people wanted their community to be a "...small, urban residential community and have a

highly nucleated mass, as in San Francisco, Oakland, Berkeley...or do they want to increase their industrial growth and become communities all to themselves and have dispersed industry throughout the entire area?"<sup>38</sup>

A Redwood City councilman pointed out that "Redwood City's and I believe all of San Mateo County's interests because of the trend of development do not view the requirements for mass transportation in the same light as San Francisco and some other areas." He thought the need was for intra-peninsula transit, rather than transit focused on the San Francisco central business district.<sup>39</sup>

The city manager of the city of San Mateo said his city council was against the regional rapid transit plan. He brought out another dimension to the issue: "...in our area of San Mateo City and down the peninsula in general, a number of commercial institutions have put in great investments. You know of Macy's, Hillsdale Shopping Center. That's about thirty-five million right there. Stanford [referring to a large shopping center near the University] and so on. Many of the stores that are being leased are competitive to downtown San Francisco. Those people, the commercial people, are afraid that rapid transit will make it awfully easy for people to run in here [San Francisco] again like they used to. These people are making their views known to our city council. I wish I could say with truthfulness we do have support [for regional rapid transit] from any organized group, but at this moment, I can't."<sup>40</sup>

The politics of the regional rapid transit movement had shifted since the latter 1940s. In the early days the main arena of conflict was the competition between the San Francisco and Oakland central



business districts, as Oakland sought to liberate itself from San Francisco's hegemony. Now, the peninsula stood in the same relation to downtown San Francisco as Oakland had before the PBHM plan. San Mateo and Santa Clara business and political leaders were establishing their independence from the metropolitan center; they opposed the use of rapid transit as a weapon to defend the existing pattern of regional domination. The plan had concretized an alliance between downtown Oakland and downtown San Francisco; the movement now began to fracture along a different fault line.

A Santa Clara speaker asserted that San Francisco's population was declining. Robert I. McCarthy, state senator from San Francisco, disagreed sharply: "...all I have to cite are the figures as to financial transactions in the City and County of San Francisco. Look at the stock exchange transactions. Look at its banking transactions, look at its retail sales. It's a long way from being on a decline." The Santa Claran reminded McCarthy he had made reference to population: the number of people living in the city. McCarthy said he would accept "relatively static" as a description of what was happening there, but he had made clear who was the constituency for rapid transit in San Francisco.<sup>41</sup>

These November hearings were a dress rehearsal for the 1957 state legislative session, during which the district creation bill would be considered. Before taking up this legislation I will cover the transit main event of 1956--CPUC's hearings on the Key System Bridge Railway abandonment application--and consider the fate of the southern crossing.

XI THE CALIFORNIA PUBLIC UTILITIES COMMISSION  
AND KEY SYSTEM

Key System applied to CPUC for permission to abandon all Bridge Railway trains and substitute buses in January, 1955; the Key also requested fare increases. This action did not surprise anyone in the the rapid transit movement.<sup>1</sup>

The BARTC considered what its options were in case the Key System's application was granted. In February, 1955, the Commission discussed the situation with DPW Director Frank Durkee. One possibility was to have the California Toll Bridge Authority take over transbay rail service if the Key System abandoned this field. However, Durkee made it clear he and his department did not want to go into the transit business; this was not an arena for direct state action. The state legislature agreed.<sup>2</sup> Bills introduced in both houses enabling the CTBA to operate Bridge Railway service upon Key System abandonment were buried in committee.<sup>3</sup> Durkee did say, though, that if the rails were abandoned and no substitute service was provided; that is to say, if the Key System went out of business entirely, then the state would operate the Bridge Railway on an emergency basis. The confusing issue was what would happen if the Key System did, in fact, substitute buses for the transbay trains. Would the Authority step in to maintain rail service under such conditions? The point was the continued availability

of the Bridge Railway space for inclusion in a future regional rapid transit system. Neither the BARTC nor the CTBA wanted any options foreclosed before the likely course of regional transit events was clarified.<sup>4</sup>

Bus substitution was, however, what the Key System proposed. However, as in its earlier (1952) proposal to abandon two of the five remaining rail lines, the company did not say anything about what would or should happen to the Bridge Railway or to the San Francisco Terminal. The proposed buses would load and unload passengers in the downtown streets of San Francisco; the Bridge tracks and the terminal were the state's responsibility; the Key was apparently unconcerned with their fate.

The CPUC granted the Key an interim fare increase in 1955; however, the Commission postponed taking up the major issue until April, 1956, after the BARTC had received its consultant reports and had had a chance to consider them. The hearings lasted into the summer; the transcribed record ran to a few thousand pages.<sup>5</sup> This case was at the center of Bay Area transportation politics; its outcome would have important consequences for the kind of transit service the ACTD would be able to provide. It would directly affect the choice between Optimum and Minimum Plans. It would also influence the feasibility of the southern crossing.

The Key System opened the hearings with arguments in support of its application. Transbay trains were no longer feasible. Patronage on the Bridge lines had declined very sharply--by two-thirds in the ten years since the end of the war; the decline showed no evidence of even slowing. Service in the East Bay was terrible.

Moreover, the equipment was old and the tracks and right-of-way had deteriorated so badly that millions of dollars would be necessary to rehabilitate them. The Key System was losing money on its transbay operations; the local passengers were subsidizing transbay travelers. As a result there weren't any funds on hand to rehabilitate the rails; there also wasn't any possibility of attracting private investment capital to this endeavor. However, the Key argued that if it were allowed to abandon the trains and substitute buses, and if it were granted a fare increase, it would be able to show an operating surplus. Most of the savings would come from rail-related labor costs.<sup>6</sup>

The fact the Key said it would be able to show a profit if the CPUC granted its requests was very important. While the CPUC cared very deeply about the quality of Bay Area transit service it was also bound by law and principle to see to it that capital invested in private property dedicated to public service earned a fair rate of return.<sup>7</sup>

Several cities lodged protests concerning all or part of the Key System application. Official Berkeley opposed rail abandonment, although the Berkeley Chamber of Commerce was in favor because the Chamber wanted more parking on city streets.<sup>8</sup> San Francisco was violently opposed, as it had been in 1952, to any buses loading and unloading on its downtown streets; peak hour congestion in the transit terminal area was already paralyzing traffic.<sup>9</sup> The City of Oakland wanted the tracks eliminated from its downtown streets, but supported a shuttle plan across the Bridge, as Harland Bartholomew had advocated in 1947.<sup>10</sup> The City of Piedmont (Clair MacLeod's home) had passed a resolution opposing rail abandonment until the regional rapid transit

plan was crystallized. The Key System lawyer jumped on this: who did Piedmont think would subsidize Key System financial losses while the Bay Area made up its regional transportation mind?<sup>11</sup>

The CPUC staff presented their findings to the Commission. The staff had made the most extensive examination of transbay transit issues since Arthur Jenkins had studied the question before the second World War. They felt obligated to consider all possible alternatives because of the critical nature of this case for the future of Bay Area transportation. Six plans were developed by the staff engineers. Three basic facts were recognized in each of the six: (1) Tracks in the East Bay streets were in terrible shape; they were increasingly dangerous; (2) the BARTC had under consideration a Minimum Plan, which envisioned using the space, but not necessarily the same tracks, used by Key System trains: "...no plan should be considered that would preclude or prejudge fulfillment of this Rapid Transit Plan;" and (3) despite the continuing decline in Key System transbay patronage, the Key still carried forty percent of the peak hour evening traffic across the Bay, while autos accounted for fifty-two percent. (Greyhound buses took the remaining eight percent; transit therefore carried forty-eight percent of the peak hour travelers in this corridor.)<sup>12</sup>

The six alternative plans were as follows: Plan 1: No change in present operations; Plan 2: The Key System Plan--bus substitution. The Bridge tracks and the terminal would stand idle; buses would load and unload in the San Francisco streets and use the Bridge truck lanes; Plan 3: Bus substitution as in Plan 2. However, the buses would use a reconstructed terminal and a lane for buses from the Bridge to the terminal. Plan 3 was estimated to cost \$950,000; Plan 4: Bus

substitution and terminal reconstruction as in Plan 3. However, the Bridge Railway would be paved and the space would be reserved exclusively for buses. Plan 4 was estimated to cost \$4,850,000; Plan 5: Abandonment of rail lines in Oakland and provision of Bridge shuttle service for Oakland passengers; continuation of Berkeley rail service; and Plan 6: Full shuttle service; abandonment of all railways in East Bay streets.<sup>13</sup>

The staff engineers recommended the adoption of Plan 4, the exclusive bus lanes alternative. This would provide a real rubber-tired rapid transit facility for East Bay commuters. About half of the average transbay commute trip would be made on a fully grade-separated exclusive transit right-of-way. This could serve as an interim operation until the regional rapid transit movement was ready to provide something better. The critical point was that the exclusive transit right-of-way would be preserved. The cost of restoring modernized Bridge Railway service would be minimal. If regional rapid transit failed to materialize then the exclusive Bridge bus lanes would serve just fine as a permanent operation. The terminal could then be used as a union bus terminal, like the one operated by the Port Authority in New York.<sup>14</sup>

The staff predicted that such an outstanding service would increase Key System revenues by three percent. The Key's lawyer asked the Senior CPUC Transportation Engineer how he knew the increase would be three percent instead of two percent, or four percent, or maybe ten percent. The engineer answered, "It was a judgement figure." He reasoned that if you gave better service you got more patronage. This was a refreshingly candid response in an environment increasingly dominated

by scientism. Plan 4 service would be so good it would attract many auto drivers onto the buses.<sup>15</sup>

It was absolutely essential, though, that transit vehicles continue to use those exclusive lanes without any interruption in service if the regional rapid transit movement were to have any chance of using the space in the future. The CPUC staff pointed out that if cars ever got into those lanes there wouldn't be any way of ever getting them out. Physically it might be possible to reclaim the space for exclusive transit use; popularly and politically there wasn't any way a governmental agency would be able to force motorists to stay out of the highway lanes. A representative of the state attorney general asked a staff engineer: "...as far as the motoring public is concerned...this proposal to use buses in the present rail space would be just as unpopular as the vacant space, would it not?" The engineer did not think so. He reasoned that the greatest concern would be the utilization of space during the peak periods; during these periods the exclusive lanes would be filled with buses. When the motoring public saw the crowded buses they would be convinced the space was being used in a useful and necessary manner.<sup>16</sup>

The idea of reserving lanes for exclusive transit bus use was not a new one; it had been discussed and widely advocated throughout the transit industry all during the postwar period. Proposals had been repeatedly made for using exclusive lanes on city streets and also using the median strips of freeways for exclusive transit use. Indeed, in January, 1956, just before the CPUC began hearing the Key System application, the transit industry press triumphantly announced the inauguration of a bus rapid transit program in Nashville, Tennessee. "History was

made...in Nashville...." With complete cooperation from the city government, the privately-owned Nashville Transit Company began operating buses on three long sections of major one-way streets on which the curb lane was reserved exclusively for them during the morning and evening peaks. Cars were permitted to enter the lanes only to make right-hand turns. Nashville officials were thrilled.<sup>17</sup> In July, 1956, Chicago followed Nashville's lead, becoming the second city to use exclusive bus lanes on downtown streets.<sup>18</sup>

PBHM had considered bus rapid transit for the Bay Area. However, in Regional Rapid Transit they rejected the idea without too much discussion: "...consideration of buses operating over their own grade-separated right-of-way is defeated by the massive multi-lane stations and approaches that would be needed in Oakland, San Francisco, and other urban centers. Their enormous space requirements would dictate locating these terminals at such distance from the high-value property which they would be designed to serve as to discourage the very patronage for which they were built."<sup>19</sup> Apparently, PBHM did not focus their attention on adapting the Bridge Railway and San Francisco terminal for bus rapid transit. Such a proposal had the same negative attractions for PBHM as did the Minimum Plan.

The DPW and the CTBA, however, had explicitly considered exclusive bus lanes on the Bay Bridge. In its 1954 report on the Bridge Railway situation the Division of Highway rejected exclusive bus lanes because the traffic statistics indicated "...the plan has little merit."<sup>20</sup> The highway engineers reasoned that if all of the transbay transit traffic were carried in buses then only 1,300 to 1,400 buses per day would be needed. They compared this with the 13,000 to 14,000 vehicles



currently being handled per day on each narrow lane of the upper, automobiles only, bridge deck. The report concluded "...it is evident this would be a very inefficient use of space on the Bridge." They went on to argue that since transit patronage was declining steadily the exclusive lanes would be used by fewer buses each year, while the volume of automobile traffic would be increasing. "This would cause an unfavorable reaction on the part of the public so that from the standpoint of public relations as well as reduced efficiency a separate bus roadway is undesirable."<sup>21</sup> Apparently the highway planners did not think the vastly improved service would attract more transit patrons.

The advocacy of a bus rapid transit plan by the CPUC staff cast an eerie light over the proceedings; it made the DPW and the CTBA very uncomfortable. The CPUC engineers were constricting the previous analysis of transbay transit issues. Moreover, since the Authority owned the facilities in question a CTBA decision on how to deal with the CPUC proposal would be necessary. The Key System, however, was emboldened by the staff suggestion. Everyone at these hearings was hostile to the Key because of its narrow, self-serving actions. The CPUC staff plan enabled the Key to briefly appear as champion of the lowly bus rider.

The Key System lawyer closely questioned an engineer who worked on the 1954 Bridge report: "...you say that from the standpoint of the Bay Area as a whole the most economical solution to the transbay transportation problem is provided by whichever means will permit the largest number of people to be carried across the Bay at the least overall cost and in the shortest practicable time. That remains the

basic consideration in any contemplation as to efficient use of the bridge." Bridge Engineer Stewart Mitchell agreed that was correct.<sup>22</sup> Indeed, even in its 1954 report the highway planners had written that since transbay transit use was declining and automobile facilities were saturated it was necessary "...to give special attention to the primary problem of transporting people..." with the emphasis on "people" being in the original.<sup>23</sup> The Key System lawyer continued, "Well then, Mr. Mitchell, I wonder about your conclusion...where you point out that comparatively few buses would be using the exclusive bus lanes. The true measure is not the buses that would be using it, but the people that would be using it, isn't that correct?" Mitchell answered, "Yes." The lawyer relentlessly pursued this logic: "And if those comparatively few buses traveling over those exclusive bus lanes were to carry, for example, half of the people moving eastward in the evening peak, that would be a very efficient use of those lanes, would it not?" Mitchell repeated the 1954 argument that transit patronage was declining and would continue to do so; opening up the entire Bridge to traffic would be a more efficient use of the space. The Key lawyer insisted on the significance of the point that transit currently carried half of the people across the Bay during the peak hour. Wasn't that efficient? Mitchell concluded, "Well, we didn't think of the efficient as getting more people over."<sup>24</sup>

A CPUC staff representative continued the same line of questioning with Bridge Engineer Mitchell. He asked if Mitchell agreed with the proposition that the plan that offered the most attractive transit service was the best solution to the problem. Mitchell answered that he agreed, but there were limits: "You do have to be

practical about it...people want to go over in automobiles, why, I don't know there is any way you can stop them." CPUC staff member Roche took up the comparison made in the 1954 report between the 1,300 to 1,400 buses that would use exclusive bus lanes per day and the 13,000 to 14,000 cars carried per lane per day. Roche pointed out transit carried half of the peak hour load and asked Mitchell if any comparison had been made between the number of people, rather than the number of vehicles using the two modes during the peak periods. Mitchell said no; such a comparison of peak hour movements had not been made. Roche pointed out it was only during the peak that Bridge capacity was a problem, wasn't it? Therefore the full-day comparison in the 1954 report missed the main point. Mitchell agreed the peak periods were the critical times.<sup>25</sup>

Roche then asked Mitchell, "...how can you...reconcile, on the one hand, the continued use of the rail space on the Bridge for trains when that movement handles approximately half of the total traffic...with your observation, on the other hand, that generally to devote space to an exclusive bus operation would be an inefficient use of that space?"<sup>26</sup> This was an important point; in 1954 the bridge engineers argued against abandoning the Bridge Railway because it represented a large existing investment, and because the Railway had a tremendous passenger carrying capacity. The space made much more sense as a transit facility than as a few more motor vehicle traffic lanes. The highway engineers recommended looking for ways to improve transbay rail service in 1954 via the Bridge.<sup>27</sup>

Mitchell answered Roche that improved rail service had been recommended because rail service was much superior to buses. Roche

asked if it wasn't the exclusive right-of-way that made rail transit faster, safer, and more dependable. Mitchell agreed the exclusive right-of-way was a crucial characteristic of excellent service.<sup>28</sup>

Roche then asked, by way of summary, "Mr. Mitchell, in the light of your experience, which has been substantial in this field, and in view of all these factors...dependability of service, flexibility, safety, moving people as a primary objective instead of the movement of vehicles, and travel time, isn't it a fact that the exclusive area now occupied by the rails on the Bridge could be justified for buses in lieu of rail?" Mitchell replied, "Well again of course it brings up the question of whether people would use it, but I certainly see nothing against trying it out and I can say further that if it had been decided that the Bridge railway is on the way out, that to follow the Commission's plan...is a logical move and there is no engineering reasons against it, or do I see any reason for great loss of capital investment...even if the lanes were later opened up for all traffic."<sup>29</sup>

The CPUC staff had apparently made a reluctant convert. Acceptance in principle was, however, a relatively small step toward implementing the bus rapid transit plan. The major stumbling block was financial; who would pay to reconstruct the terminal, pave the Bridge Railway, and build the necessary approaches? Would the Key System pay? Key President Glen Stanley told the CPUC the staff proposal was certainly an excellent one that would provide truly outstanding service for transbay travelers. However, the Key System would certainly not invest even one cent in improving facilities that were owned by the California Toll Bridge Authority. Moreover, there wasn't any guarantee the Key System would even be around to earn a

return on this investment if it were made. There would be public transit agencies in the territory soon; the very future of private enterprise in this industry was in doubt.<sup>30</sup>

Would the CTBA pay to reconstruct the facilities it owned? DPW Director Durkee told the CPUC that as things now stood, the Authority did not have the \$4,850,000 necessary to implement staff Plan 4. Moreover, given existing legislation, there wasn't any way the Authority could raise the money. The only source of income available to the CTBA was Bay Bridge tolls; these were reserved for the southern crossing. Without legislative action changing Bay crossing priorities there wasn't anything the CTBA could do.<sup>31</sup>

Paul Beck, representing the City and County of San Francisco, reminded the hearing of how his city felt about the southern crossing; this feeling had to be kept in mind during discussions of using bridge tolls for transit. Beck introduced a San Francisco Board of Supervisors resolution to the effect that the city opposed any diversion of funds currently pledged to the southern crossing. The Key System lawyer asked Beck how come San Francisco was willing to spend several hundred millions for another bridge but apparently was against spending less than five million dollars to greatly facilitate the use of the present crossing? Beck responded: "As I say, the City of San Francisco is dedicated to one thing, and that is a southern crossing. That is our official position and we have carried the ball on it, and consequently, we don't want any funds diverted which are dedicated at the present time to the southern crossing."<sup>32</sup>

There apparently wasn't any financial source for a \$4,850,000 bus rapid transit program currently available. However, this idea was

just one of the issues under consideration. What did the BARTC think of the Key System application? After all, these hearings had been delayed for more than a year in order to give the BARTC time to develop its plans. The DPW and the CTBA were likewise waiting for the regional rapid transit situation to crystallize before charting their own courses of action.

The BARTC's executive secretary Angus Cohan testified on behalf of the Commission just a few days after the BARTC had resolved its approval of the Optimum Plan. The Key System lawyer asked Cohan: "...the present position of your Commission is that there is no necessity, as far as you are presently concerned to retain the area on the San Francisco-Oakland Bay Bridge now used by the Key System trains for your purposes, is that correct?" Cohan answered: "Yes, I feel that is correct."<sup>33</sup>

CPUC Commissioner Dooley asked Cohan, "In view of the declaration of policy set forth in the resolution...has your committee assumed that the die is cast, as it were. As I understand it, that you are in favor of the Optimum Plan, which negates any interest in the rail system across the bridge; therefore, it might be superfluous for you to make a detailed examination..." of the plans developed by the CPUC staff? Cohan responded, "That is correct."<sup>34</sup>

Dooley wanted to know if the BARTC resolution approving the Optimum Plan was all that was needed to commit the region to it; or, was it more or less tentative in relation to the cities and counties in the Bay Area? Cohan said that in his opinion the BARTC action was not binding on anyone; it was more or less in the nature of a feasibility study. Dooley pointed out to Cohan that "...this Commission is mainly

concerned with respect to whether the abandonment of the rails would have any complaints on any plan you may have and as I understand from your testimony, abandonment would have no effect upon your plan in view of your adoption of this so-called Optimum Plan." Cohan concluded: "I feel it would have no effect on the ultimate plan."<sup>35</sup>

Just to be sure about what the BARTC was saying, the representative of the Key System workers pointed out to Cohan that in March, 1956, two months before the resolution approving the Optimum Plan, the BARTC had approved a resolution asking that action that might lead to Bridge Railway removal should be deferred until after the various counties had a chance to consider the regional rapid transit proposals. Had the Commission now rescinded that resolution? Cohan replied, "Yes, the Commission's further action was based on the receipt of the finding and study of that report."<sup>36</sup>

It seems to me that Cohan had accurately represented the long-range program of PBHM and the BARTC majority. However, Cohan received a handwritten note from BARTC chairman Alan Browne saying the Commission was deeply disturbed by Cohan's testimony to the CPUC.<sup>37</sup> Browne himself went to the hearings a few weeks later to clarify the BARTC's position.

Browne told the CPUC the BARTC's resolution approving the Optimum Plan had no binding authority at all; there wasn't any assurance that the Optimum Plan system would ever be built. The BARTC's action was purely advisory. In fact, there was support for a less expensive alternative on the BARTC and elsewhere in the region. Moreover, even if the Optimum Plan were ultimately approved and the entire transit program were carried off without a hitch it would be at least five years,

and very likely longer, before the Optimum Plan system was ready to carry passengers. During this interim period there should be adequate facilities on the Bridge to handle the transit traffic. Browne emphasized it had always been and continued to be the BARTC's position that nothing should be done to disturb the existing transit facilities on the Bridge until the regional rapid transit program was ready to go.<sup>38</sup>

The Key System lawyer raised the same issue with Brown he had raised with the Piedmont representative: "As a businessman and a banker, Mr. Browne, do you believe that a private utility should be obligated to continue to operate over these tracks at a loss until such time as a public body decides whether or not it is going to use them?" Browne replied: "I am not here to question whether or not there is a financial loss involved. Naturally, from the standpoint of business, generally speaking, you don't like anybody to operate at a loss, but we are thinking of the public interest and the public convenience."<sup>39</sup> Commissioner Dooley added, "Which is paramount."<sup>40</sup> The Key System lawyer, however, urged recognition of what Browne was saying: "In your opinion...would you say that the possible use of this equipment for these tracks in some indefinite time in the future by the public for its convenience justifies its present operation at a loss by a privately owned utility company?"

Browne, of course, knew what was involved, difficult though it was, for him to advocate it: "I think in trying to answer that question the fact is that I don't think anyone is trying to force any public corporation to sustain a loss. As I say, I am not here to determine whether or not there is a loss being incurred. After all, I am not trying to examine the books of the Key System.... [B]ut there are



compensating factors and I think that is the reason we are talking about municipal ownership of a public transit facility, because it is felt that some sort of subsidization is necessary to carry out the type of transportation individuals would want to patronize and which would be satisfactory and the cost would not be too great to the users."<sup>41</sup>

In response to a question from a City of Oakland representative Browne did, however, support a shuttle system across the Bridge, which would allow track removal in the Oakland streets, as a means of maintaining the status quo.<sup>42</sup>

The San Francisco Chamber of Commerce went further than Alan Browne in castigating the Key System for putting its own narrow corporate priorities above the general business interest. The Chamber thought it was unfortunate the Key was losing money, but as Browne had emphasized there was no assurance the Optimum Plan system would ever be built; even if it were it would be five to ten years before it was ready. The Chamber was very concerned with the downward trend in transit traffic and with the fact that the Key System had done nothing whatsoever to counter this trend. In fact, the Key had exacerbated the decline. "They have let their facilities deteriorate and depreciate. They have in no way attempted to modernize or even rehabilitate their facilities, until at the present time...it is on the verge of being a serious problem from a safety angle in the poor condition of the track ...." Moreover, the Key apparently didn't care about the effects of its bus substitution proposal; the added congestion in downtown San Francisco and on the Bridge were issues that were not addressed by the Key at all.<sup>43</sup>

The Chamber was impressed with the CPUC staff's bus rapid

transit plan, but, as the relevant agencies were saying, there wasn't any money to implement it. Therefore, the Chamber concluded the CPUC had no alternative but to deny the Key System application and force the company to continue operating trains.<sup>44</sup>

The state Attorney General, representing the DPW and the CTBA, likewise called for denying the Key permission to substitute buses. The state agencies argued there wasn't any money available to them to reconstruct their bridge and related facilities. Therefore, serious congestion would result if buses were operated on the Bridge truck lanes and in the San Francisco streets. Finally, the state felt the Bridge Railway should remain intact until the regional rapid transit situation was clarified.<sup>45</sup>

On the last day of the hearings the CPUC staff offered a summation and a proposal. The staff emphasized the multifaceted benefits of its Plan 4; the bus rapid transit plan was one which appeared to satisfy virtually every party to the proceedings. It would provide an outstanding service for transbay transit travelers on either an interim or on a permanent basis. Since the San Francisco terminal would be reconstructed there wouldn't be an additional downtown street traffic congestion. The City of Oakland would be rid of the train tracks in its streets. Plan 4 would not cause any problems for whichever regional rapid transit plan eventuated. Rails could easily and inexpensively be put back down to implement a Minimum Plan; the exclusive bus lanes could be opened to all traffic if the underwater tube were built. Most importantly, the Key System would be able to show an operating profit without a fare increase.<sup>46</sup>

The staff acknowledged, though, finding the \$4,850,000 necessary

to accomplish bus rapid transit was a problem. They called for state legislation to provide the funds. In the meantime, the staff recommended the CPUC decide on its Plan 3 as an interim measure. This called for reconstructing the terminal to handle buses and building an approach lane to the terminal from the Bridge. The staff also wanted the Key ordered to buy new buses for transbay service; the Key had proposed using buses it already had on hand. The Key should, moreover, be directed to explore ways of financing reconstruction with the state; the cost of this work was estimated by the staff at \$950,000.<sup>47</sup>

The hearings ended in July. The CPUC finally issued an interim decision on 11 December 1956. The staff's bus rapid transit plan was indeed an ideal program for the CPUC in this extremely complicated and consequential case. The Commission followed its staff's recommendations on all the major issues. The CPUC strongly recommended exclusive Bridge bus lanes, although it recognized the CPUC could not itself implement this plan. The Commissioners called on the state to pass the necessary legislation authorizing the CTBA to reconstruct the Bridge Railway facilities and build the necessary approaches for exclusive bus use. The CPUC argued that "...there is much to be said for some expenditures to be made for the exclusive benefit of the users of mass transit. The freeway system is designed to make it easier for private automobiles to get into the urban centers. The increasing congestion of the streets in these centers is a potent argument for legislative action to encourage the use of mass transit in lieu of the private vehicle."<sup>48</sup>

The CPUC declared its intention to implement Plan 3, hopefully

as an initial step leading to Plan 4. The Key System was ordered to go talk with the DPW and the CTBA about reconstructing the terminal and approaches. The Commission made it clear the Key was to come up with the \$950,000 necessary for terminal modifications. The Key was told to report back to the CPUC on 31 January 1957 on the progress it had made in these discussions.<sup>49</sup>

The CTBA met the day after the CPUC interim decision. The Authority took note of the CPUC action; it proposed legislation providing money for the Authority to do a study of what should be done with the Bridge Railway facilities in the event train service was abandoned, and how much any work would cost. At this same meeting the CTBA was informed that given current conditions in the financial markets of the nation, bonds for a southern crossing were not saleable. The Authority asked the legislature for clarification of the relation between the southern crossing and possible Bay Bridge reconstruction work.<sup>50</sup>

## XII BRIDGE CROSSINGS III

In December, 1955, Chief Engineer Norman C. Raab of the Division of San Francisco Bay Toll Crossings in the DPW reported on the progress of southern crossing work. Raab found the crossing feasible from an engineering standpoint, though difficult. It would also be extremely expensive. Based on traffic and earnings projections which did not assume either regional rapid transit or changes in the Bay Bridge, Raab estimated that \$180 million worth of revenue bonds could be sold with the toll remaining at the current twenty-five cents. This amount would be sufficient to construct only a "minimum" crossing; there wouldn't be any approaches to the crossing in San Francisco and only minimal approaches in the East Bay. An increase in the toll to thirty-five cents would be necessary to raise the \$250 million necessary to build the entire project as outlined in the 1953 Dolwig Southern Crossing Act.<sup>1</sup> After a decade of bitter conflict and with victory seemingly at hand, this was very disheartening news to San Francisco, San Mateo, and southern Alameda Counties.

In early 1956 representatives from these areas began working on proposals to make the southern crossing project financially viable. They voluntarily accepted an important constraint: bridge tolls would remain at their current twenty-five cents level.<sup>2</sup> By April, however,

Dolwig was able to secure support from the state legislature for two critical amendments to his 1953 Act. The existing law mandated construction of the entire project as a unit; the 1956 amendments limited the approaches to the crossing and allowed for staged financing and construction. The amendments made possible the construction of the "minimum" crossing without touching the twenty-five cents toll.<sup>3</sup>

Moreover, George Burpee, leading figure in the consulting firm of Coverdale and Colpitts, said the \$180 million first stage construction program could definitely be financed without raising the toll. The minimum southern crossing project thus had the blessing of the firm that had been doing financial studies for Bay Area bridges since the beginning of such projects. Dolwig voiced great optimism that no more obstacles appeared in the way. The CTBA was ready to proceed with a bond issue.<sup>4</sup> However, once again, something happened.

The important new development was, of course, the regional rapid transit plan. One of the important consequences of the Optimum Plan would be the elimination of the need for the southern crossing for at least fifteen years. Moreover, the transit movement leadership was expressing interest in the surplus Bay Bridge toll revenues currently reserved for the southern crossing.

In a March, 1956, newsstory the San Francisco Chronicle quoted BARTC chairman Alan Browne as calling for postponement of the southern crossing because the crossing might jeopardize the regional rapid transit plan. Browne pointed to the suggestion made by SRI for using bridge tolls for transit; he also noted the Optimum Plan would make a southern crossing unnecessary for the time being.<sup>5</sup>

A few days later the Chronicle began to editorially reconsider

its historic support for an additional motor vehicle facility. The editorial noted Alan Browne's position that both a southern crossing and rapid transit were not possible financially. Browne was quoted as arguing there were "...financial relationships between the...rapid transit plan and the...Army Street crossing plan that tend to make them mutually exclusive." The Chronicle took special notice of Browne's comment that he didn't "...think we should risk everything for one more crossing of the Bay.... What is more important for the future of the area, moving cars or people? I think moving people is more important."<sup>6</sup>

In March, legislation was introduced at the state capitol which would exempt a rapid transit tube from the prohibition on construction of a Bay crossing within ten miles of an existing toll bridge on which bonds were still outstanding. Official San Francisco responded to the measure with extreme ambivalence, as did Richard Dolwig. San Francisco worried that support for the tube at this time would jeopardize the southern crossing. Dolwig was similarly concerned. However, San Francisco also wanted regional rapid transit. After lengthy and agonizing discussions, official San Francisco adopted the position that it would support legislation exempting a transit tube from the ten-mile prohibition only if investment bankers gave assurances this would not jeopardize southern crossing financing. Mayor George Christopher pointed out the bridge was still the city's top transportation priority.<sup>7</sup>

Dolwig announced he had received such assurances from the investment community shortly thereafter, that there wouldn't be any conflict. The investment people were primarily concerned the legislation enabling transit tube construction be passed before the crossing was

financed, so that no changes would be made in midstream. These assurances were apparently sufficient for Dolwig and San Francisco; the transit bill was passed at the end of April, just after Dolwig's own amendments to the southern crossing legislation limiting approaches and allowing staged financing and construction were enacted.<sup>8</sup>

However, in December, 1956, the CTBA was informed by its financial consultants, Smith, Barney and Company, that revenue bonds for a minimum southern crossing project secured by a twenty-five cents toll would not be saleable in the money markets at that time. Smith, Barney concluded that "...the revenue bond financing necessary to finance its [minimum southern crossing] construction would not comply with all of the generally accepted investment standards for such securities and...must, therefore, be considered marginal as to financial feasibility."<sup>9</sup>

This was, of course, an interesting and consequential pronouncement. George Burpee of Coverdale and Colpitts had said just eight months previously the minimum southern crossing project was financially feasible. The process by which a major public works project was found to be financially feasible or not in the private capital markets was a difficult one to specify. The Bank of America and Blyth and Company were the leading commercial and investment banking firms in the region. They had always been closely involved with CTBA financing efforts. Alan Browne and Arthur Dolan, officials of these firms who were also BARTC members, had declared their support for the Optimum Plan. It seems to me these representatives of Bay Area financial capital were expressing their preference for regional rapid transit rather than another bridge crossing in a most effective manner. Smith, Barney and Company



would serve as financial advisors to the Bay Area Rapid Transit District.

Norman Raab, the man who had directed the southern crossing studies, was directed to study the reconstruction of the Bay Bridge. His work was financed with a \$50,000 emergency appropriation made possible by the state legislature. The legislators noted the CTBA must be in a position to commence reconstruction work without delay if and when the Key System trains were abandoned. The legislation did not say anything regarding reserving the Bridge Railway space for buses.<sup>10</sup>

Norman Raab reported in March, 1957, that the Bay Bridge could be reconstructed so as to increase its traffic carrying capacity by twenty-five percent to thirty-five percent. Raab proposed paving the Bridge Railway lanes and establishing one-way traffic on each deck. He likewise did not say anything about the CPUC's bus rapid transit plan; his proposal contemplated all lanes being open to general motor vehicle traffic. Raab estimated the cost of reconstruction at thirty-five million dollars.<sup>11</sup>

Meanwhile, on 31 January 1957, the Key System and the DPW appeared before the CPUC to report on their talks. The Key told the Commission there was absolutely no way it was going to invest its money to modify a terminal it did not own at a point in time when a public agency could come on the scene at any moment. The Key lawyer said, "...we don't want to stay on the bridge." Moreover, the Key railed at the CPUC for failing to grant the company a fare increase. "There can be no excusing...the lack of action by the Commission...by which the Commission has failed to grant to this company the relief to which it is so clearly entitled. It amounts to a failure on the part of the Commission to perform its constitutional duty to protect, in so far as it is able, the financial integrity of the company...."<sup>12</sup>

On 12 March 1957, the CPUC reluctantly issued its final decision. The Commissioners were deeply disturbed by the Key System's intransigent attitude on the question of modifying the terminal. They angrily rejected all the Key's arguments against making the necessary investment as being, "...without merit. It is apparent that the company's discussions with the DPW were carried on in the light of its preconceived position that it was not disposed...to provide the necessary funds for alterations to the San Francisco Terminal...as provided for by...Plan 3." The Commissioners charged that by refusing to implement Plan 3 the Key System was "...unlawfully denying to itself a reasonable opportunity to earn a fair return upon its property...devoted to the public use."<sup>13</sup>

However, the CPUC decided it had done all it could do in this matter. It had strongly supported the bus rapid transit plan and had indicated its support to the relevant state agencies. The Key System refused to invest in the necessary changes, but apparently the state legislature was going to provide the required funds. The next move was therefore up to the legislature and the CTBA. The CPUC gave its permission to the Key System to abandon Bridge Railway service and substitute buses.<sup>14</sup> The CPUC plan for exclusive bus lanes was now in the hands of the state bridge and highway engineers.

The deed, however, was not yet done. The Key System was granted permission to substitute; it was not ordered to do so. The Key held off accepting this authorization until the middle of November. The company apparently wanted to wait and see what happened in the state legislature regarding bridge reconstruction, and how it would be treated by the ACTD.

In April the state legislature took up a bill enabling the CTBA

to reconstruct the Bay Bridge for general traffic. The legislature noted the CPUC had approved rail abandonment; therefore, reconstruction had to go forward to minimize the period of severe motor vehicle congestion. The bill provided that Bay Bridge revenues currently available and available through 1 July 1961 could be used to finance reconstruction. If bonds for a southern crossing were issued, the DPW would include the cost of Bay Bridge work in the southern crossing bonds. One-way traffic on each deck was allowed.<sup>15</sup>

In May this bill was amended to include two provisions regarding the southern crossing. One stated that financing for the crossing must be complete by 1 July 1958; the second said the crossing could be constructed only if financing could be arranged without increasing the current twenty-five cents toll. In July the bill was signed into law; it contained nothing about exclusive Bridge bus lanes.<sup>16</sup>

The amendments answered the CTBA's question about the relationship between the southern crossing and Bay Bridge reconstruction. Even if local financial leaders had been favorably disposed toward it, the 1957 law effectively killed the southern crossing project. Raab's previous studies had said that only a minimum project was possible with a twenty-five cents toll.

The addition of thirty-five million dollars to a bond issue to include Bay Bridge reconstruction work would push the project well beyond financial feasibility. Moreover, adding additional transbay transport capacity--both motor vehicle and transit--decreased the revenue generating prospects of the southern crossing.

Finally, on behalf of southern Alameda and the peninsula counties the legislature authorized a new approach to Bay crossing problems. During the same 1957 session the legislature appropriated money for studies leading to plans and a bond issue to at least double the capacity of the existing San Mateo-Hayward Bridge, seventeen miles south of the Bay Bridge. Traffic had been increasing sharply on that structure; congestion was now a serious problem.<sup>17</sup>

At the 3 April 1958 meeting of the California Toll Bridge Authority the DPW reported that investment bankers had indicated once again the southern crossing, even with staged financing, was not a safe and attractive investment for private capital. The Department recommended that construction was neither feasible nor in the public interest. The CTBA agreed.<sup>18</sup>

Just a few weeks later, on April 30, Bay Area Rapid Transit District Director Jack Beckett requested the Authority to consider building a rapid transit tube as its next Bay crossing, and to use surplus Bay Bridge toll revenues to finance its construction.<sup>19</sup>

After more than ten years of intense controversy, was the southern crossing project finally dead? Not quite. The project would make one more brief, though exciting appearance as a referendum issue in 1972 before disappearing from view.<sup>20</sup>

## XIII BAY AREA RAPID TRANSIT DISTRICT

The Bay Area Rapid Transit District (BARTD) bill, SB 850, was introduced in the state senate on 17 January 1957. The bill followed the BARTC proposal discussed the previous November, with some significant exceptions. One difference was that all of Santa Clara County was now included in the district. The BARTC thought that including Santa Clara would make participation more attractive to San Mateo County. Property taxes would be increased in both counties to pay for the transit project, rather than saddling San Mateo with a higher rate. Moreover, having all of Santa Clara in at the beginning increased the likelihood of future extensions of intra-peninsula service.<sup>1</sup>

Another change made the district director selection process more acceptable to the cities. The governor no longer had a role and all appointments would be made by city and county elected officials.

Finally, the BARTC compromised its original proposal for unlimited property taxing power; SB 850 allowed the district to levy a property tax of up to ten cents per \$100 assessed valuation for all district purposes in addition to paying off the construction bonds.<sup>2</sup>

The proposed district would be able to provide regional rapid transit service using any type of equipment it desired. It could provide any feeder service it found necessary. The district could bond

twenty-five percent of its territory's assessed valuation; it needed only refer plans for routes and facilities to local councils and boards and give due consideration to their recommendations. BARTC still wanted the power to levy a one percent sales tax, which could be used only to pay off construction bonds.

One of BARTC's members worried at a Commission meeting that sales taxing power would upset organized labor; labor had historically opposed this regressive measure. However, the two union representatives on the Commission, Tom Rotell of San Francisco and Otto Sargent of Santa Clara, both gave their assurances that a sales tax would not be a barrier to labor support.<sup>3</sup> Rotell spoke for the Pacific Coast Metal Trades and Sargent for his county's Building and Construction Trades. Just as construction and equipment manufacturers supported rapid transit, construction-related unions were willing to go along with a regressive financing mechanism in order to generate employment for their memberships.

The response to SB 850 was hostile from several quarters. Official San Francisco was concerned the city wasn't going to get rapid transit service commensurate with its financial contribution. Moreover, city leaders thought the twenty-five percent bonding capacity was too high and the District's proposed taxing powers too great.<sup>4</sup> All Bay Area cities raised objections to the bonding figure, the sales tax, and the autonomy granted the board of directors, just as they had in November. In late February Santa Clara BARTC representative Nestor Barrett wrote to Alan Browne that his county board of supervisors had just voted to ask for withdrawal of Santa Clara from the district. Barrett said this action was led by the Santa Clara County Taxpayers Association, which "...is...very powerful...in this county, since it stands for all

of the principal industries, financial institutions and businesses in the Valley. To allow them to remain antagonistic to our program is to continue to assure that this County will not participate in it."<sup>5</sup>

At state Senate hearings on the district legislation the Millbrae City Council articulated its opposition at the level of regional planning theory and practice; their critique went to the heart of the transit proposal. The Millbrae Council would not agree with the stress on "The preservation and enhancement of...urban centers and subcenters... as concentrations of employment, commerce and culture." In their opinion this theory was "...contrary to all modern concepts of area planning and is shared by no planning commission in the suburban area to be served by the proposed Rapid Transit. The establishment of industrial parks adjacent to highly restricted residential areas, the creation of professional and administrative zones in practically every Peninsula city are aimed at decentralization and the reduction or elimination of the need for public Rapid Transit of the type contemplated.... Present day planning is aimed at bringing the worker closer to his job to the end that the time and expense of commuting may be reduced to a minimum. It is also essential to the economy of each city that industry and commerce be a part of that city." Millbrae also raised the issue of national defense, arguing the necessity of breaking up industrial concentrations to decrease the nation's vulnerability to attack.

Peninsula speakers charged BARTC's proposal gave the district far too much power, especially financial power. Moreover, they stressed it would be as effective and much, much cheaper to look for ways of improving Southern Pacific rail service, even to the point of

subsidizing its losses. They noted the importance of Southern Pacific's freight operations for the industrial growth of the area. They insisted that peninsula communities not be forced to accept a regional rapid transit system without their explicit consent.<sup>6</sup>

BARTC offered more compromises. In early March the maximum property tax levy was reduced from ten cents to five cents. In addition, the vote necessary to approve a bond issue was set at two-thirds, an increase from the fifty percent originally proposed. This was not enough for the peninsula, however. In early April, in the final Senate action on SB. 850, San Mateo and Santa Clara counties were amended out of the district.<sup>7</sup>

Later in April the district bill drew more opposition: the San Francisco Labor Council. Contrary to what BARTC's labor representatives had predicted, the San Francisco Labor Council opposed the use of sales and other consumer taxes to finance construction because they were regressive. The Labor Council also was against an appointed board of directors; the Council favored an elected board, that would be more responsive to labor and consumer demands. The district bill contained labor provisions similar to those contained in the ACTD legislation; the Council objected to appointed directors engaging in collective bargaining and negotiating sensitive labor-management issues.<sup>8</sup>

The regional rapid transit movement, having come this far, was now in serious disarray. Pessimism prevailed. San Francisco was alarmed at the prospect of a district without San Mateo County;<sup>9</sup> San Mateo's absence did major violence to the regional scope of the project. San Francisco urged immediate and intense negotiations to get San Mateo back in.



In the state assembly during mid-May the BARTC agreed to more compromises. Amendments were passed requiring the district directors to submit plans to county boards of supervisors for approval. The unanimous consent of all counties in the district would be required to get a bond issue on the ballot. In addition, the district bonding capacity was reduced to fifteen percent of assessed valueation.<sup>10</sup>

This was still not enough for San Mateo. At the end of May the BARTC surrendered its sales taxing power. San Mateo County came back in.<sup>11</sup> The BARTD lost Santa Clara, though; this was the first major break in the ranks of the regional transit movement.

Interestingly, at the end of May the Commonwealth Club of California reported the results of its study, "Rapid Transit for the Bay Area?" George Whittle, chairman of the Highways and Transportation Section summarized the pros and cons of the Optimum Plan, the Minimum Plan and the proposed district legislation. Whittle asked the question: "Is rail rapid transit enough superior to bus transportation to justify a construction estimate of \$84 million to get from the terminal [in the San Francisco financial district] to the first Marin County station at Sausalito, nine miles distant?" Whittle pointed out that adding in the cost of the rest of the Marin line this segment of the proposed system would cost about sixteen percent of the entire rail network. Yet it would serve less than four percent of the district's population and only 3.2 percent of the assessed valuation of the six counties. Did the prospective patronage on this line require such a large investment? The Section membership voted "No;" they thought buses would be sufficient for the Marin route.<sup>12</sup>

Whittle pointed out the \$200 million construction estimate for

the peninsula line; he noted that a small fraction of this amount could provide improved service from the present Southern Pacific depot to downtown San Francisco. However, the Section membership was not offered a question which posed this alternative.<sup>13</sup>

In general, the Highways and Transportation Section supported the BARTD bill. Large majorities approved state legislative creation of the district and public subsidies for the transit system. The Optimum Plan was approved by a close vote, as was a two-thirds requirement for bond issues. The Section chose property taxes and bridge tolls as their favored forms of public subsidy.<sup>14</sup>

The amended version of SB 850 was passed and signed into law in the middle of 1957. The BARTD had five counties: Alameda, Contra Costa, Marin, San Francisco, and San Mateo. Given the political history of the bill, San Mateo County's attachment to the District was tenuous. Minus Santa Clara, however, the regional rapid transit movement had survived this crucial test. The BARTD was more hedged around than the ACTD. The ACTD had a larger bonding capacity--twenty percent compared to fifteen percent. The two-county district had unlimited property taxing power, while the five-county district was limited to five cents per \$100 assessed valuation. The ACTD board of directors would submit a bond issue directly to the voters without prior local approvals; the BARTD directors needed to have their engineering plans approved by county boards of supervisors prior to an election. The BARTD did not get the sales taxing power the BARTC and SRI wanted for it. Ironically, in the late 1960s when the BARTD threatened to run out of construction funds, the state legislature gave the District a one-half cent sales tax.

The BARTC's work was now done. On 14 June 1957, Alan Browne chaired the final BARTC meeting. Arthur Dolan stated that "...he considered it very important the Commission's records contain mention of the extraordinary amount of work and well-directed effort that the chairman Alan K. Browne had contributed toward successful passage of the transit legislation...." Dolan offered the following resolution:

Whereas, Mr. Alan K. Browne has shown extraordinary ability and leadership in his untiring efforts to convince the state legislature of the merit and need for rapid transit in the Bay Area which resulted in the passage of SB 850, Now, therefore, be it resolved that the members of the BARTC hereby commend Mr. Alan K. Browne for his outstanding contribution to the welfare of all the people in the greater metropolitan Bay Area.

Dolan continued, "I think, Alan, you have done an extraordinarily good job and made this thing a success. I think you deserve ninety percent of the credit."<sup>15</sup>

Alameda representative Moffit seconded the resolution: "I know that I express the sentiment of every member in this room as well as the sentiment of those who are unable to be here when I mention the keen appreciation of our members of the tremendous and well-directed effort our chairman had put forth to benefit our Bay Area at large, and to insure that a large portion of our people receive the information which was essential to their having a proper understanding of the program and to lending their support to it."<sup>16</sup>

"Whereupon everyone in the room stood and awarded Mr. Browne a round of applause."<sup>17</sup>

Sonoma representative Kinne said that he wanted to make one addition to the wording of the resolution: "I would include the wording '...in a dignified and progressive manner.'<sup>18</sup>

Clair MacLeod told the Commission that Browne had mentioned this was Browne's first experience in seeking support for a piece of legislation. MacLeod said that he had himself been active in legislative procedures for more than twenty-five years and had never seen a piece of legislation which was so far-reaching be enacted with so few changes in its essentials. This was a tremendous accomplishment and the credit was all Browne's.<sup>19</sup>

On that note, chairman Browne adjourned the meeting.

## XIV ACTD, BARTD, AND THE BRIDGE RAILWAY

The Alameda-Contra Costa Transit District Board of Directors began discussing serious business in January, 1957. Recall the ACTD Board was elected by the people; as a result of this there were several new people centrally involved in the East Bay transit political scene. Clair MacLeod was still present as an at-large Director, and Robert Nisbet was the District's Attorney. The elective procedure had, however, opened up the District to new people and new ideas. MacLeod would work hard to see that the new official East Bay leadership stayed close to the line of the District's founding fathers, but there wasn't any guarantee that the other Director's wouldn't want to pursue an independent course.

The District began functioning just after the CPUC issued its interim order permitting Bridge Railway abandonment. The ACTD authorized a representative to make a statement to the CPUC urging that transbay trains not be removed at this time. Director J. Howard Arnold, an engineer representing the Albany area of northern Alameda County, wanted the Board to consider a plan that would retain all the train lines and eliminate all the buses in transbay commuter service.<sup>1</sup>

The next substantial order of business discussed was the possible use by the District of the old tracks and rights-of-way of the

Sacramento Northern Railway to provide commuter service in central Contra Costa County. These rails were scheduled to be removed very shortly. Arnold wanted the Board to acquire the facilities. He was supported by Robert Barber, Berkeley's representative, but the rest of their colleagues weren't interested in taking action to save the Sacramento Northern rails.<sup>2</sup>

A pattern emerged from these two issues that characterized much of the early politics of the ACTD Board. Howard strongly advocated a rail transit system for the East Bay and wanted to do everything possible to keep the Bridge Railway in operation. He bitterly opposed the Key System, frequently charging it and its National City Lines ownership with deliberately sabotaging train service and seeking to destroy rail transit entirely in the East Bay.

Arnold was frequently supported by Barber, who shared Arnold's advocacy of rail facilities. These two were usually, though not always, opposed by Clair MacLeod, who wanted to brake action by the ACTD which he felt would encroach on the BARTD's territory.

In March, Arnold told the Board their statement to the CPUC opposing rail abandonment wasn't strong enough. He moved to open negotiations with the Key System to purchase its facilities in order to keep train service going. This notion was defeated.<sup>3</sup> In April, after the CPUC final decision permitting bus substitution, Arnold again criticized the weakness of the ACTD's opposition to the change. He moved to have the Board express its intention to acquire Key System trains and operate service as soon as the District was legally and financially able to do so. The motion died.<sup>4</sup> Arnold then moved the District take over some Sacramento Northern tracks; this likewise was defeated.<sup>5</sup>

In May, Richard Barber introduced Charles DeLeuw to the Board. DeLeuw's consulting firm would be developing a plan for the ACTD. DeLeuw told the Directors that Bridge Railway removal would be a very serious mistake at this point in time.<sup>6</sup> DeLeuw spoke while the state legislature was considering the bill enabling the CTBA to reconstruct the Bay Bridge in the event of Railway abandonment. Arnold introduced a resolution in which the ACTD strongly opposed any and all legislation that would result in the removal of the Bridge Railway because of the potential use of the Bridge facilities by the ACTD. This action carried unanimously.<sup>7</sup> It signalled an independent attitude on the part of the Board; the Bridge reconstruction program was strongly backed by the Oakland Tribune, and the Oakland Chamber of Commerce. Alameda Senator Breed had sponsored the legislation.<sup>8</sup> Director Barber had even spoken to the CTBA about the District's possibly leasing the Railway facilities owned by the Authority and operating them. The CTBA said it had not yet established a policy on the question.<sup>9</sup>

Following the passage of the legislation Arnold moved the District petition the governor to veto the bill. The Board considered this too strong an action, however, and defeated it.<sup>10</sup>

Arnold continued his efforts to secure rail transit for the East Bay. He wanted the District to adopt a budget for the coming year that would permit purchasing the Key's facilities and Sacramento Northern rights-of-way. The majority refused him.<sup>11</sup> The Directors did, however, declare their intention to file a petition with the CPUC asking that just compensation for Key's lands, rights and facilities be fixed.<sup>12</sup> Moreover, DPW Director Durkee gave his assurances that even

with the new state legislation the department would not proceed with reconstruction until at least January, 1958.<sup>13</sup> There was still time for the ACTD to implement a plan that would retain the Bridge Railway. The Board eagerly awaited DeLeuw, Cather's report on what kind of transit service it ought to provide; the report was due early in November.

DeLeuw, Cather's Preliminary Report on Trans-Bay Transit created a great swirl of controversy; the consultants essentially proposed an entire regional rapid transit system. DeLeuw, Cather opened with a blast at the Key System: "There is every evidence that transbay rail services have been purposely allowed to deteriorate during the last decade by a management devoted to bus operation."<sup>14</sup> The consultants proceeded to outline four transbay transit options for the ACTD. Three of these were shuttle plans that would eliminate some or all of the rails in East Bay streets. One shuttle plan kept two of the five rail lines intact, the Berkeley and East Oakland lines, and would institute bus service to a transfer station on the Bridge toll plaza. The second shuttle plan eliminated all the street rails and brought everyone to a transfer station where they would board Bridge trains. The third possibility called for using twenty-nine modern, articulated pneumatic (rubber) tired train units for the trip across the Bay. The fourth alternative was an all-bus system.<sup>15</sup>

DeLeuw, Cather strongly recommended their third shuttle option, rubber tired trains on the Bridge and elimination of all streetcars in the East Bay. One problem, however, was that it would take two years to get the rubber tired trains. Therefore, as an interim measure, existing Key System rolling stock should be improved and the Bridge Railway modernized to permit somewhat higher speeds. The consultants



recognized the dangers of requiring a transfer, but they hoped to overcome them with frequent shuttle service.<sup>16</sup>

DeLeuw, Cather stressed their proposal conformed to any logical development of regional rapid transit. Extensions into downtown San Francisco and into important East Bay centers would undoubtedly be made. They went on to argue, though, "The preservation of the existing valuable rail facilities is essential to economical development of area-wide rapid transit." This was not all: "Failure to adopt [their plan for a modernized Bridge shuttle] would necessitate the construction of a tube under San Francisco Bay to serve the same function. Such construction was estimated at upwards of \$70,000,000 two years ago. The imposition of this unnecessary financial burden during an initial stage of financing on the San Francisco BARTD would constitute a serious problem in the development of area-wide transit. It could conceivably postpone the start of construction of much needed works for years." There was more: DeLeuw, Cather predicted their rubber tired trains would attract so many motorists that another bridge crossing could be postponed for a number of years. They had presented a full-blown alternative to the Optimum Plan.<sup>17</sup>

This was the preliminary report. The final one was due on December 1. However, DeLeuw was sick; the final report would be delayed for two weeks. DeLeuw wanted to know if the ACTD would facilitate his work by narrowing the options that should be covered. The Board unanimously told DeLeuw to forget the all-bus alternative.<sup>18</sup> The Directors then proceeded to unanimously adopt their most forthright statement on the Bridge Railway question yet. Resolution #33, approved at the November 14, 1957 meeting, declared: "...the Board of Directors of the

ACTD does hereby express its intention to include the area on the Bay Bridge now occupied by the Key System trains in its program of transit for the District and will, upon receipt of the final report of its engineering consultants as to the transit program for the entire District, determine to what extent and in what manner this space shall be utilized..."<sup>19</sup>

The December report offered more detailed arguments in favor of the November rubber tired Bridge trains proposal. DeLeuw, Cather pointed out this type of train would permit a direct connection between the Bridge Railway and a Market Street subway in San Francisco; they were much lighter and had much better traction than conventional transit cars. They were able, therefore, to negotiate the steep grades that would be required in a direct Bridge-subway connection. The consultants went on to note there wasn't any problem at all in extending subways from the Bridge tracks to the centers of Oakland and Berkeley.<sup>20</sup>

The consultants then hammered home the main point: "With the use of modern, high-speed car equipment, travel time between Oakland and San Francisco will be reduced to fourteen minutes as compared with the eleven minutes estimated for a tunnel route. Through the preservation of the bridge tracks it appears that the community will be saved a capital outlay of some \$80,000,000 for the trans-bay rapid transit tunnel required in the event of removal of the bridge tracks."<sup>21</sup>

DeLeuw, Cather had now thrown down the gauntlet to the BARTD and the Optimum Plan. They had also told the ACTD, in effect, to fight to save the Bridge Railway before it was too late.

Recall that everything DeLeuw, Cather was proposing to the ACTD had been proposed before, some of it by DeLeuw, Cather. Shuttle

proposals dated back to the 1947 Bartholomew plan: DeLeuw, Cather had recommended shuttle operation in their 1948 Transportation Plan for San Francisco. They had also stated in that 1948 document that rail rapid transit would not be necessary in the East Bay. Shuttle plans had never been popular, though; the transfer made the service unattractive. However, in 1957 DeLeuw, Cather was saying a shuttle would be just an interim operation, until a regional system was in place.

Rubber tired trains and a direct connection between the Bridge Railway and a Market Street subway had been studied by PBHM. PBHM thought well enough of these trains to recommend a test program for them. However, this alternative was lost, remember, when PBHM posed the choice as one between the Optimum and Minimum Plans.

Regardless of their lineages, in late 1957 the proposals caused quite a stir. The Oakland Tribune carried an article highly critical of the DeLeuw, Cather plan. It added an entirely new dimension to the regional rapid transit situation. It directly conflicted with the DPW plan to reconstruct the Bay Bridge, a project that downtown Oakland and the Tribune strongly supported. The plan would confuse efforts to get the rails out of the streets of Oakland; if the Key had to keep running trains then where would the money come from to pave the streets? Moreover, the DeLeuw, Cather proposals invited conflict with the BARTD. BARTD Directors were reported fearful the DeLeuw, Cather plan would force their District into accepting the Minimum Plan.<sup>22</sup>

The Oakland Chamber of Commerce was deeply disturbed with the Bridge Railway proposal and with the ACTD resolution opposing Bridge reconstruction. The Chamber thought the ACTD was getting out of line,

engaging in actions that were not contemplated by those who labored to create the District, namely the Oakland Chamber. The ACTD was getting into areas intended for the BARTD. The Chamber wanted the ACTD to stop fighting the rail abandonment, thereby permitting Bridge reconstruction to go forward. The Oakland Chamber wrote a letter to the ACTD Board telling them so. The Directors were warned to quit meddling in Bridge issues and stick to strictly East Bay local affairs. If the ACTD didn't realize its appropriate role in these matters, downtown Oakland support for any future ACTD bond issue would be conspicuous by its absence.<sup>23</sup>

The DeLeuw, Cather preliminary plan came out just as the BARTD began its career. Being an appointed Board of Directors, there were several familiar people; a large portion of the BARTC leadership was returned to office. Arthur Dolan from San Francisco, Jack Beckett from Marin, Sherwood Swan and Clair MacLeod from Alameda, and H. L. Cummings from Contra Costa were the important carryovers. Several of the new appointees were also long-time transportation activists. Adrien Falk from San Francisco was a retired business and civic leader; he had served on Mayor Roger Lapham's Citizens Postwar Planning Committee in 1945. Transportation issues had been this Committee's chief concern. Harry Morrison from Contra Costa County was busy fighting the ACTD. J. G. Hunter from San Mateo County served with the CPUC. Two major figures from the BARTC were absent, however: Alan Browne and Marvin Lewis. Both men now lived in San Mateo County. The district legislation stipulated that directors reside in the county they represent. Lewis hypothesized that he and Browne were "too San Franciscan" to be appointed from San Mateo.<sup>24</sup>

As soon as the BARTD was functional, in late November, 1957, Morrison moved the Directors petition the CPUC to postpone its authorization of Key System rail abandonment for a three-month period to give the BARTD time to study the issue. Several Directors said the question was too complex to decide immediately. Morrison withdrew his motion; the question was referred to the Plans Development and Engineering Committee. Jack Beckett was chairman.<sup>25</sup>

On December 12 the Committee gave its report. It had held two meetings; Norman Raab, Charles DeLeuw and Walter Douglas had addressed them. Raab said his plan would increase Bay Bridge motor vehicle capacity by thirty percent to thirty-five percent. DeLeuw reviewed his plan for rubber tired Bridge trains. These trains would go fifty-eight miles per hour and make the trip from Oakland to San Francisco in fourteen minutes, which wasn't that much different than the eleven minute trip time via tunnel. DeLeuw said his Bridge Railway trains could be integrated into any regional rapid transit system. He also had done his own study of Bay Bridge reconstruction; DeLeuw concluded that Raab's plan would increase capacity by only fifteen percent, not the thirty to thirty-five percent Raab was promising. DeLeuw had a Bridge improvement plan that together with his modernized Railway would increase motor vehicle capacity by fifteen percent.<sup>26</sup>

Walter Douglas reviewed the Optimum and Minimum Plans. He said that use of the Bridge rails would cost 3,000,000 man hours per year because of its longer route length. He also said the thirty-five percent increase in motor vehicle capacity on a reconstructed Bay Bridge would make another vehicular crossing unnecessary for at least fifteen years. Douglas said that if the Bridge rails were removed now it would

be impossible to implement the Minimum Plan; Douglas also said that use of rubber tired trains on the Bridge would rule out the Optimum Plan. Once such an investment was made it would be very hard to abandon it.<sup>27</sup>

With one member dissenting, Beckett's Committee voted to recommend the following policy to the Directors: The BARTD continue to follow the BARTC policy of using existing rights-of-way and existing transit facilities wherever feasible. However, the District should "...Not be saddled with inadequate and obsolete facilities that would be an operating liability. Any plan for use of the present space on the San Francisco-Oakland Bay Bridge must include complete appraisal of the routing..." The Committee felt, however, that it needed more time to study the issue before it could make a concrete recommendation to the board.<sup>28</sup>

Following Beckett's report, the BARTD Directors received guests: Walter Douglas, Robert Nisbet and Robert Barber from the ACTD, and San Francisco Planning Director Paul Opperman. Douglas told the Board the Optimum Plan represented the least-cost overall package plan for Bay Area transportation needs. Robert Nisbet informed the Directors of the ACTD's opposition to rail removal; the ACTD Board wanted a chance to present a plan to its electorate that would include the Bridge Railway space. Acting ACTD President Barber told the BARTD that his Board desired to cooperate to the fullest with their larger neighbor. Barber said that "...In the event that the Regional Transit District develops an interurban system the function of the ACTD will be to provide feeder service and local distribution to the territory of the latter district." However, during the interim period the ACTD had to provide interurban

service; the District wanted to provide improved rail service via the Bridge Railway. Barber said he didn't think keeping the rails now would preclude the Optimum Plan. Nisbet asked the BARTD to declare itself to the CPUC as soon as possible.<sup>29</sup>

Paul Opperman said he personally favored the Optimum Plan, but he also thought the Bridge Railway option should be kept alive until the tunnel plan was certain. The San Francisco Board of Supervisors was on record as opposing rail removal; the Mayor's Transportation Committee recently reaffirmed this position. Moreover, Opperman said that the Director of San Francisco's Department of Public Works agreed with DeLeuw about the Raab plan--it would only increase Bay Bridge motor vehicle capacity by fifteen percent.<sup>30</sup>

Beckett pointed out to Opperman that "...Any sizeable expenditure of funds in rehabilitating the bridge rails and investment in new cars...could have the...effect... [of] committing the District to the 'minimum plan.'" <sup>31</sup>

One of the San Francisco Directors then moved the BARTD go on record as requesting the CPUC and the DPW to defer for six months any action directed to removing the Bridge Railway. This motion was defeated; another motion to have the Plans Development and Engineering Committee continue to study the question and report at the next meeting was, however, approved.<sup>32</sup>

The ACTD had its own meeting on December 12. Nisbet reported what had happened at the BARTD meeting; he also said a fresh wave of opposition to the rail abandonment was gaining strength in the East Bay and in San Francisco. Several East Bay cities: Berkeley, Piedmont, Albany, and others, and the Mayor's Transportation Committee in

San Francisco had already or would soon resolve their opposition. Nisbet had prepared a petition to the CPUC asking it to either rescind Key System's authority to substitute buses or to re-open hearings in the case. This petition had to be submitted to the CPUC by December 16 if it was going to be considered.<sup>33</sup>

District President Barber told his colleagues the maintenance of this sole existing rail rapid transit link across the Bay was the ACTD's responsibility. Maybe the BARTD would build a regional rapid transit system some time in the future; maybe it wouldn't. In either case there was going to be a need for transbay transit for some years; the ACTD had to resist the DPW-Key System plan to destroy the Bridge Railway.<sup>34</sup>

A motion authorizing Nisbet to submit the petition to the CPUC was offered. Clair MacLeod and one other Director voted against it; the ACTD had chosen to defy the Oakland Tribune and the Oakland Chamber of Commerce.<sup>35</sup>

On December 18, by a 3-2 vote, the CPUC decided to re-open hearings on the Bridge Railway case. These would be held in January.<sup>36</sup> The ACTD was also informed by the DPW that the DPW felt it had a mandate from the legislature and was also in the public interest to begin reconstructing the Bay Bridge as soon as possible following abandonment.<sup>37</sup> The CPUC appeared to be the ACTD's final hope. Even though some DPW engineers had grudgingly admitted the CPUC bus rapid transit plan had merit, they had done so before they had money to do what they clearly wanted to do, implement the Raab plan. The exclusive transit space was in serious jeopardy.

The ACTD looked to the BARTD for support. The entire region



had been waiting on the BARTD for years. Without the BARTD's support the ACTD's appeal might not carry much weight. The day before the BARTD was to take up the question the San Francisco News editorialized: "If the ACTD, which has begged five-county support in its fight to retain the rails, gets cold-shouldered now, who knows whether it will want to cooperate with the Bay Area in the future?"<sup>38</sup>

On January 9, 1958, the Plans Development and Engineering Committee recommended to the BARTD Board of Directors the BARTD not make any representation to the CPUC regarding bus substitution. The Committee argued the District was not now, nor would it be in the near future in a position to comment on whether or not bus substitution was in the public interest. Moreover, the District acknowledged the need for increased motor vehicle capacity.<sup>39</sup>

The Directors unanimously adopted the Committee's recommendation. They proceeded to resolve a request to the CTBA to give "full consideration" to the matter of reserving recoverable space on the Bridge.<sup>40</sup>

The ACTD went to the CPUC hearings with the BARTD very conspicuous by its absence.

San Francisco Planning Director Paul Opperman explained to the CPUC why his city wanted to hang onto the Bridge rails. He directed the Commissioners' attention to "...particular conditions that exist in San Francisco, especially in its central business district, that underscore its need for adequate rapid transit service, conditions that would be adversely affected by the abandonment of transbay rail service and substitution of motor coach service therefor." This central district would suffer "irreparable damage," which might prove to be a

barrier to its further growth and development. "Our high-density financial district and central shopping district are unusually dependent, for their continued usefulness and prosperity, on the degree to which they are conveniently accessible by mass transit facilities to all parts of the Bay Area." High downtown property values and the pedestrian character of existing central core activities worked against increasing the use of private automobiles by all of the employees, businessmen and shoppers who transacted life there. If there were an increase in private automobile traffic "...our street traffic congestion would become intolerable. Decentralization to suburban office or industry zones, such as those in Menlo Park and San Mateo, now a small trickle, might become a major flood of relocating firms. The Bay Area would experience a costly loss of San Francisco's convenience and utility as a compact nerve center and regional headquarters for corporate, financial and business service enterprises and as a compact regional marketing and shopping center with a wide variety and selection of goods and services."<sup>41</sup>

Of course, what Opperman said would be a disaster for San Francisco and, indeed for the entire Bay area, those firms being "forced" to move to San Mateo and Menlo Park, was seen quite differently in Menlo Park and San Mateo; those relocating firms were being welcomed with open arms.

Opperman also told the CPUC that given the projected growth in San Francisco's central district office employment, an average of 250,000 square feet of new space had been added annually in recent years, bus transit would not be able to handle the traffic load. Moreover, he cited the figure developed by San Francisco's Director of the City

Department of Public Works that the Raab plan would increase Bay Bridge motor vehicle capacity by only fifteen percent. This hardly seemed worth the effort.<sup>42</sup>

Opperman remembered the bus rapid transit plan proposed by the CPUC; he said such a plan would be an adequate substitute for the Bridge Railway. However, he noted the CPUC couldn't require the lanes to be reserved for buses. The CTBA could change its mind any time and order the Highway Patrol to open the lanes to general traffic, frustrating CPUC intentions. It wasn't a certain thing. The only certain course was to keep the trains running.

Opperman concluded, "...We should like to submit that to allow our one transbay rail link to be taken away from us, with the strong possibility that no other grade-separated right-of-way, free from highway congestion, might be established, would be a step backward and one that would severely restrict San Francisco's economic expansion."<sup>43</sup>

Nisbet's petition on behalf of the ACTD asked the CPUC to maintain basically the status quo on the Bridge Railway until the ACTD could present a bond issue to the District electorate in November, 1958. The existence of the ACTD was an entirely new element in the case; since the District had declared its intention to use the Bridge Railway space in its future program, "...This fact alone should provide sufficient grounds for not implementing the bus substitution order."<sup>44</sup> If this wasn't enough, Nisbet suggested several other things the CPUC ought to consider.

Nisbet pointed out that financial relief for the Key System had been one of the major reasons why the CPUC had approved the substitution. He argued that in fact Key System's 1957 financial experience

was better than either the company or the CPUC staff had thought it would be. Therefore it was realistic to require that substantially the same service be maintained for a few more months.

The District attorney pointed out the DeLeuw, Cather plan for a modernized Bridge shuttle system was another alternative available to the CPUC. Nisbet said this particular shuttle arrangement was a different, higher quality affair than earlier shuttle proposals. Moreover, no one had ever done a study of the financial possibilities of operating a shuttle service when all transbay bus travelers were required to transfer to trains. The shuttle plans studied by the CPUC staff in 1956 had contemplated both buses and trains providing transbay service.<sup>46</sup>

Nisbet went on to propose an alternative plan to the Raab proposals for increasing motor vehicle capacity on the Bay Bridge. If certain structural changes were made in the Bridge to improve its safety features and its capacity to handle disabled vehicles; if transbay commuter buses were kept off the Bridge, thereby freeing up space for cars; and if a modern, efficient Bridge Railway transit system were inaugurated that would attract motorists out of their cars, then using Raab's methods the motor vehicle capacity of the Bridge would be increased by fifteen percent.<sup>47</sup>

The City of Oakland wanted the rails out of its streets. Oakland also supported the Raab plan for Bridge reconstruction. Nisbet said the CPUC's concern for Oakland's streets was legitimate, but "...The condition of the streets in the City of Oakland should not outweigh the consideration of preserving and developing the best possible transit service for the people of the City of Oakland and for all of the people in the East Bay."<sup>48</sup>

The DPW opposed re-opening the case; it had money to build, it had a plan, it was ready to go. The DPW pointed out the ACTD was not yet ready with a plan; they were studying the DeLeuw, Cather proposal for a shuttle system, but this was an old idea and no one, including the ACTD was happy with it. Moreover, the DPW noted the BARTD had taken up the question of asking the CPUC to re-open the case, and had decided not to address the Commissioners directly. The DPW did not say anything about the bus rapid transit plan the CPUC had been urging.<sup>49</sup>

On March 11, 1958, the CPUC issued its decision; it would not re-open the proceedings. The CPUC argued it did not have jurisdiction over what happened on the Bay Bridge. The state legislature had allocated money and the CTBA had the responsibility. The Commissioners "...Noted that the Five-County District, which as the former BARTC, had participated in earlier phases of these proceedings and had recommended to the Legislature the so-called 'Optimum Plan'...took no part in the recent hearings."<sup>50</sup>

The CPUC once again urged the DPW and the CTBA to consider reserving the Bridge Railway lanes for exclusive bus use, perhaps by fencing in the right-of-way; they noted the BARTD had asked the CTBA to pay attention to reserving space which could be recovered.<sup>51</sup> This was as far, however, as the CPUC was going to go.

Referring to the CPUC bus rapid transit suggestion, Norman Raab said the Bridge Railway lanes would certainly be more valuable for general traffic than for exclusive bus use.<sup>52</sup>

Nisbet asked the CPUC to reconsider its decision. The Commissioners denied his appeal. Nisbet advised the only legal option remaining open to the ACTD was to appeal the CPUC decision to the state

supreme court. A motion to do this was made and defeated.<sup>53</sup> Director Arnold moved the supreme court appeal at another meeting; this, too, was defeated.<sup>54</sup> Arnold then moved the seat held by Clair MacLeod should be vacated because of conflict of interest: MacLeod's position as director of both transit districts. This motion died for lack of a second.<sup>55</sup>

At a BARTD meeting following the CPUC decision, a motion was made to request the DPW and the CTBA to delay removing the rails until January, 1959, to give the BARTD time to study the question. A counter motion was made to table the previous motion. The motion to table passed.<sup>56</sup> A motion was then made to request the CTBA to consider a tube as the next Bay crossing. The Director who had introduced the first motion, above, moved an amendment asking the CTBA to reserve the rail space on the Bridge until it decided about a tube. This amendment was rejected.<sup>57</sup> Jack Beckett and Clair MacLeod had led the opposition to the space reservation measures. The tube motion was passed unanimously.<sup>58</sup>

April, 1958, was a very significant month for the Bay Area Rapid Transit District. On April 3 the investment community declared to the CTBA there wasn't any money to build a southern crossing. The reasons included increased motor vehicle capacity on the Bay Bridge and on the San Mateo-Hayward Bridge, and steady progress toward a regional rapid transit system. According to the 1957 amendments to the 1953 southern crossing Act, the southern crossing would now forfeit its priority claim to surplus Bay Bridge toll revenues.

On April 20, 1958, after just nineteen years of operation, the last Key System trains rolled across the Bridge Railway into

oblivion. Two alternatives to the Optimum Plan were eliminated as a result. One was the rubber tired Bridge train proposal advocated by DeLeuw, Cather as a less expensive alternative to a transbay tube. The other was the CPUC bus rapid transit plan.

Why didn't the BARTD support the ACTD's efforts to save the Bridge Railway? It seems to me the BARTD Directors were convinced that continued operation of a modernized Bridge Railway, along the lines advocated by DeLeuw, Cather, would seriously jeopardize the possibility of constructing a tube at a later date. The BARTD Board concluded it was their top priority to protect the long-range prospects of their Optimum Plan; the laboriously constructed political alliances cemented together by the tube and a reconstructed Bay Bridge were paramount.

The Bridge Railway was gone forever; bus rapid transit, however, was an idea whose time would come. Ironically, of course, right on the San Francisco-Oakland Bay Bridge.

Throughout the latter 1950's the ACTD followed the progress of exclusive bus lanes in other cities. The District's magazine, Transit Times, carried articles about buses running in exclusive lanes on the streets of Baltimore, Nashville, Dallas, Cincinnati and Peoria, and proposals for such service elsewhere.<sup>59</sup> The Board's interest was further stimulated by serious traffic congestion on the Bridge that was being caused by the reconstruction work; the Directors passed a resolution, in December, 1961, to ask the CTBA and the Highway Patrol to close the lower deck to automobile traffic, at least during the peak hours.<sup>60</sup> Discussions were held with the DPW Director; in January, 1962, the state gave ACTD evening peak period buses an exclusive lane on the Bridge from the San Francisco terminal through the Yerba Buena Island tunnel. The

Highway Patrol provided excellent enforcement. The ACTD Directors were thrilled. Director Barber proposed the District start pressing the DPW to keep the exclusive lane in operation after Bridge reconstruction work was done. ACTD general manager J. Worthington, former Key System traffic chief, would study the situation.<sup>61</sup>

Using the exclusive lane, ACTD buses were crossing the Bay Bridge twice as fast as cars. At a time when transit patronage was everywhere stagnant or declining in the United States, ACTD was recording substantial increases in transit travel and commuter book sales on its transbay lines. These increases steadily continued throughout the one year period the exclusive bus lane was available.<sup>62</sup>

The Bay Bridge exclusive bus lane was the first and only one of its kind on a freeway or highway in the entire nation. Transit people everywhere watched. The United States Bureau of Public Roads studied it. The state highway people were surveying it to see what influence it had on travel habits. Federal transit Administrator John C. Kohl started working with ACTD officials to extend the use of exclusive lanes in the East Bay; Kohl said the ACTD had a very progressive attitude. President John F. Kennedy, in his urban transportation message to Congress, requested the Secretary of Commerce to consider favorably exclusive bus lanes on highways during peak periods.<sup>63</sup>

In January, 1963, the DPW informed the ACTD that as of February 1, the state was going to take the exclusive lane away. The DPW said it needed the lane to provide adequate facilities to maintain commuter vehicular traffic flow while reconstruction work proceeded. The ACTD argued that if the lane were lost, the District's costs would increase, service would be delayed, and congestion would be a problem anyway



because of bus rapid transit patrons returning to their cars.<sup>64</sup>

The "Minutes" of the ACTD Board meeting recorded that, "...The Director of Public Works appeared to receive the District's position sympathetically...The director had inquired of his own staff whether there would be any physical reasons to prevent restoration of the exclusive lane following reconversion of the bridge. The Director's staff had replied in the negative.."65

However, bus rapid transit was an idea whose time had not really come, even after this thoroughly successful experience. In the 1970's though, the state highway agency would provide ACTD buses with an extensive network of exclusive lane approaches to the Bay Bridge toll plaza. Combined with a metering system that gives the buses priority in getting on to the Bridge structure, the ACTD now supplies transbay transit service the quality of which would have made the 1956 California Public Utilities Commission staff proud.

## XV THE TRANSBAY TRANSIT TUBE

In early January, 1959, BARTD Directors resolved to ask the State to build the transbay transit tube, and to use surplus Bay Bridge toll revenues to finance its construction.<sup>1</sup> In February Marin Senator McCarthy introduced SB 519, which embodied the District's request. The California Toll Bridge Authority would build the tube and enter into a contract with the BARTD for its use. The CTBA would pay for tube insurance and maintenance out of toll revenues.<sup>2</sup>

Official San Francisco initially resisted supporting the bill; some Supervisors carried lingering southern crossing thoughts. The San Francisco Labor Council was still solidly behind the bridge; the Council opposed the transit tube as a very poor substitute for the southern crossing and a San Francisco sell-out to downtown Oakland.<sup>3</sup> By April, however, the San Francisco Board of Supervisors had lined up in support of the tube.<sup>4</sup>

SB 519 was supported by the directors of the California State Automobile Association, interestingly enough. The directors reasoned that since rail transit facilities had always been part of the Bay Bridge project, it was all right for motorists to pay tolls to finance the recreation of rail transit under the Bay once the Bridge was reconstructed.<sup>5</sup>

The transit tube bill was referred to the Senate Transportation Committee. The Committee chairman was Randolph Collier, a legislator with twenty years experience in the state senate and the leading advocate, defender, and widely acknowledged "father" of the California freeway program. Richard Dolwig, now Senator from San Mateo County, was a Committee member. In early May Senator Collier called the bill up for consideration. His personal opinion of the project was clear: Collier didn't think anyone would prefer a transit tube over a car. Dolwig said he was instructed by the San Mateo County Board of Supervisors that San Mateo County had little to gain from a tube. Collier called for a voice vote on the bill; he determined the measure was two votes short of the seven needed to clear the Committee. Collier and Dolwig had both voted against. Collier didn't think the bill would come up again.<sup>6</sup>

A journalistic storm of controversy erupted. The discussion in Sacramento was that Collier had buried the transit bill even though there had been enough votes to pass it out. The San Francisco Chronicle editorially charged that Collier was taking revenge against San Francisco because the city's Supervisors had resolved their famous "freeway revolt" in January, 1959, in effect telling Collier that San Francisco didn't want anymore of the freeways that Collier and his highway engineering associates were pushing. The Chronicle diagnosed that Collier suffered from "freeway-itis;" he could only imagine building more freeways to solve traffic congestion problems.<sup>7</sup>

Collier and Dolwig--note the ominous implications of Dolwig's action on this issue--were not the only obstacles the BARTD Directors faced in their quest for a state-constructed tube. The Bay Area Council

led by Edgar Kaiser, was seeking legislation that would create a Golden Gate Authority. This effort was the BAC's first serious organizational initiative in the transportation field since its ill-fated Master Plan of Bridge Crossings in the early 1950s. The BAC wanted surplus Bay Bridge tolls and indeed, the entire Bridge, for its proposed Authority.<sup>8</sup>

The Golden Gate Authority was patterned after the Port of New York Authority. Its purpose would be to build, own, and operate transportation infrastructure, such as bridges, harbors, airports, and others, necessary to facilitate regional economic growth. The BAC wanted to take the extremely profitable Bay Bridge into the Authority and use its surplus toll revenues to construct other surplus-generating projects. The Golden Gate Authority would not have any taxing power; it would only be able to sell revenue bonds. The Authority would, therefore, own and operate those facilities that generated surplus income. Edgar Kaiser said the Authority would build a transbay tube for the BARTD, but it would certainly not own and operate it. Following in the footsteps of the New York Port's legendary and extreme opposition to taking on deficit-producing transit operations, Kaiser explained that the regional rapid transit project would require public subsidy. The New York Port didn't, and the proposed Golden Gate Authority couldn't either, jeopardize the security of its revenue bondholders by assuming the risks inherent in deficit-producing transit provision. The Board of Directors of the Golden Gate Authority would, of course, be appointed.<sup>9</sup>

In early June Governor Brown intervened with Senator Collier; Brown urged passage of SB 519.<sup>10</sup> Collier relented. SB 519 was amended to require the BARTD to maintain and insure the tube at the District's

expense. If general obligation bonds totalling at least \$500 million were voted for a rapid transit system by 30 November 1962, the CTBA would build the tube and finance its construction with toll revenues.<sup>11</sup> The amended bill was passed; the Golden Gate Authority was defeated.

As he signed the tube bill Governor Brown declared: "I am informed that this is the first time a state has pledged its financial resources and has, in effect, become a partner in the development of a regional public transportation system. There is general agreement that the San Francisco Bay Area, through the efforts of the five-county BARTD, is the closest to revolutionary achievement in the public transit field of any of the Nation's metropolitan areas."<sup>12</sup>

Why did Senator Collier change his mind? In 1960 Collier was holding hearings about a proposed rail rapid transit system for the Los Angeles region. He was discussing possible state financial aid for the project with former DPW Director C.M. Gilliss, now general manager of the Los Angeles Metropolitan Transit Authority. Gilliss pointed out the "...provision that \$115 million may be spent to build this underwater tube if and when San Francisco builds the rest of this system." Collier asked Gilliss, "What amount?" Gilliss replied: "\$115 million." Collier said, "I am talking about how much of a bond issue they have to put up first." Gilliss answered, "It is near a billion dollars, Senator." Collier reasoned, "Certainly it is a practical impossibility, isn't it, and that legislation doesn't mean anything?" Los Angeles state Senator Richard Richards asked Collier, "Are there any examples that do?"<sup>13</sup>

Not yet. Collier would soon, however, be surprised.

## XVI THE BEGINNINGS OF ACTD SERVICE

Having lost the opportunity to operate a Bridge Railway transit service, the ACTD Directors turned their attention to a DeLeuw, Cather plan for all-bus operation. In August, 1958, Charles DeLeuw presented his firm's proposals; he pointed out in his cover letter that the Key System had been most uncooperative during this transition period. DeLeuw said the stated policy of National City Lines was to be agreeable to sale of their transit properties to local governments at a fair price. However, the Key System had refused to furnish any data, access to terminals and shops, or any other assistance. The Key had opposed the ACTD's petition to the CPUC for an appraisal to determine the fair value of the properties involved. Evidently the Key System wanted court litigation before settling, perhaps thinking they would get a better price. DeLeuw was angry with the Key's persistent obstruction; he recommended that should the management continue its present policy, the ACTD should commence parallel operations and drive the Key System out of business.<sup>1</sup>

The consultants noted per capita transit patronage in Key System territory had shrunk to the lowest figure of any large city in the United States with the exception of Minneapolis. The Key had made no attempt to extend service to rapidly-developing areas; its equipment was mostly obsolete. DeLeuw, Cather pointed out, as Harland Bartholomew

had more than ten years previously, the "surprising" fact that much better and faster service was provided to the San Francisco central business district than to downtown Oakland. This was reflected in the fact that only one express route, other than transbay lines, was currently in operation.<sup>2</sup>

DeLeuw, Cather suggested several actions to the ACTD Directors: service should be vastly expanded; several hundred new buses ought to be purchased; and four new express lines focusing on downtown Oakland and using East Bay freeways should be inaugurated. These express buses were the "...most important single measure that can be taken by the Transit District to improve the service offered to the bus rider and to attract new riders to the system..." The absence of expresses was perhaps "...the most glaring deficiency in the present Key System set-up." Parking lots along the express bus routes and transfer stations at freeway interchanges were also advocated.<sup>3</sup>

A \$16.9 million capital outlay was proposed. The consultants argued that conservative estimates forecast a favorable financial situation for the District. Income each year would be sufficient to pay off the bonded debt; accumulate depreciation funds sufficient to retire all used buses in seven years and replace all new buses and everything else in fourteen years; and produce a moderate net income each year. All this would be accomplished without increasing fares or levying additional taxes.<sup>4</sup>

Two of the proposed express bus routes paralleled proposed regional rapid transit lines from Richmond and from Hayward into downtown Oakland. DeLeuw, Cather said these express routes would be abandoned when the regional rail system opened. They also said the ACTD

would abandon transbay transit when the BARTD network was functional; the ACTD's purpose would then become one of providing adequate service within the District proper "...suitably integrated with the regional transit system" DeLeuw, Cather did not, however, address the question of the likely financial impacts of these momentous changes.<sup>5</sup>

The ACTD Directors prepared for a November, 1958, bond issue; the DeLeuw, Cather plan was the basis. Appropriately enough, Senator Breed, one of the people most responsible for the District's creation, was general chairman of a Citizens' Committee for Better Transit, a group formed to propagandize on behalf of the bond issue.<sup>6</sup> The issue needed a two-thirds favorable vote; it failed to get it. The issue was approved by sixty percent of the voters in Alameda County, and by only thirty-nine percent in Contra Costa.<sup>7</sup>

During the 1959 state legislative session the ACTD pressed for legislation enabling the formation of special transit districts having the power to issue general obligation bonds by a simple majority vote. In addition, the Directors wanted the process by which parts of the original district could withdraw made easier. Such legislation was passed. In May, 1959, a special district was created; by the time of the next bond issue vote in October the greater part of Contra Costa County was gone. The bond issue was approved the second time around.<sup>8</sup>

Early in 1960 the District finally settled with the Key System on a price. Arthur Jenkins had been retained to place a valuation on the Key's properties the District would buy.<sup>9</sup> During the summer the District prepared to sell bonds to acquire the Key and to purchase new equipment; Blyth and Company prepared the Official Statement relating to the bonds.<sup>10</sup> The District clearly stated that if and when the BARTD



became operational, the ACTD's bus service would "...continue to operate in both a feeder and supplementary capacity." The Official Statement contained a twenty-year projection of operating expenditures and revenues; this projection did not take into account any changes in ACTD service.<sup>11</sup>

In October, 1960, the ACTD commenced supplying transit. Patronage gains were immediately registered; within a very short time the District was winning national transit industry awards and being recognized as one of the most progressive transit agencies in the nation.<sup>12</sup>

In July, 1962, on the eve of the BARTD bond issue, DeLeuw, Cather presented the ACTD with an analysis of the likely financial impacts of BARTD service on the ACTD. The consultants assumed the regional rail system would start providing service in 1969. They estimated that if the ACTD eliminated all its transbay lines, redirected its East Bay lines to serve as feeders to the regional system, and added additional feeder lines, the ACTD would incur a \$2.8 million deficit in 1969; this deficit would increase steadily thereafter. If there were no BARTD system, the ACTD would show a net positive income of \$524,000 in 1969. The difference was due to the fact that the transbay lines generated sufficient surplus income to more than make up for losses incurred on the East Bay lines.<sup>13</sup> These financial projections would, understandably, give the ACTD pause when it came time to make good on the non-competitive promises that had been made over the years.

The irony, of course, was that if the ACTD transformed itself into the locally-oriented, supplemental transit supplier its downtown Oakland founders and its Directors had always said it would become, the District would run operating deficits requiring either fare increases on the East Bay lines, service cuts, property tax increases, or some

combination of the above. This must have been a fascinating prospect for the downtown Oakland leadership; they would have to be concerned with getting East Bay people to and from San Francisco for a long time to come.

In August, 1962, Transit Times reported the ACTD was exploring luxury bus service for commuters to the San Francisco financial district. The luxuries would include stewardesses, breakfast, telephones, newspapers, card tables, and name-plate seating.<sup>14</sup>

## XVII CHALLENGES TO BARTD

Having cleared the way for the Optimum Plan and secured financing for the underwater tube, the BARTD and its consultants still faced several critical challenges to the integrity of the regional rapid transit project. One of these challenges concerned the relation between the proposed transit system and the Bay Area freeway network. The major issue was whether a cooperative arrangement could be worked out between the District and the California Division of Highways enabling transit and freeways to be built with each other in mind, and with the rails in freeway medians. The chief advantage of this to the transit project was the cost saving involved in the joint purchase of right-of-way. The chief problem was that the Division of Highways had a huge professional staff, money and plans; the highway engineers were, generally speaking, far ahead of the transit planners. The issue of whether or not the DPW would accommodate rapid transit was, however, more than simply a matter of lower right-of-way acquisition costs. A principle was also at stake, the long-expressed need to move large numbers of people, not just automobiles. I will discuss the early history of this transit-freeway relationship.

Another set of challenges were made by local governments and chambers of commerce; these concerned transit system design, proposed

route alignments, station location, and subway versus elevated construction. These challenges were relatively simple from an engineering point of view; they were the type of demands that figured in all public works projects and had always and everywhere figured in them. They usually meant increased construction costs. The methods and language for dealing with these challenges were straightforward; the engineers studied relative costs, traffic projections, other related variables and made a judgement. Whether or not these engineering judgments were politically acceptable was another question. However, this question, like the challenges themselves, was a familiar one. I will briefly note these developments.

A more fundamental challenge to the integrity of the regional transit plan came from the City of San Francisco; it came in the form of a demand for intra-city rapid transit facilities far in excess of that proposed in Regional Rapid Transit. This was potentially a very disruptive demand, threatening to engender similar demands from other cities; the fracture line between San Francisco and Oakland might be reactivated. In addition to radically altering the regional nature of the proposed system, the cost of the San Francisco demands jeopardized the ability of the BARTD to present a plan within its legislated bonding capacity limits. I will discuss how the District dealt with this demand.

The most serious challenge to the District came from San Mateo County; the character of this challenge was different than the others. Given the history of the regional rapid transit movement thus far, it should be clear the District was in serious trouble in San Mateo County.

The challenge was to keep San Mateo participating in the movement, thereby preventing a severe blow to the regional scope of the project.

The actions taken by the District Board of Directors in the face of these challenges expressed a complex relationship between responsiveness to particular constituency demands and concern for the integrity of the Project; Directors frequently came into conflict with the preferences of those they represented.

Bay Area transit planners had always been staunch allies of the DPW in the effort to construct an extensive network of freeways in the region; Regional Rapid Transit had clearly articulated the pressing demand for freeways and the supplementary role transit would play in the transportation picture of the metropolitan area. However, the BARTD Directors noted a disturbing development in the state freeway planning process. Following the passage of the 1956 National System of Interstate and Defense Highway Act, the California Senate enacted Concurrent Resolution 26 (1957), directing the DPW to prepare a master plan of state freeways and expressways to guide the expenditure of federal and state monies. The BARTD Directors worried that nothing was said in this resolution about coordinating freeway and transit planning. In September, 1958, the Board adopted a "Policy Statement Concerning Joint Planning of Freeway and Rapid Transit Development."<sup>1</sup>

The BARTD declared in this statement the need to pass remedial legislation making transit and freeways of equal importance; the legislature should require coordination. The areas the District felt needed attention included: (1) The use of freeway median strips for transit; (2) Purchase of rights-of-way for joint transit-freeway use by the state; (3) Construction of transit facilities by the state for

lease to the District; and (4) State construction of parking lots adjacent to outlying freeway-transit station connections.<sup>2</sup>

This coordination requirement was embodied in Senate Bill 29, introduced at the request of the BARTD to the legislature in 1959; it was buried in committee. The District was able, however, to secure a Senate Concurrent Resolution requesting the DPW to cooperate fully with the transit planners.<sup>3</sup> In October, 1959, the District consultants recommended that one of the East Bay transit lines run in the median strip of the proposed Grove-Shafter freeway through North Oakland. There would be problems: the transit line would merge into the freeway near an interchange between the Grove-Shafter and the proposed MacArthur freeway; the interchange design would have to be modified to accommodate the rails. However, in the spirit of coordination recently resolved by the state Senate, the DPW agreed to consider the joint-use proposal.<sup>4</sup>

The idea of placing rail transit lines in freeway medians was, like the idea of exclusive bus lanes, one which had been frequently discussed and widely advocated in the transit industry for some time. In California the first major proposal for joint freeway-transit construction was made in the 1939 report of the Los Angeles Transit Engineering Board. The Board, interestingly enough, suggested using freeway medians for both rail lines and bus rapid transit.<sup>5</sup> The transportation program of the Los Angeles Chamber of Commerce in the latter 1940s was based on this 1939 proposal for rail transit lines within the median strips of several Los Angeles region freeways.<sup>6</sup> At the end of the second World War the DPW carried out a small version of the joint use idea when the freeway engineers relocated the Pacific Electric Railway's line through Cahuenga Pass from Hollywood into the

San Fernando Valley into the median of the Hollywood Freeway.

The Illinois state highway agency and the Chicago Transit Authority built the first major joint transit-freeway facility, the Congress Street Expressway and rail transit line. This project also began at the end of the World War, when the highway agency proposed building a freeway along the route of an existing transit line. The highway builders and Walter J. McCarter, head of the recently formed Transit Authority, agreed on a plan whereby the freeway would contain space reserved for the rail line. The United States Bureau of Public Roads also participated in the project. In the latter 1950s, McCarter, who was considered one of the nation's transit leaders along with New York's Sidney Bingham and Cleveland's Donald Hyde, proudly told transit activists that cooperation between the highway people and his transit operation was so good that whenever the state was planning a freeway McCarter was asked if he wanted space reserved for a transit line. Unfortunately, the U.S. Bureau of Public Roads was no longer as progressive on this issue as it was during the regime of Thomas MacDonald, Bureau Chief from the World War One era through 1953; this made planning and financing such joint ventures more difficult.<sup>7</sup>

There had been previous suggestions for joint transit-freeway facilities in the Bay Area, too. Harland Bartholomew had recommended such facilities in the East Bay in his 1947 report to Oakland. DeLeuw, Cather had also suggested such construction in San Francisco in 1948.

The 1956 regional rapid transit plan also discussed the idea, but did not even mention placing any East Bay rail lines in the median of the Grove-Shafter freeway. Indeed, this particular freeway was not one of those PBHM included in their forecasted regional freeway network.

This freeway had, however, a lengthy history. The route was suggested by Bartholomew in 1947, adopted by the Oakland Planning Commission, and in 1948, was approved as a part of the Oakland Master Plan by the City Council.<sup>8</sup> The DPW was planning the Grove-Shafter through the early-middle 1950s; it was, like many other Bay Area freeways, an intensely controversial project, affecting many interests. In September, 1955, for example, Bay Area district highway engineers met with Alameda County Supervisor Emanuel P. Razeto to discuss the proposed freeway routing through north Oakland. Assistant District Engineer C. F. Greene pointed out after his meeting with the Supervisor that "Missing the Ligure Social Club at 48th and Shattuck is of the utmost importance if we are to avoid stirring at least half of the local Italian neighborhood in opposition to our proposal. This club has a membership of 700 men and 700 women. It seems that this club and the Colombo Club are bitter rivals and that we might become involved in a local social battle if we disrupted either of the clubs without the best of reasons. We could expect opposition from [Oakland] Councilman Tripp unless he were convinced. (Mr. Razeto is a member of the Ligure Club and represents the Colombo Club as attorney.)"<sup>9</sup>

The Division of Highways decided not to tangle with the Ligure Club; all subsequent plans routed the freeway around it. Clearly, though; planning for the Grove-Shafter had been proceeding at the same time as PBHM had been developing the regional transit network. Indeed, after the PBHM final report came out, opponents of the Grove-Shafter freeway cited it as a reason to either abandon or greatly modify the freeway proposal. In December, 1956, R. E. Mellana, representing the Temescal and College Avenue Merchants Association, told a public hearing about



the Grove-Shafter freeway that "The people want Rapid Transit in this area. They want the Commission to come up with their proposals to solve the traffic problem which is strictly the movement of people, not the movement of vehicles . . . Rapid Transit is the solution we believe . . . "10

Sherwood Swan addressed the same public hearing; he spoke as President of the Oakland Downtown Property Owners' Association. Swan and his Association strongly supported the Grove-Shafter freeway project, as did the Oakland Chamber of Commerce.<sup>11</sup> Note once again the same interests that supported regional rapid transit also wanted extensive freeway construction. Precisely the same situation prevailed in San Francisco, where the San Francisco Chamber of Commerce was the strongest local supporter of freeway building and regional rapid transit. Indeed, the pattern of opposition to freeway plans in both Oakland and San Francisco was identical; district merchants led the protests against freeways that would disrupt their neighborhood merchandising areas in order to bring people downtown. I will return to this issue in a latter section.

Grove-Shafter freeway planning continued through 1957; in September another public hearing on the plans was held. ACTD Director J. Howard Arnold told the DPW to delay building the freeway until rapid transit could be integrated with it. Arnold argued that transit rails could be easily and cheaply placed in the freeway median. Moreover, Arnold pointed out there were now two transit districts in existence which could greatly benefit from the savings this joint use could accomplish.<sup>12</sup>

Given this lengthy history of joint-use proposals without

success, the DPW's announcement in January, 1960, that it had, in fact, found a way to provide for rails on the Grove-Shafter freeway was very warmly received. The BARTD Chief Engineer said that as far as he knew this was the first concrete step towards freeway-transit integration in the western United States.<sup>13</sup> The DPW informed the BARTD that it would need a commitment from the District to purchase the additional right-of-way necessary for transit by July, 1961.<sup>14</sup>

In May, 1961, it was clear the BARTD would not be able to meet the July deadline. DPW Director Robert Bradford wrote to the District that the DPW would proceed with its engineering work on the assumption that rapid transit would not be provided, so that by July, 1962, the Department would be in a position to commence freeway construction. If, however, the District was ready to commit itself by July, 1962, then the DPW would accommodate the rails so long as the District would assume all the costs of additional necessary engineering work.<sup>15</sup>

The Oakland Tribune editorialized its deep concern that the BARTD be able to place a bond issue on the June, 1962, ballot. If the District lost this opportunity to get in the freeway median, purchasing the necessary right-of-way for the rail lines alone at some later time would add \$100 million to the transit project cost. Danger threatened, warned the Tribune, if the BARTD did not get on the June, 1962, ballot.<sup>16</sup>

In fact, the District did not get on the ballot until November, 1962. The DPW apparently decided, though, that having waited this long, it could wait a few months more.

Relations between freeway and transit planning on the proposed peninsula line through San Francisco were not as smooth. Whereas using

the Grove-Shafter median was not considered in the 1956 report, use of the Southern freeway median through San Francisco was explicitly discussed and rejected in Regional Rapid Transit. In the 1956 plan, PBHM routed the peninsula line from the San Francisco central business district south on elevated structure along Valencia Street through the city's Mission District, and then southwest through the city elevated in the center of Alemany Boulevard, parallel to the proposed Southern freeway, to Daly City in northern San Mateo County. PBHM considered placing the rails in the Southern freeway median, but noted, "If the two facilities could be planned, designed, and constructed simultaneously . . . troublesome details could be solved . . . In view of the urgent need for additional freeways in San Francisco and the fact that transit planning and construction may not be undertaken for several years, we have eliminated this route from further consideration."<sup>17</sup>

However, in 1960 both San Francisco technicians and the BARTD engineers once again considered the possibility of getting inside the Southern freeway. In January the Mayor's Transportation Committee, charged with studying whether or not the BARTD plan met San Francisco needs, discussed the feasibility of a subway line that made a few stops under the Mission District and then rose into the center of the freeway.<sup>18</sup> Bay Area district highway engineers were not sanguine about opportunities for coordination in this particular area. Assistant State Highway Engineer J.P. Sinclair told a San Mateo consulting firm that inquired about this San Francisco routing that such joint use would add years to the freeway construction process and several million dollars to the cost. More right-of-way, longer grade separation structures and additional grading would all be necessary. The Southern freeway had already been budgeted for construction in the 1959-60 and 1960-61

fiscal years; detailed design and right-of-way acquisition were very well advanced. Ninety percent of the right-of-way had already been acquired. Providing for transit now would delay construction for at least two years after a firm agreement with another agency to pay all the added costs had been reached. Sinclair did not want to delay the Southern freeway; the DPW would, however, review the situation.<sup>19</sup>

In early August the BARTD came back to the possibility of using the freeway median after San Francisco clearly stated it did not want any elevated construction in the city; PBHM's elevated lines through the Mission district and in the center of Alemany Boulevard were not welcome. The District engineers came up with an alternative plan which involved using the freeway median after the trains emerged from tunneling all the way through the Mission district without stopping.<sup>20</sup> By letter of August 31, DPW Director Bradford informed the BARTD the highway agency would negotiate with the District for transit in the median so long as the freeway were an eight-lane facility; if the BARTD would pay for all costs over and above those for an eight-lane freeway then transit could come along.<sup>21</sup>

The Division of Highways had planned six lanes initially for the Southern freeway, with the median strip to be converted into an additional two lanes when traffic volumes warranted the conversion. The freeway had never been planned to accommodate rails. According to traffic forecasts made by the highway engineers, which were based on a rapid transit system being in operation, 1980 traffic demand would be in excess of the six-lane capacity. Construction of rapid transit in the median would preclude the eventual expansion to eight lanes the Division of Highways planned.<sup>22</sup>

In October the San Francisco transit technicians declared their support for a subway under Mission Street and use of the Southern freeway median in order to keep elevated structures out of the city. The local planners argued a six-lane freeway would be adequate if rail rapid transit were in the center.<sup>23</sup> The BARTD Directors took up the San Francisco suggestion at a meeting in January, 1961. The District engineers outlined several possibilities for the peninsula route through the city. One was the city proposal for a Mission street subway-six-lane Southern freeway median route. Second was a Mission Street subway-eight-lane Southern freeway median route, which was what the DPW was willing to consider. Finally, there was the possibility of building a Mission Street subway and then running the trains on elevated structure in the center of Alemany Boulevard. The city didn't like this, but it was a lot cheaper than either of the other two, eleven million dollars less if a six-lane freeway were involved, and twenty-one million dollars less than an eight-lane facility.

The District engineers recommended the Directors support the San Francisco proposal if the city and the highway agency could agree on a six-lane Southern freeway.<sup>24</sup> However, as I will discuss shortly, such an agreement could not be reached; the Mission Street subway-Alemany Boulevard elevated route was the one eventually constructed.

There was one other joint transit-freeway possibility. The only use of a freeway median proposed by PBHM in 1956 was on the Concord line from east of the Berkeley Hills to just outside Walnut Creek through central Contra Costa County; on this stretch the rails would be placed inside proposed state freeway route 24, the continuation of the Grove-Shafter freeway.<sup>25</sup> Interestingly, the route studies done by the

District engineers subsequent to the 1956 report until the 1962 bond issue did not plan to use the state route 24 center strip.<sup>26</sup> However, the BARTD and the Division of Highways were eventually able to get together on this route; the original joint use plan was implemented.

The regional rapid transit planners got more coordination with the DPW than they had initially expected. Getting inside the Grove-Shafter freeway was a windfall benefit. The Southern freeway was considered lost in 1956. The central Contra Costa line worked out as it was supposed to. The examples of joint use saved the transit project money; they were also concrete illustrations of the regional transit movement's ideal: virtually unlimited transportation capacity.

During the spring of 1959, official San Francisco began organizing itself to deal with the question of whether or not the proposed regional transit system would meet the transit needs of the city. The Mayor's Transportation Council, consisting of the heads of the Planning Commission, the Public Utilities Commission and the Parking Authority, and the Administrative Officer geared up for action. The Council was advised by a Transportation Technical Committee, composed of the Planning Director, the Public Works Director, the general managers of the Parking Authority and the Municipal Railway, and the head of the Utilities Engineering Bureau. The SFPUC made \$125,000 available for consulting services; DeLeuw, Cather and Company was hired. The city's technical capacity was mobilized.<sup>27</sup>

Recall the 1956 PBHM plan provided very little transit service for San Francisco residents. As a result of this, in 1956 the city's technical leadership had proposed that San Francisco construct its own extensive rail rapid transit system in addition to the regional project.

Both of these policies were now receiving serious scrutiny. In August the Transportation Council recommended a general perspective on these issues: the BARTD ought to provide much more rapid transit within San Francisco than originally planned. The Council felt the city was not going to receive transit benefits commensurate with the costs that would be locally borne. In the middle 1950s San Francisco had about thirty percent of the assessed valuation in the initially proposed six-county district. However, only 12.5 percent of the miles of transit construction and about twenty-five percent of the capital cost of the 1956 PBHM regional system were located within the city. The Council felt this distribution of costs and benefits was unfair from the city's point of view; the regional system would provide so little local service that San Francisco would be forced to build its own rapid transit network.<sup>28</sup> This would cost a huge sum of money; combined with the San Francisco share of the BARTD project, the total cost would mean far too much money.

Mayor George Christopher accepted his Council's general policy perspective; he asked the Board of Supervisors to make it official policy.<sup>29</sup> The BARTD Directors were deeply disturbed by the San Francisco action. Director Morrison offered a resolution reminding the city that the District was supposed to be building a regional system; economically and practically only a limited facility could be provided. Morrison withdrew his resolution, however, when the San Francisco Directors asked for a chance to talk with their city's officials.<sup>30</sup>

The Directors met with Mayor Christopher; they outlined for him the District's concern that the city's proposals were too costly to assimilate. Many people apparently felt San Francisco wanted the BARTD

to take over the Municipal Railway. Christopher protested the city had no intention of giving up the Muni, but the city feeling was that access should be provided to and from the heavily populated areas of the city. San Francisco should not have to pay for two rapid transit systems.<sup>31</sup>

At the end of August the San Francisco Board of Supervisors approved the policy of one rapid transit system to serve the entire city, all built by the BARTD.<sup>32</sup> In January, 1960, the San Francisco technicians revealed their plans; these were later presented in a Report on a Plan for Rapid Transit in San Francisco Consonant With the BART System.<sup>33</sup> The Technical Committee proposals were essentially similar to rapid transit plans that had been discussed in San Francisco since the late 1940s. The technicians wanted four routes built within the city; three of these were planned for a first-stage system. One was a Twin Peaks subway, which would run under Market Street downtown, through the existing tunnel and then southwest to Daly City. Second was a subway line serving the Richmond district before heading across the Golden Gate Bridge to Marin. Finally, they wanted a peninsula route, following the Southern Pacific tracks through the city southward. Tracks would be leased from the Southern Pacific to provide this service; the technicians did not, however, report any Southern Pacific interest in this proposal. In the second stage a Mission district line would be built; this route corresponded closely to the one proposed by PBHM in 1956. The technicians were split on the peninsula route, though, some favored a Mission Street subway combined with use of the Southern freeway median as a more effective option than a Twin Peaks subway.<sup>34</sup>

PBHM had suggested five stations in San Francisco outside the central business district; the city technicians wanted eighteen. The



city people also wanted parking lots and feeder buses included in the San Francisco package. Finally, the Technical Committee declared itself adamantly against any elevated construction within the city.<sup>35</sup>

This was the city's ideal plan. Some of the technicians expressed fear their proposals for extensive local service would stimulate other communities to do the same;<sup>36</sup> these fears were well-founded. A few days after the city proposals were revealed the Oakland Chamber of Commerce protested San Francisco's bid for more local service. If San Francisco got more, then Oakland and the other East Bay cities should also get more. The Chamber accused San Francisco of violating the regional character of the original plan.<sup>37</sup> The San Francisco Chronicle editorially warned against making the Technical Committee's program official policy until after the BARTD presented its own plan. "San Francisco's technicians are grabbing so avidly for benefits for this city that they are losing sight of a principle well put by Adrien Falk of the district board: 'The value of the system we are planning cannot be judged on the basis of the amount of money to be spent within a specific locality on physical facilities. The value of rapid transit lies in the benefits the system will bring.'"<sup>38</sup>

The BARTD engineers agreed to keep an open mind about the Technical Committee's proposals; they would receive serious study.

The District engineers were now a joint venture, organized to contract with the BARTD to prepare the necessary studies preparatory to a bond issue. The target date for the bond issue vote was set for November, 1960, three years after the District Directors began meeting. The firms involved in the joint venture were: Parsons, Brinckerhoff, once again; the Tudor Engineering Company, led by Ralph Tudor, who had

done the bridge studies in the late 1940s; and Bechtel, one of the world's largest engineering and construction companies. PBTB.

PBTB worked closely with the professional staffs and other representatives of the cities and counties in the District to work out an acceptable plan of routes and facilities. The San Francisco demand for more extensive local service was one of a very large set of challenges directed to PBTB and the District. In March, 1960, the District received protests from several cities and business groups along the proposed central Contra Costa line concerning the routing in that area.<sup>39</sup> Director Silliman, representing southern Alameda County, expressed his deep concern that engineering studies about extending the first stage southern Alameda route to Fremont were not being done.<sup>40</sup> In 1956 PBHM had proposed terminating the first stage system short of the Fremont area, near Union City; the consultants had recommended immediate purchase of the necessary right-of-way for second stage construction. PBTB reasserted the 1956 argument to Silliman: the Fremont extension was not warranted for the first stage, but right-of-way should be acquired.

Silliman, however, did not agree with this analysis. He presented evidence of explosive growth in southern Alameda County; he offered protests from several business and political groups in the Fremont area.<sup>41</sup> Shortly thereafter the Directors voted to ask PBTB to do studies of the Fremont extension.<sup>42</sup>

By April, 1960, it was clear that given the alternatives suggested by the localities, the time required to analyze these, and the costs involved in making many modifications, it wouldn't be possible for the District to be ready with a bond issue in November.<sup>43</sup> Perhaps if the "refer and consider" provisions originally proposed by the BARTC

to structure the regional transit planning process had been incorporated into the District Act, the Directors and PBTB might not have been so willing to consider these alternatives. However, the fact that local legislators held veto power over the final plan indicated that some degree of participatory planning would be politic. The costs of these alternatives, however, threatened to exceed the District's legislated bonding capacity.

The BARTD's financial consultants, Smith, Barney, were very concerned because of the possible financing difficulties. Smith, Barney recommended the District try to secure legislation dropping the requirement that interest be paid on the bond issue during the construction period; this would mean a difference of about \$150 million in the size of the bond issue. They also suggested that legislation be sought enabling the District to finance rolling stock purchases through means other than general obligation bond issues; an additional ninety million dollars was involved in this aspect. Such favorable legislation would have the effect of significantly increasing the amount of bond money that would be available for construction.<sup>44</sup> Bills embodying both these provisions were introduced on behalf of the BARTD during the 1961 legislative session; both were passed into law.<sup>45</sup>

In May, 1960, PBTB presented the BARTD Directors with its first set of "Working Estimates." Walter Douglas commented by way of introduction about the pioneering nature of the transit patronage projections; recall that virtually nothing was known about diverting people from cars to transit. Douglas also called attention to the detrimental effects of inflation on project cost. Delay would be very expensive; cost estimates made years ago were no longer adequate.<sup>46</sup>

"Working Estimates" confirmed everyone's worst fears. PBTB had drawn up a plan which included many of the preferences expressed by the local areas: subway instead of elevated construction, and more costly rights-of-way, for example. In San Francisco PBTB followed the suggestions of the Technical Committee: a Twin Peaks subway to Daly City; a peninsula line along the Southern Pacific tracks; and a Marin line that ran as a subway under Geary Boulevard to 11th Avenue in the Richmond district before turning north to cross the Golden Gate Bridge.<sup>47</sup>

The total cost of the first stage system in these May "Working Estimates" came to \$1.2 billion, not including rolling stock, construction period interest or the transbay tube. The state would be paying for the tube, and the legislature gave the District a break on the other two items. However, the \$1.2 billion figure was way out of line; given the fifteen percent bonding capacity, the District would only be able to raise about \$949 million in 1968. PBTB immediately commenced studying ways of cutting back to get the system under the financial ceiling.<sup>48</sup>

In June PBTB submitted "Supplementary Estimates" on a modified system. Several cheaper alternatives were outlined. In San Francisco PBTB considered: placing the Marin line out Geary Boulevard on elevated structure; postponing the Twin Peaks subway and the rapid transit line along the Southern Pacific tracks; building a tunnel under Market Street for the city's streetcars; and routing the peninsula line in subway under Mission Street and on elevated structure in Alemany Boulevard.<sup>50</sup> There would be two residential stations in San Francisco on this proposed peninsula line. In addition, PBTB discussed chopping off stations at the ends of the East Bay lines: no extension to Fremont;

stopping in El Cerrito, short of Richmond; and terminating the central Contra Costa line in Pleasant Hill rather than in Concord.<sup>51</sup>

In early August PBTB developed two other alternative alignments for peninsula route, based on San Francisco opposition to elevated construction in Alemany Boulevard. One called for combining a Mission Street subway with rails in the median strip of the Southern freeway to Daly City; this route would have two San Francisco stations. PBTB estimated it would cost about eleven million dollars more than the Alemany elevated route, the additional costs being necessary because the freeway would already be in place. The other alternative combined a deep tunnel all the way through the Mission district, the San Miguel Tunnel, and the Southern freeway median; this route would cost four million dollars less than the Alemany elevated option. However, using the San Miguel Tunnel meant taking away one of the two San Francisco stations along the peninsula line. PBTB noted that patronage would decline somewhat due to the loss of the Mission district station, but this was the most economical route.<sup>52</sup>

On August third and fourth the BARTD Directors met to decide on a regional transit system. PBTB pointed out the economy of the San Miguel Tunnel route in San Francisco; the engineers also presented an analysis of extending first stage construction to Fremont; net revenues would be decreased by three percent.<sup>53</sup> The Directors proceeded to discuss route alignments, stations and facility designs; they did so, however, in executive session.<sup>54</sup> The District Directors apparently thought they could speak more freely and make more statesmanlike decisions if their deliberations were not revealed in the Official Minutes or to the press; future historians would only be able to examine

the outcome of these intense discussions.

On August 11, the BARTD released its Plans of Routes, Rights of Way, Terminals, Stations, Yards and Related Facilities and Improvements. In San Francisco the peninsula route adopted was the San Miguel Tunnel-Southern freeway median to Daly City; there would be one residential station along this line. The Marin line rose on elevated structure in the center of Geary Boulevard to a Richmond district station at 11th Avenue, then headed north to the Golden Gate Bridge; there were three stops outside downtown San Francisco on this line. A Market Street tunnel for Muni streetcars was included.<sup>55</sup>

The Directors also adopted the PBTB suggestions for limiting the East Bay lines. Money to acquire rights-of-way to extend the lines to the terminals specified in the May report, however, would be included in the bond issues.<sup>56</sup> The total cost of the August 11 plan was \$926 million, a much more realistic figure. This was an important moment in the regional transit movement's history. The BARTD Directors had stood face-to-face with constituency demands for a system that would threaten the financial viability of the project; they acted to protect the regional project's integrity. At the August 25, 1960, District meeting the Board voted to distribute the August 11 plan for official consideration.<sup>57</sup>

Charles DeLew criticized the BARTD plan for ignoring San Francisco policies; far less local service was being provided than the Technical Committee had proposed. Moreover, DeLew thought the regional plan was too extravagant in other areas; it was an engineer's "dream".<sup>58</sup> Thomas Gray, manager of the San Francisco Downtown Association, expressed his organization's support for the regional transit plan.

Gray, who would soon be a District Director, commented about statements made to the press by Charles DeLeuw, calling the plan an engineer's dream and saying it was in conflict with San Francisco's goals. Gray noted that DeLeuw had applied for the engineering contract to work on the regional rapid transit project.<sup>59</sup> Adrien Falk agreed with Gray; he expressed dissatisfaction with irresponsible statements made by some San Francisco officials to the effect the city was getting the short end of the stick.<sup>60</sup> A San Francisco city planner, William Proctor, told the Directors, though, that some members of the Transportation Technical Committee were changing their minds; they were becoming more responsive to the District's position.<sup>61</sup>

At the August 25th meeting the District's Chief Engineer presented a lengthy review of the implications of the San Francisco demands for extensive local service. The point was straightforward, San Francisco wanted far more than the District was capable of providing without exceeding its bonding capacity. The Chief Engineer stressed the District's plan does and must emphasize the regional nature of the system. Moreover, the Market Street streetcar tunnel option with local distribution west of Twin Peaks would be entirely adequate for San Francisco traffic. Although the Engineer didn't say so, this streetcar tunnel was the plan proposed by Mayor Elmer E. Robinson back in 1948. The Engineer defended the adopted peninsula route, the route with one local San Francisco station; he argued that San Mateo County commuters would require the great majority of the peninsula line's peak hour capacity. The Mission district stop would just get in the way and slow the trains down.<sup>62</sup>

Reactions to the August 11 plan were mixed. The Concord and

Richmond city councils protested losing their stations. Several cities expressed dissatisfaction with the routing through their areas: Albany, the central Contra Costa corridor cities. Union City and San Leandro communicated their approval.<sup>63</sup>

The San Francisco Transportation Technical Committee replied to the BARTD in October, 1960. As city planner Proctor had predicted, the Technical Committee split on its recommendations concerning the peninsula line; there were two factions. Both factions, however agreed on certain points. They rejected the San Miguel Tunnel route because it took away a station. They also rejected a possible Alemany elevated (if the Southern freeway median was not available) and the proposed aerial structures in Geary Boulevard. Obviously, they argued, elevated structures depressed neighborhood property values.<sup>64</sup>

Regarding the peninsula route the Committee majority acknowledged the BARTD's financial limitations; they proposed a Mission Street subway with two stops north of Army Street, continuing the line in the Southern freeway median with another stop at Ocean Avenue, and then on to Daly City. The majority approved the idea of streetcar operation through the Twin Peaks Tunnel and in a Market Street subway downtown.<sup>65</sup>

The Technical Committee minority still wanted two rapid transit lines in the southern part of the city: the Twin Peaks subway to Daly City, and a line via the Southern Pacific tracks. The Mission Street subway-Southern freeway median route should be postponed to a second stage. The minority argued the costs of their two lines combined were less than the BARTD's San Miguel Tunnel route; the District hotly disputed this cost claim. Moreover, the minority was still unable to report any interest in their plan on the part of the Southern Pacific.<sup>66</sup>

At the January 26, 1961, meeting the District Directors



discussed the San Francisco proposals. They noted the local opposition to elevated construction in Geary Boulevard. PBTB proposed a tunnel through the Pacific Heights area which would reduce travel time from Marin County to San Francisco by two minutes; this route would also be \$800,000 cheaper than tunneling under Geary. Unfortunately, the Pacific Heights tunnel meant San Francisco would lose the 11th Avenue station in the Richmond district.<sup>67</sup> The Board adopted the PBTB suggestion;<sup>68</sup> San Francisco was out another station. PBTB also took up the Technical Committee majority call for a Mission subway-Southern freeway median route; they agreed this route would offer better San Francisco service. As I discussed earlier, PBTB recommended that should the city be able to work out an arrangement with DPW, the District should adopt this alternative; the Directors agreed. On February 9th, the Directors ordered a revised plan of routes be officially distributed. This version incorporated the Pacific Heights tunnel on the Marin line, and the tentative Mission subway-Southern freeway median peninsula route.<sup>69</sup>

More protests came in. The Walnut Creek City Council wanted subway instead of elevated. El Cerrito didn't like the routing or the elevated structure. Albany didn't want elevated. The Greater Geary Boulevard Merchants and Property Owners' Association protested the lack of service in their area. The Lafayette Chamber of Commerce didn't like its route either.<sup>70</sup>

In May the San Francisco Board of Supervisors held a hearing on the February plan. The Technical Committee majority advocated extending the Market Street Muni streetcar tunnel further at both ends, to the Twin Peaks Tunnel and also to serve the planned Golden Gateway

urban renewal project, than PBTB had proposed. They also objected to the loss of service to the Richmond district; the Committee majority proposed placing a line in subway under Geary to a station at 10th Avenue before turning north.<sup>71</sup> Official San Francisco was ambivalent; Adrien Falk came to address the Supervisors. Falk told the local legislators the principal benefit to San Francisco would be in the preservation of values in the central business district and continuation of the city's role as the metropolis in a great metropolitan area. This was what made it so difficult for Falk and the other San Francisco Directors to fight for more local service for the city: San Francisco would gain so much from the regional system as it was being planned.<sup>72</sup>

During the summer and fall of 1961 the District Directors thought it increasingly likely that Marin County would withdraw from the project; they asked PBTB for a four-county plan. In October the engineers presented a proposal that offered increased local service to San Francisco. PBTB advocated extending a transit line all the way to 25th Avenue, but on elevated structure in the center of Geary Boulevard.<sup>73</sup> The Mayor's Transportation Council replied in the negative to this latest modification; their rejection of the elevated line was, however, tempered by an overriding concern for benefits of the system as a whole. The council wrote the Mayor and the Board of Supervisors that an interurban rapid transit system was ". . . vital to the continued role of San Francisco as the business, financial, and corporate headquarters center of the Bay Region, Northern California, and the Western States. San Francisco's leadership as such a nerve center depends upon its convenient accessibility to great numbers of people. This can be accomplished without disruption to the compact and

convenient arrangement of facilities in our central core area only through the provision of regional rapid transit." The Council noted that employment in the central core was increasing even though the city's resident population was declining; if these employment trends were going to continue then it was necessary to supply the means for getting people downtown. "A regional rapid transit system would significantly increase San Francisco's commerce and retail trade activities, and substantial increases in property values can be predicted . . . "74

The Council proposed asking the BARTD to chop off the Geary line short of 25th Avenue and place as much as possible of it in subway.<sup>75</sup> The city would sacrifice the length of the line in order to protect Geary Boulevard property values from being blighted. The Council once again declared its opposition to elevated construction in Alemany Boulevard, calling for continued negotiations with the DPW for use of the Southern freeway median; they also asked for more stations on the peninsula line. Finally, they again requested extending the Muni streetcar subway to the Twin Peaks Tunnel at one end and to the Golden Gateway project at the other.<sup>76</sup>

A few weeks later one of the San Francisco Directors introduced these proposals at a District meeting; the Directors bent a little in San Francisco's direction. The Board approved cutting back the Geary line to 6th Avenue and placing it all in subway. They approved four stations for the peninsula route, instead of the two previously adopted. The Directors also voted to extend the Muni streetcar subway another 150 feet towards the Twin Peaks Tunnel in order to cross a major intersection.<sup>77</sup>

As of December, 1961, the BARTD had managed to successfully

defend itself against the local service challenge from San Francisco. The District was able to do so through a combination of compromise and the realization by sufficient numbers of city technical and official leaders that the integrity of the project was at stake. The District offered more subway construction, a few more stations, and the streetcar tunnel; the Transportation Council's letter signalled a reluctant acceptance of the fact that local service demands could not be permitted to jeopardize the future prosperity of downtown San Francisco. The bulk of the demands made by the Technical Committee in late 1959 and early 1960 were abandoned.

In December, 1961, the BARTD gained support in San Francisco; the District lost it elsewhere. The San Mateo County Board of Supervisors wanted out.

Since the 1956 hearings on BARTC's district proposal it had been clear the regional rapid transit movement had few, if any friends in San Mateo County; there were several indications that subsequent relations had worsened. San Mateo Senator Dolwig's opposition to the tube financing bill in 1959 was ominous. After the various plans of routes were distributed by the Directors in 1960 and 1961 messages of opposition to the District poured in from cities on the peninsula, including Atherton, Millbrae, Pacifica, and South San Francisco.<sup>78</sup>

During the summer of 1961 the San Carlos Income Property Owners' Association argued that "The transit district is designed almost entirely for the purpose of moving people into and out of the San Francisco and Oakland business districts to the detriment of the development of San Mateo County."<sup>79</sup> Moreover, the tax burden on County property would be staggering. The county was urged to withdraw. David

Bohannon, the very large builder on the peninsula and the head of the taxpayer-protecting Government Research Council argued against participating in BARTD's project.<sup>80</sup> In September the Council put out a "Review of Proposed San Francisco Bay Area Rapid Transit System."

Glenn Ireland, who wrote this review, offered several reasons why San Mateo County ought to withdraw from the BARTD. He pointed out Santa Clara County was growing rapidly and travel from San Mateo would increasingly be oriented south; BARTD's system would not serve this traffic. Ireland also cited competition with Santa Clara County to attract new business; if San Mateo had to pay taxes to construct the rapid transit system, then its property tax rate would be that much higher than Santa Clara's, placing San Mateo at a competitive disadvantage. Ireland offered two alternatives to the BARTD plan for peninsula transit service. One was to publicly subsidize the Southern Pacific in order to keep its commuter service going. Continued operation of some kind of transit between San Mateo and Santa Clara would be necessary in any case, and Southern Pacific's San Francisco service was reasonably good. Subsidizing the Southern Pacific would be a lot cheaper than building a new transit system. The other alternative was to consider special lanes for buses on peninsula freeways.<sup>81</sup>

The San Mateo County Board of Supervisors apparently agreed with the various opponents of the BARTD; they voted to withdraw. San Mateo County's withdrawal forced Marin County out of the District; without San Mateo's assessed valuation the Marin connection was not financially feasible. San Francisco stood alone in the West Bay.

In Mass Transit and the Politics of Technology Stephen Zwerling adds two "unofficial" reasons to those outlined by Ireland to explain

why San Mateo County withdrew; he learned these from interviews. "First, San Mateo County's civic and political leaders were said to feel that BART was designed to be of principal benefit to San Francisco. Second, and more compelling, two of the largest landowners in San Mateo County were opposed to the construction of the system." These were the Southern Pacific, a retired Southern Pacific vice-president was currently a County Supervisor, and David Bohannon.<sup>82</sup> In A History of the Key Decisions in the Development of Bay Area Rapid Transit, Richard Grefe and Richard Smart, likewise citing interviews, focus on the same two major influences: the Southern Pacific and Bohannon.<sup>83</sup> These explanations point in the right directions. It should be clear, however, that while he was a very large real estate developer with all the local political influence this position usually conveys, Bohannon was far from alone in his opposition to the District. Wide-ranging opposition had been active for several years prior to the actual County withdrawal. Neither Zwerling nor Grefe and Smart make the connection between the Southern Pacific's concern for its freight business, and San Mateo County's deep concern with the relationship between a profitable Southern Pacific freight business and the County's industrial development, and the company's opposition to the regional transit movement.

Once Marin and San Mateo Counties were gone, San Francisco lost its Geary rapid transit line entirely. However, the BARTD partially made up for this loss by agreeing to extend the Muni streetcar subway through the Twin Peaks Tunnel and for a distance beyond that. City technicians had already begun questioning the need for a Geary subway if there wasn't going to be a Marin line; they also increasingly felt the streetcar subway would do just fine. San Francisco could

avoid the disruption attendant on heavy construction in the west of Twin Peaks residential neighborhoods.<sup>84</sup>

The damage resulting from San Mateo County's withdrawal was unevenly distributed across the regional transit movement; all the damage would be suffered by San Francisco. The final three-county plan dramatically proclaimed the success of downtown Oakland. Downtown Oakland would be enriched by vastly increased Easy Bay transit capacity. By way of contrast, downtown San Francisco would not benefit nearly as much. Recall the PBHM projections that increased commuter travel to San Francisco would mostly come from San Mateo and Marin. These counties were now gone, although a northern San Mateo County station in Daly City would be salvaged. The loss of San Mateo and Marin meant that San Francisco lost the counties which sent the largest proportions of their employed residents to the city. San Mateo and Marin counties were also, by a substantial margin, the counties with the highest median family incomes in the Bay Area. In 1959 the medians in San Mateo and Marin were twenty-one percent higher than those in San Francisco and Alameda.<sup>85</sup> These high income commuters were precisely the people the regional rapid transit system was designed to attract.

The major split in the regional transit movement represented by the withdrawal of San Mateo County underscored the absence of a political apparatus which could effectively hold the competing coalitions of business, political and technical leaders together. The transbay tube enabled San Francisco and Oakland to peacefully coexist; the regional transit movement never found a comparable solution in the West Bay.

## XVIII THE NOVEMBER 1962 BARTD BOND ISSUE

During the summer of 1962 the Commonwealth Club studied the three-county \$792 million BARTD bond issue that would be on the November ballot. This was the largest locally financed public works project about which anyone knew. The amount of money involved was greater than the combined outstanding debt for all purposes in the three counties.<sup>1</sup> Adrien Falk, now District President, told the Highways and Transportation Section that "We, here in the Bay Area, are the forerunners of the solution of a world-wide problem of congestion."<sup>2</sup> Other speakers disagreed.

Management Research Consultant Marston Campbell, Jr. posed some questions for the Club Section. He wanted to know why the people of Richmond and Berkeley should travel clear to downtown Oakland before they could go to San Francisco. Now they could go down the Eastshore Freeway and across the Bay Bridge without any diversion. Campbell asked what was being done to capitalize on existing transit facilities. He asked if reserved lanes for buses, like the exclusive Bridge lane currently being used by the ACTD, were being used to the utmost. He pointed out that suburban areas were growing rapidly and would continue to do so, decreasing the need for mass transportation to the core areas. Campbell concluded: "I cannot see any reason to subsidize the downtown merchants of any city when one can buy the same merchandise in the sub-



urban shopping centers."<sup>3</sup>

Fred Reed, a past President of the California Real Estate Association, also opposed the BARTD plan; he raised several issues for the Club membership. Reed pointed out that the ACTD was expected to cut out service across the Bridge once rapid transit was operational. He asked: "Can you imagine...that a system that has to pay its own way, with a large portion of its revenue coming from trans-bay service, stopping this service for the benefit of a competitor?" DeLeuw, Cather had presented the ACTD with the analysis of likely financial implications of BARTD service a few weeks before Reed spoke. Reed also noted the circuitous routing through downtown Oakland, pointing out the Bridge route was more direct for San Francisco-bound commuters from the Richmond area, northern Alameda, and central Contra Costa county.<sup>4</sup>

Reed proposed an alternative to the BARTD plan: double-decked buses running in exclusive lanes. The buses would be able to reach out to all the homes, which was something the rail system couldn't do. He cited a study by the consulting firm of Wilbur Smith and Associates, where it was said that a population density of 25,000 people per square mile was required to support a rail rapid transit system; Alameda County population densities ranged from 3,000 to 11,000 per square mile. Reed concluded by challenging the downtown supporters of the BARTD plan: "Real estate should have no right to demand that it should continue to live after it has gone dead."<sup>5</sup>

Mel Neilson, a Contra Costa County Supervisor who had voted against clearing the BARTD plan for submission to the District electorate, told the Club's Public Utilities Section the reasons for his opposition. He noted the circuitous routing through the Oakland central business

district. He pointed out that his county and southern Alameda were developing their own residential and commercial complexes; they would require commuter service in the future. "Essentially," Neilson argued, "the transit plan is to dump people in downtown San Francisco or Oakland. \$792 million is a pretty expensive bill for that."<sup>6</sup>

Finally, just a few days before the bond issue vote, L.G. Crockett, Assistant General Passenger Traffic Manager for the Southern Pacific, reviewed the situation on his railroad; Crockett discussed a number of familiar themes. The Southern Pacific peninsula commuter service was the last remaining rail commuter service west of the Mississippi; it continued to be a real bargain. Commuters paid only 1.8 cents per mile for an average commuter trip of twenty-four miles; this was the lowest price in the nation. Moreover, these commuters were currently enjoying the benefits of the more than ten million dollars in new equipment the railroad had purchased in the last few years.

The Southern Pacific, however, was still losing money on its commuter operations--more than \$700,000 per year. Patronage was dropping steadily; it was down from 16,000 per day in 1954 to 11,000 in 1959. Crockett noted that "Almost all of the mid-day shopper traffic has been lost with the growth of outlying shopping centers." Therefore, the peak-hour problem, already very severe in the early 1950s, had worsened. Eighty-nine percent of the total northbound traffic traveled during the peak. The result was tremendous idle capacity in capital and labor which had to be paid but did not generate income. Costs of operation had, of course, been increasing; an increase in the number of passengers, because of the peaking problem, would probably mean greater losses.<sup>7</sup>

Crockett provided the following analysis of the Southern Pacific's plight: "The basic difficulty is that commuters' homes are moving away from the railroad tracks, so that supplemental transportation is required to get to the station. Once a commuter gets into his auto, he does not want to get out until he has reached his destination--and he has very little regard for the cost factor."<sup>8</sup> Note that Crockett's analysis contradicted the core notion underlying the BARTD regional rapid transit plan. The regional system was entirely built on the assumption that suburban residents would drive their cars to distant, spacious parking lots, leave their cars there, and hop on the train.

All of the criticisms made at these Commonwealth Club section meetings had been made since the 1956 PBHM report had been presented: the downtown focus; the circuitous East Bay routing; the bus rapid transit alternative; and the conceptual critique implicit in Crockett's analysis. The consulting engineers had themselves admitted there wasn't any experience anywhere that would lend credence to their diversion percentages and consequent transit patronage projections.

Was there any possibility of the District Directors reconsidering their commitment to the \$792 million rail rapid transit plan? I don't think so. Given the transit situation in 1962 I don't think the movement representatives from San Francisco, Alameda, and Contra Costa Counties saw any more attractive alternatives. The Bridge Railway was gone; even though the ACTD was using an exclusive bus lane on the Bridge, this was temporary. The DPW didn't support exclusive lanes on the Bridge; it was even less likely the DPW would support exclusive freeway lanes for buses. Besides, the point was to supply

both transit and motor vehicle capacity; it was not to sacrifice freeway lanes in order to make bus rapid transit possible. Since the possibility of rapid transit on the Bridge was now remote, the underwater tube was extremely important to downtown San Francisco. Moreover, financing for the tube was in the law.

Downtown San Francisco would also get other benefits from BARTD's project: the Daly City station; underground distribution in the central business district; the Muni streetcar subway; and high-speed, large capacity rail transit connections to central Contra Costa and southern Alameda counties. The links between the San Francisco core and these rapidly growing areas would be greatly augmented.

The final version of the plan was very popular with the Alameda County leadership. Downtown Oakland wanted the tube and the extensive network of rail lines in the East Bay. Since the withdrawal of San Mateo and Marin counties, BARTD's Directors had voted to extend the first-stage system to Fremont. This was important to the business and political leadership in this southern Alameda County area because this part of the County was not included in the ACTD. BARTD's plan promised service to this rapidly growing area. Finally, the plan would provide a high-speed connection from Contra Costa to the growing numbers of office jobs in the central core areas plus a rail transit line for the rapidly growing corridor within central Contra Costa County. The Richmond and Concord stations were restored in the three-county plan.

There wasn't any indication in the Minutes of the BARTD meetings that a review of the transit plan was ever done, or even considered. A well-financed propaganda effort on behalf of the bond issue was organized.<sup>9</sup>

XIX REGIONAL RAPID TRANSIT AND THE SAN  
FRANCISCO FREEWAY REVOLT

The November bond passed, of course; its chances for success were materially assisted when the percentage vote necessary for approval was reduced from the original two-thirds to sixty percent in 1961. The BARTD, with an eye on how such an action would look, did not sponsor the legislation that reduced the percentage.<sup>1</sup> The District was, however, simply following the lead of the ACTD, which had already had its approval vote percentage reduced.

Even after the reduction the bond issue would have been defeated had not the San Francisco vote been sufficient to offset deficits in the other two counties; San Francisco voters would have approved the project even under the old two-thirds standard. Why did San Franciscans give such strong support to the project when so little service would be provided within the city? Wolfgang Homburger analyzed the election returns and found the affirmative vote was highest in the northern section of San Francisco, far from any BARTD improvement. He also found support for the bond issue was greatest in those areas with large proportions of rental housing; this indicated high proportions of families without cars. Homburger did not find a significant relation between distance from a transit station and support for the bonds in the city. Homburger did not mention the San Francisco freeway revolt as a factor contributing

to the strong positive showing.<sup>2</sup> Since Zwerling and Grefe and Smart rely on Homburger for their analysis of the San Francisco vote, they likewise do not discuss the impact of the freeway situation.<sup>3</sup>

In the BART chapter in his The Selling of Rail Rapid Transit, Andrew Hamer says: "Conventional wisdom places BART in the context of a spontaneous anti-freeway revolt in the San Francisco area that pitted pro-transit citizen groups against an automotive conspiracy. In fact, it appears the revolt itself was directed at the building of freeways in the San Francisco core and was rooted in controversies over location and design rather than in a comprehensive effort to control the automobile."<sup>4</sup> Hamer is apparently saying that San Franciscans did not vote for transit because they were against freeways and cars. I think the strong support in the city, particularly in the northern and southeastern parts of the city, had a great deal to do with the intensely controversial freeway situation. Moreover, both Hamer's version of the "conventional wisdom" and his own explanation of the revolt are seriously misleading.

Finally, in Power in the City, Frederick Wirt explains San Francisco support for the BART project as another instance of the "politics of income." The attractions for San Francisco residents were the jobs, income, and prestige that would flow directly and indirectly from building the transit system. This seems to me an important part of the story. While the San Francisco Labor Council voted to oppose the bond issue and the Alameda Central Labor Council decided to not make any recommendation, they both noted that construction and related workers would benefit from the project. The building and construction trades councils of the three counties in the District endorsed the

transit bonds. Wirt does not, however, see any relation between the positive transit response and the freeway revolt. His understanding of the freeway question is, like Hamer's, that aesthetics was the major issue.<sup>5</sup>

Two proposed freeways were primarily responsible for engendering the San Francisco freeway revolt. These were the Western Freeway and the Golden Gate Freeway. Both were part of the city's Master Plan of Trafficways, adopted by the City Planning Commission in 1951.<sup>6</sup> According to the city charter, though, the Planning Commission need not forward the Master Plan to the Board of Supervisors for approval; the 1951 Trafficways Plan was never so forwarded. Both freeways were included in the California state highway system, which meant they were eligible for construction by the state, using state and federal monies. Moreover, both freeways were also included in the National System of Interstate and Defense Highways; the Western Freeway was the original route of Interstate 280, and the Golden Gate Freeway was Interstate 480.<sup>7</sup> The significance of their inclusion in the Interstate system was two-fold: following passage of the 1956 federal highway legislation the Interstate system was assured of right-of-way acquisition and construction funds. In California the federal government would be supplying more than ninety percent of the monies required to build the Interstates; and there would be pressure to construct the Interstate routes quickly because it was now national policy that the network be completed within a certain period of time.

In the San Francisco Master Plan the proposed Western freeway entered southern San Francisco from the peninsula roughly where the present Interstate 280 does. The freeway continued north toward Golden

Gate Park, closely following the existing California Coast Highway, California Route 1, for a portion of its northern leg, and running several blocks east of Route 1 for the remainder of its Park-bound segment. When the freeway reached the edge of the Park it turned east, following the southern edge of the Park Panhandle until it reached an intersection with the Central freeway on the fringe of the downtown Civic Center. The Western freeway traversed many of the west of Twin Peaks residential areas, particularly the Sunset district. The Sunset district was, as its numerous defenders pointed out, a "first-class" residential community, by which these people meant the freeway threatened high-valued homes and prosperous neighborhood businesses.

The Golden Gate freeway entered the northwestern part of San Francisco by way of the Golden Gate Bridge and the Presidio. It continued east through the Marina district, and passed near Fisherman's Wharf on its way to the northeastern corner of the city. The freeway then turned south to a connection with the Bay Bridge. The residential areas traversed by the Golden Gate freeway were, like the ones in and around the Sunset district, zones of prosperity.

Both the Western and Golden Gate were radial freeways focused on downtown San Francisco. They were staunchly supported by the San Francisco Chamber of Commerce, the Downtown Association, the city's planning and engineering leadership, and the local labor movement. The opposition to them was led by merchants in the outlying districts through which they would pass. The district merchants formed alliances with real estate people, property improvement and homeowner groups in their areas. Their basis of opposition was straightforward: high value



residential neighborhoods and the district merchants these kept in business should not be disrupted or destroyed to make it easier for commuters from Marin and San Mateo Counties to get to downtown San Francisco to work and to shop. This opposition movement demanded the State Division of Highways, the city technicians, and downtown business groups give rapid transit a chance to serve the downtown-oriented traffic, and leave the district merchants and their residential market areas alone.

Recall the opposition to the Grove-Shafter freeway in Oakland. Raymond Mellana, representing the Citizens Committee against the freeway, argued either for eliminating the freeway altogether or at least modifying its route to preserve existing district business zones. Mellana said, "...to us in North Oakland the spending of five million dollars more for a freeway, if it must be built at all, at the saving of the heart of a thriving small business area and the people that live around it, is worth every penny spent. Our opposition might be heard to say...that this is a reactionary view; that we are holding on to the past and afraid to let go and look to the future; that the day of the small businessman is gone; that today you must think big and act big; that big business has taken over in this country and that the people should realize that and stop supporting the small merchants; that this freeway will speed the people to big, modern downtown stores in Central Metropolitan Oakland, the All-American City. The answer to this kind of talk is that when the little businessman no longer can make a decent living, when he is forced to knuckle under to big business, then a vital part of the American Way of Life will have disappeared, taking away rugged individualism which made this nation

great."<sup>8</sup> The opposition pattern was the same in San Francisco; the language and imagery, like that used to describe the effects of congestion downtown, was every bit as colorful and apocalyptic.

The mass character of the San Francisco freeway revolt took shape in early 1956, when word of possible routes for the Western freeway being considered by the Division of Highways circulated through the neighborhoods. The Division and its city technical friends walked into a meeting of 2,000 irate property owners. The meeting was told freeway plans were only in the preliminary stages; the Division was not yet recommending any definite routes.<sup>9</sup> They never would. In September, 1956, Chris McKeon, President of the San Francisco Property Owners Association and a leading Sunset area homebuilder, told a state Assembly hearing who he was and what his people wanted: "I represent the little people. All we have heard here...so far is how we are going to get people downtown, how they are going to shop from the larger merchants. No consideration has been given, whatsoever, to the little merchant and the neighborhood merchant." McKeon warned that his people out in the Sunset were "rebellious."<sup>10</sup>

During the summer of 1958, the Public Works Subcommittee of the State Assembly Interim Committee on Conservation, Planning and Public Works came to San Francisco to take testimony about the troubled freeway program. These hearings were among those outpourings of local discontent that upset Senator Collier shortly before his Transportation Committee took up the transbay tube financing bill in 1959. The Assemblymen came largely because Assemblyman Busterud, whose constituency included the Sunset district, wanted the legislature to learn first-hand what the people back home were thinking. Busterud himself argued the stress should be on moving people rather than cars; rapid transit ought

to be emphasized. Rapid transit was on the horizon in San Francisco; Busterud supported diverting gas tax monies to help bring transit into being.<sup>11</sup> He led a move in the 1959 Assembly session to amend the state constitution permitting such diversion. This effort was defeated.<sup>12</sup>

Others at the hearings, however, were in favor of such a policy; they wanted to give rapid transit a chance to meet commuter needs. The representative from the Marina Merchants Association pledged that this group was "...unalterably opposed to any freeway that will separate the business district from its merchandising area...." They called for using gas tax monies to build transit to bring commuters downtown.<sup>13</sup> The San Francisco Council of District Merchants outlined the basis of their opposition to the proposed downtown radial freeways: "...the threat of concrete monstrosities destroying the values of properties of our customers. In other words, a very high-class trade, with more expensive types of goods, more expensive types of art wares and other things of this nature, furniture stores, could be destroyed by a freeway going nearby and turning a top residential area into an off-freeway residential area where the property values will be lower." Twenty district merchant associations, including virtually every major district shopping area in San Francisco supported the Council in opposition to the proposed freeways.<sup>14</sup>

The San Francisco Council of Civic Clubs--thirty-nine district property improvement clubs and merchants associations--demanded the scrapping of the outmoded Master Plan of Trafficways; all future planning should be done in relation to the proposed rapid transit system. Gas tax monies for transit were, once again, urged.<sup>15</sup> The West of Twin Peaks Council Freeway Committee agreed; coordination between free-

way and transit planning was essential. Everyone supported legislation to require such coordination.<sup>16</sup>

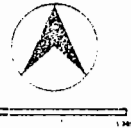
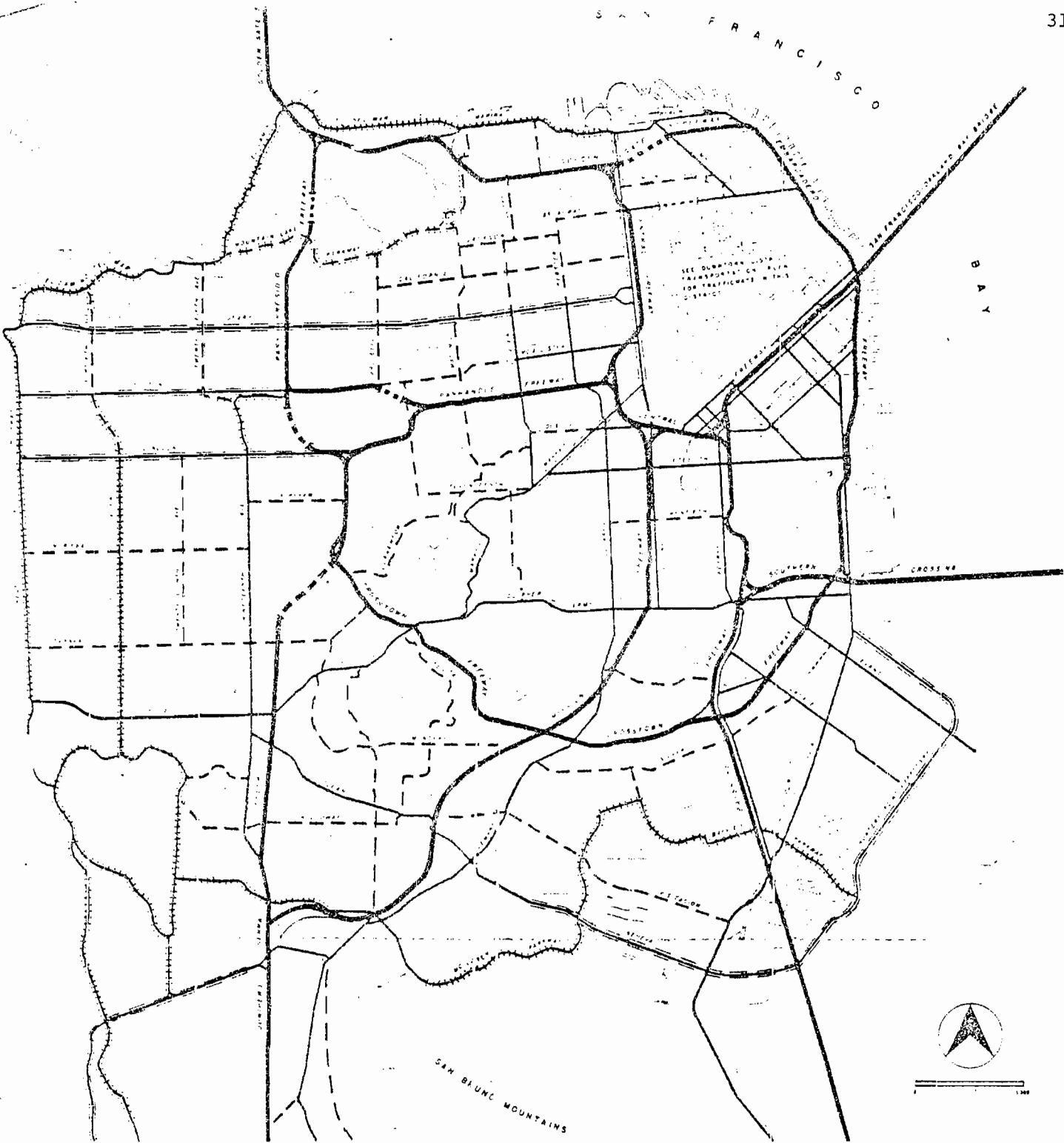
Ironically, the freeway oppositionists themselves stood in the way of coordinated planning when a higher priority was at stake. After the January, 1959, revolt declared by the San Francisco Board of Supervisors, Mayor Christopher appointed a Committee to Study Freeways. Chris McKeon led this study group, which included various business, neighborhood property owning and labor groups. The Committee came up with a plan that would make the original Western Freeway unnecessary: build an eight-lane Southern freeway and extend it downtown; build the Southern freeway as quickly as possible.<sup>17</sup> Recall the city technicians working on the rapid transit plan had suggested using the Southern freeway median for the rail lines; the BARTD engineers had supported this idea. This joint use would only be possible, however, if the DPW would limit the Southern freeway to six lanes, reserving the center two for transit. The DPW had told the transit planners an eight lane freeway would be necessary; the freeway revolters thus took up a position in support of the Division of Highways, blocking joint use of the Southern freeway.

The Southern freeway was exempt from the revolt because its proposed route did not disrupt any "first-class" neighborhoods; the San Francisco Board of Supervisors also exempted a possible freeway through the Hunter's Point section of the city in the southeast corner, which is a racial minority zone.<sup>18</sup> This route would likewise not disrupt a first-class community.

In 1962 Marin and San Mateo Counties were no longer in the BARTD; the Directors were hopeful, however, that the other West Bay

counties could be enticed back in by the carrot of federal government monies for transit.<sup>19</sup> Therefore, it seems likely to me the relation between freeways and transit was still an issue in the 1962 bond election. The downtown groups, organized labor, and city planners continued to press for more freeways.<sup>20</sup> I think many San Franciscans, especially low-income minority people living in the path of the proposed Hunter's Point freeway who were exempt from the revolt, and those prosperous citizens living in the originally proposed corridors, voted for transit in order to forestall future freeway pressure.

The regional rapid transit planners, of course, had never intended transit as a substitute for freeways. Transit would supplement critically needed motor vehicle capacity. In early 1956, though, just after the PBHM report was presented to the region, Bay Area freeway chief B.W. Booker already sensed trouble. Booker told a meeting of Bay Area planning commissioners, "There is a great deal of discussion at the present time regarding the birth of a new member of the transportation family, rapid transit." Booker noted he personally had been advocating integrated, balanced, comprehensive transportation planning for some time, even before it was popular. Now, however, he was worried that "Our enthusiasm in anticipation of this 'blessed event' may cause us to lose sight of and neglect the other and more mature members of the family, which are equally necessary in providing a satisfactory solution of the transportation problem."<sup>21</sup>



TRANSPORTATION SECTION OF THE MASTER PLAN OF SAN FRANCISCO

# TRAFFICWAYS PLAN

	FREEWAYS
	MAJOR THOROUGHFARES
	SECONDARY THOROUGHFARES
	EXPRESSWAY TREATMENT
	PARKWAY TREATMENT

THIS PLAN WAS ADOPTED BY RESOLUTION NUMBER 3940 OF THE CITY PLANNING COMMISSION AT A SPECIAL MEETING HELD ON JULY 17, 1951  
*Edward J. ...*  
*James ...*

TRANSPORTATION PART I

**1**  
PLATE



XX THE DOWNTOWN ECONOMIES AT THE TIME OF  
THE BOND ISSUE

While the various currents of the rapid transit movement ebbed and flowed across the Bay region in the postwar period, the spatial structure of the metropolitan economy was changing. Manufacturing employment in San Francisco declined. The number of manufacturing jobs in Alameda and Contra Costa Counties increased by a small amount. In San Mateo and Santa Clara Counties, however, manufacturing employment boomed. The number of jobs in the two peninsula counties increased from about 19,000 in 1947 to about 106,000 in 1962; the great bulk of this increase was due to national defense spending during the period.<sup>1</sup> In finance, insurance, and real estate, though, San Francisco more than held its own. Employment in this category increased more in San Francisco than in these four other Bay Area counties combined between 1947 and 1962; the dominance of the city in this realm continued.<sup>2</sup>

Indeed, throughout these years of the Congestion Alert, the San Francisco central business district generally had held its own. In a study of patterns of administrative office location in the region, Donald Foley concluded that "...the demand for first-class downtown office space remained strong." Foley noted the proportion of top administrative offices concentrated in central San Francisco had



dropped steadily over the years; however, this decline was due entirely to what he called "attached" offices setting up alongside non-office facilities in suburban areas. These non-office facilities included manufacturing plants, warehouses, and transportation terminals. "The relocation of important top detached offices to the Bay Area suburbs has been negligible." These detached offices were primarily those in the financial and related fields.<sup>3</sup>

Land values had increased in downtown San Francisco during the 1950s, particularly in the financial district and in the Union Square shopping and hotel area; land values had declined in downtown Oakland, however.<sup>4</sup> The number of permits for commercial office buildings in the San Francisco financial district increased from one in the period 1946-1950 to nine in the period 1956-1961. Almost 3,000,000 square feet of rentable office space was added in San Francisco during the 1950s; an additional 2,500,000 was added between 1960 and 1962. San Francisco stood fourth in the United States in office space, behind New York, Chicago, and Los Angeles.<sup>5</sup> The San Francisco City Planning Department noted in 1963: "Unquestionably the strong and continuing anchor of San Francisco's economy rests in the Financial-Administrative District, both physically and functionally.... [S]everal new buildings are either under construction or firmly proposed in the Montgomery Street area. Among them, the Hartford Insurance Building and the Standard Oil Building are under construction, and the Alcoa Building and the Wells Fargo Building are well into the planning stage. Also under construction in the Golden Gateway Redevelopment area are the major units of residential buildings which will provide a new market for high middle income housing near places of work. The impact of these physical developments upon the

economy of Downtown...will serve to bolster its function as a financial headquarters of international significance."<sup>6</sup>

In retail trade terms the San Francisco core had declined, but not nearly as much as many other cities in the nation had. Between 1954 and 1963 the share of total retail sales in the city captured downtown declined from 35.6 percent to 33.7 percent. The share of total metropolitan area retail sales in downtown San Francisco fell from 13.9 percent to 11.0 percent.<sup>7</sup> In both cases the declines were modest; they signalled the continuing strength of the city core as a shopping center. The main factors involved in the continuing success of the downtown shopping zone were: the large and increasing numbers of white collar office workers in the central district, providing a captive market for the downtown stores; a large volume of tourist trade; and, the continuing presence of large numbers of high-income people living in or near the central business district.

The city was, of course, taking steps to increase the number of people in all these categories, using urban redevelopment, zoning, and parking policies. The Golden Gateway Redevelopment project was one example. The San Francisco Parking Authority had been active; it built more than 5,000 parking stalls between 1949 (when it was created) and 1956. By way of contrast, only 3,400 stalls had been provided between 1930 and 1950. Moreover, the Authority had another 7,000 stalls under development.<sup>8</sup> These actions were supported by San Francisco's zoning ordinance. In 1955 the ordinance was amended to require that each new dwelling unit have an off-street parking space. In 1960 another amendment became effective requiring that parking be provided in connection with larger commercial buildings.<sup>9</sup>

While the freeway revolt blocked the construction of several downtown radial freeways that state and city planners and downtown businessmen had argued were essential for San Francisco's future growth, nevertheless, downtown San Francisco was supplied with large amounts of transportation capacity. The Bayshore and Southern freeways would bring peninsula commuters to the central areas; the Central freeway served the Civic Center area; the Embarcadero freeway served the financial district and the redevelopment area; and a reconstructed Bay Bridge would add motor vehicle capacity in the transbay corridor. Greyhound still brought commuters in from Marin and central Contra Costa Counties. The ACTD fed downtown San Francisco from the East Bay. The Southern Pacific still rolled on the peninsula. Indeed, in 1959, the CPUC denied the Southern Pacific permission to abandon two evening trains--one each way between San Jose and San Francisco--because substitute Greyhound bus service would not be as good; transit patrons would be inconvenienced.<sup>10</sup>

Regional rapid transit, when it came, would likely reinforce a downtown San Francisco economy that had been doing quite well, relatively speaking, without it. The San Francisco core had experienced land value, office construction, and finance and related employment increases while the proportion of peak hour travelers leaving downtown via transit had declined rather sharply, from fifty-nine percent in 1947 to forty-four percent in 1959.<sup>11</sup>

Downtown Oakland's experience had not been quite so favorable. Land values had declined in the central business district during the 1950s; retail sales had suffered proportionately more than in San Francisco. Total retail sales in the Oakland central area dropped from 33.4 percent of all city sales in 1954 to 28.7 percent in 1963. As a

proportion of metropolitan Bay Area sales the analogous figures were 6.2 percent and 4.3 percent.<sup>12</sup>

Downtown Oakland had done quite well for itself through its participation in the regional transit movement. The BARTD and the ACTD would supply the Oakland central core with a tremendous amount of transit capacity. Downtown Oakland would really test the amount of leverage transit capacity could exert on the pattern of urban economic growth; this would be an extremely difficult exam. The point, however, is the downtown Oakland coalition, like its counterparts in San Francisco and elsewhere, embraced this test out of necessity; their interest in transit, and in transportation generally, was structured by the drive for competitive advantage.

This page is for numbering purposes only.

XXI THE REGIONAL TRANSIT MOVEMENT IN  
THEORETICAL-HISTORICAL PERSPECTIVE

Marvin Lewis convened the initial meeting leading to the creation of the Bay Area Transit Committee in February, 1948; almost fifteen years passed before movement activists placed a concrete transit proposal before the electorate. Representatives from all nine Bay Area counties attended the first meeting. Six counties were included in the original legislative version of the regional transit district. Only three counties remained at the time of the bond issue referendum. The delays, fractures, the partial disintegration and the planning choices marking the history of the regional transit movement were structured by urban mercantilism.

Urban mercantilism is the attempt to defend and advance the economic and governmental interests of particular places.<sup>1</sup> By structured I mean that urban mercantilism supplied both the motivation and set the limits for movement activity. Urban mercantilist transportation policies are attempts to design, locate, finance, and control transport facilities in order to create locational advantages for particular places. The general practice and its specific transportation variant have prominently figured in the political-economic life of the United States throughout the nation's history. Such policies are possible because each aspect of every transport facility confers locational advantages on some places and, by comparison, disadvantages others. They are opportune policies because places compete to attract and retain population and economic activity;

transportation facilities are important factors in locational decisions. They appear as necessary policies because the failure to use transport in mercantilist fashion invites economic disadvantage.

The completion of the state government-built Erie Canal in 1825 gave New York City an almost overwhelming competitive advantage in securing the trade generated by the rapidly growing trans-Appalachian west; the merchant capitalists of Boston, Philadelphia, and Baltimore, in alliance with their respective city governments, had to and did respond in varying ways. As the Joint Committee on Internal Improvements of the Baltimore City Council explained, the question was "...whether the city of Baltimore is to be reduced to a place of comparative insignificance in a commercial point of view, or to assume a position equal if not superior to that of any other city in the Union."<sup>2</sup>

St. Louis business and political leaders hesitated to build railroads linking their city with the growing middle west in the pre-Civil War years; St. Louis had achieved its preeminence through domination of river-borne commerce, and its leading citizens were tied in myriad ways to the steamboat. Chicago merchants, however, supported by New York business interests, busily promoted railroad lines, including a railroad bridge over the Mississippi, in order to capture northern and central mid-western trade. The St. Louis Chamber of Commerce responded negatively to the railroad-based challenge from Chicago; they took legal and political action to block construction of the trans-Mississippi bridge, and any and all bridges over navigable rivers. Chicago leaders laughed at this ludicrous attempt to derail the engine of Progress; the bridge company hired Abraham Lincoln to defend it in the courts. Chicago advised St. Louis to get busy building its own bridges and railroads: "...Chicago

offers her best wishes to her anxious sister, and asks only a fair field and an honorable struggle for the prize of commercial supremacy; the position of the great central city of the continent." St. Louis belatedly responded; the response was far too little, however, and too late.<sup>3</sup>

In the 1850s Louisville, Kentucky, undertook an ambitious program of railroad promotion in order to divert trade from Cincinnati. Cincinnati's response was one of the more dramatic mercantilist efforts of the nineteenth century. In 1869 the Cincinnati City Council, the Board of Trade, and the Chamber of Commerce united in support of a municipally built and owned railroad. The Cincinnati Southern Railway, one of the few such wholly municipal ventures in the nation, cost more than \$18 million; this was a rather large sum of municipal money for the 1870s. Considering the threat from Louisville, for the city's business and political leadership it was, of course, "a matter of life or death."<sup>4</sup>

Conflicts between territorially based interests were the primary political features of the Bay Area transit movement's history. These conflicts generally cut across industrial and social class lines. However, the locations of particular industries and social classes were unevenly distributed across the many places in the region; and the financial and control aspects of transport facilities had differing impacts across industries and social classes. Urban mercantilist politics were, therefore, compounded by interindustrial and social class conflicts. Specifically governmental interests added an additional complexity; government officials sought to retain their autonomy to define and represent the interests of both the governmental unit and of capital invested within their jurisdiction in higher-level political arenas. Finally, the relevant place unit varied, further complicating dynamics. Mercantilist conflicts were



permanent features of the political terrain within cities, between cities within a county, and between counties, as well as interregionally (and internationally). The particular place-interests represented by government officials shifted, therefore, depending on the issue and on the political strength of contending coalitions.

Downtown San Francisco financial and merchant leaders and city government officials took the initiative in forming a Bay Region-wide movement to plan and build a transit system. Mayor Robinson apologized for his city's boldness; regional initiatives were usually the province of the privately organized Bay Area Council. However, the Council was embroiled in the bridge-crossing conflict; San Francisco couldn't tolerate extended delay on the transit question.

San Francisco leaders espoused an ideology of regionalism to legitimate their transit initiative. They repeatedly argued that the Bay Area was a fully integrated economic and social unit that required political action on a comparable scale to effectively deal with regional questions. During the Progressive Era the San Francisco Chamber of Commerce led a movement to cast this ideology in governmental form. The Chamber sought to draw much of the East Bay, Marin, and San Mateo counties into a Greater San Francisco. The Oakland Chamber of Commerce waged a grim campaign locally and throughout the state to prevent the incorporation. According to regional planning advocate Mel Scott, the Oakland Chamber viewed the effort as a "...bare-faced attempt to reduce Oakland to the status of a borough of imperialist San Francisco."<sup>5</sup> When Mayor-elect Robinson revived the Greater San Francisco idea a generation later he and it were greeted with equivalent hostility.

Following the defeat of the metropolitan government proposal, and

based on pioneering efforts in Los Angeles and New York, an attempt to promote regional planning was initiated by San Franciscans in the mid 1920s. Fearing domination by its larger rival, Oakland leaders quashed regional planning, as they earlier had regional government; a version limited to the East Bay, however, received local support.<sup>6</sup>

The transit initiative was another instance of San Francisco leaders attempting to give concrete expression to their ideology of regionalism. Mel Scott noted it was natural that the city play a leadership role in this and other areas: "...no other city in the nine counties around the bay would...be so sensitive to regional influences as (San Francisco). Its planning problems really could be solved only in relation to those of all the cities and counties in the area...The metropolis felt that it must assert leadership in a new movement for metropolitan regional planning even though it risked the accusation, heard many times before, that it was seeking to dominate other cities."<sup>7</sup>

Professional planners played the important role of articulating, legitimating, and propagating the regionalism ideology. San Francisco technicians, led by Planning Director T. J. Kent, eloquently expressed this theme in their 1947 report; these arguments were carried forward by later city planners and transit planning consultants. The Bay Area was said to be an increasingly integrated unit, composed of functionally specialized interdependent parts. Specialization and interdependence were the conceptual lenses San Francisco leaders used to focus regional planning as an exercise in democratic action; different but relatively equal participants would collectively plan and act for their mutual benefit. Because of complex interdependencies within the regional economy, the interests of each specialized part were necessarily the interests of

all. Regionalism enabled San Francisco to present its initiatives as actions in the metropolitan area public interest.

Downtown San Francisco specialties, however, were really special; city activists were imbued with a rare and intensely felt sense of mission. The financial, administrative, and commercial activities concentrated in the city's central core were regionally, nationally, and globally significant. The San Francisco central business district was a great regional natural resource, enhancing the quality of life for the entire Bay Area and for those from elsewhere who came to experience it. The growth and prosperity of downtown San Francisco was, therefore, essential for the efficient functioning and future development of the Bay region. The innovation-generating and corporate control processes that were this particular place's contributions in the division of labor were extremely fragile; they had to be protected and nurtured.

On a more mundane level, high downtown land values were an important resource for the city government budget, supporting municipal services, the city's bonding capacity, and its credit rating; the local real estate industry was likewise concerned.

San Francisco faced a postwar world where population and economic growth were increasingly taking place outside the established central areas, where cheaper, undeveloped land was relatively abundant. Bay Area growth had been rapid during the war; in the postwar period it was spectacular and enthusiastically promoted in every conceivable way. Although a network of highways and transit lines was in place, it is important to note that with the exceptions of a few bridges and tunnels, in 1945 there weren't any fully grade-separated, exclusive right-of-way facilities for either automobiles or transit in the Bay Area. Metropolitan-scaled

transportation facilities, those that were able to move goods and people quickly and cheaply across metropolitan distances, were underdeveloped.

Downtown San Francisco required connection with these growing outlying areas; the city's central core had to be easily and universally accessible to all the places in the region because all of these places were implicated in the future of the city's central business district. The freeways and rapid transit lines that downtown San Francisco leaders promoted were defensive measures, aimed at overcoming two major locational disadvantages that suburban and automotive growth were creating for the central core: metropolitan-scale distances, and congested street traffic. San Francisco leaders never opposed suburban growth; the city's major financial and merchant groups were deeply implicated in the suburban building process. Rather, they sought to prevent a spatial restructuring of activities that would lessen regional dependence on downtown San Francisco for those special functions the city's central core had historically, and with great style, performed.

Rail rapid transit had a dual significance for downtown San Francisco activists: It would supply the central core with a tremendous amount of long distance people-receiving capacity; and it would concretely represent San Francisco's aspiration to world-city status. Los Angeles Metropolitan Transit Authority general manager Ralph Merritt said Los Angeles and San Francisco were the only metropolitan areas in the "civilized" world without rapid transit. This assessment was widely shared. Local transit experts and experts of international stature continually and scientifically called attention to this deficiency. The Bay Area Transportation League's Robert River pointed out that every great metropolitan area had it. DeLeuw, Cather said a rail rapid transit system was

necessary. Colonel Sidney Bingham agreed. The former Assistant Superintendent of the London transit system said the need for rail rapid transit was "glaringly obvious." San Rosoff, the world's greatest tunnel builder and the man who had built a large part of New York's subway system said that San Francisco needed a subway even more than New York.<sup>8</sup> Finally, PBHM said the Bay Area could not afford not to have one. The rising crescendo of expert opinion was not without discordant notes: Arthur Jenkins, for example, did not think San Francisco needed a subway. Jenkins also thought the city should abandon the cable cars; he was heartless. However, for those who were predisposed to hear it the message was deafeningly clear: if San Francisco wanted to mix in international cosmopolitan circles it would have to dress according to prevailing custom.

One sense in which San Francisco's regionalism was ideological was that it distorted economic and social reality. San Francisco leaders' identification of their partial interests with the general metropolitan public interest rested on this distortion. Geographer James Vance noted that "To the outsider, the traditional San Franciscan, or the romantic, the Bay Area appears to be single-centered and ruled by San Francisco." However, Vance's researches demonstrated that "...the traditional view has long since lost much of its validity. The East Bay is a metropolis in its own right, a fact that needs to be asserted forcefully." Vance argued the Bay Area was composed of a set of increasingly autonomous urban realms, rather than constituted as a single, integrated unit. Moreover, the East Bay realm focused on Oakland in the same way that the peninsula focused on San Francisco.<sup>9</sup> Indeed, state highway engineers noted, and even San Francisco city planners and PBHM acknowledged that the East Bay was increasingly a self-contained economic and social entity.

Planner Scott said it was likely San Francisco's regional initiatives would be interpreted as renewed efforts at area-wide domination. He was, of course, correct. Downtown Oakland's resistance was, however, a complex response. The critical point to recall is that the structure of existing East Bay interurban and transbay transit disadvantaged downtown Oakland relative to San Francisco. Downtown Oakland leaders perceived San Francisco's regional transit initiative as another attempt to defend and enhance a neo-colonial relationship between San Francisco and rapidly growing areas in the East Bay. Such a relationship threatened the possibilities of economic growth open to downtown Oakland.

Neo-colonial transport policy is a specific manifestation of the more general mercantilist pattern. It is the attempt by a dominant center to use transport facilities to penetrate and integrate peripheral areas in such ways as to reinforce the center's dominance. Neo-colonial transport policy supplies radial lines connecting the center with many places in the periphery, facilitating interaction between core and periphery. It does not provide connections between or within peripheral areas.

Oakland didn't have a world-class financial or administrative concentration; there were, however, ambitious merchant and commercial property interests. In relation to San Francisco, therefore, downtown Oakland sought liberation from another neo-colonial challenge. However, downtown Oakland leaders had their own concept of regionalism. Their vision was geographically more restrained, and not nearly as grandly conceived as San Francisco's; they merely sought to firmly establish their hegemony in the East Bay, rather than throughout the Bay Area. Recall that downtown Oakland leaders were interested in rapid transit in the East Bay even before Marvin Lewis sounded the call to form a region-wide

movement. They sporadically discussed possibilities with other East Bay activists independently of San Francisco. The same defensive motivations prompting San Francisco leaders to promote rapid transport facilities prompted their Oakland counterparts; only the scale and the imagery differed.

During its first several years the regional transit movement constituted a political terrain on which downtown Oakland contested downtown San Francisco for supremacy in the East Bay. Oakland leaders carried sufficient political weight to delay and restrain the movement's progress until such time as they were convinced their interests were adequately represented. Creation of an effective governmental transit agency was blocked by them until a plan that centered East Bay rapid transit lines in the Oakland central business district crystallized. This had been downtown Oakland's demand since the movement began. PBHM's 1956 Optimum Plan, built around and atop the transbay tube, satisfied this condition; it also accomplished a great deal more.

The Optimum Plan established the concrete basis for an alliance between downtown Oakland and downtown San Francisco. East Bay interurban transit would be reoriented to focus on central Oakland. The tube would make this Oakland convergence possible without seriously compromising a high-speed, large capacity connection between San Francisco and the East Bay. Moreover, since the tube would allow Bridge Railway abandonment, Bay Bridge reconstruction would supply additional motor vehicle capacity in the transbay corridor connecting the two downtowns. West Bay rapid transit lines, would, of course, focus on central San Francisco. The Optimum Plan would not eliminate competition between the Oakland and San Francisco central business districts. It would, however, enable them to peacefully

co-exist while pursuing their respective neo-colonial ambitions.

Given the generalized pessimism then permeating the United States transit industry, the Optimum Plan was also breathtakingly optimistic and technically daring. It was an appropriate expression of a movement whose leaders measured their progress not by existing transit conditions, not by those moderate improvements instituted in a few cities, such as Toronto, Cleveland, and Chicago. It set a new standard in the revolutionary technological achievements of the era: hydrogen bombs and rockets in space.

There were other dramatic railroad and subway structures in the United States and abroad, but the scale and complexity of the underwater tube, the Berkeley Hills tunnel, and the Golden Gate crossing represented bold engineering ventures. Computer-controlled operations were another exciting technological prospect, albeit an expensively ironic effort to substitute capital for labor, thereby increasing productivity and reducing labor costs. There was, in addition, the regional scale of the project; a network of 123 miles would be built as a single, integrated first-stage system.

The Optimum Plan was also the recommended product of a pioneering venture in regional transportation planning, organized and directed by one of the most prestigious private consulting firms in the world.

Private sector planning firms occupied a strategic position between the major participants in the public works planning process. Recall that the standing of a firm in the eyes of the private investment community was the most important criterion in the consultant-selection process. Consultants acted, on the one hand, as representatives of private financial capital, elaborating plans that would meet the requirements of sound investment finance. The private investment community supplied the capital



for bond-financed public works; they insisted that reputable private planners develop and approve the projects that were worthy of their support. On the other hand, consultants were entrusted with the long-range, amorphous visions nurtured by their clients. The contract called for forging these visions into engineered structures and detailed cost estimates.

Private planners were well-suited to this dual, delicate role because of their status as outsiders. They appeared to stand professionally apart from the local mercantilist pressures which threatened to disrupt the regional planning process and to undermine investor security and confidence. Government planners and planning agencies were, by comparison, inevitably enveloped by these pressures.

The central planning innovation embodied in PBHM's Regional Rapid Transit was that the transit system was specifically designed to function in a region where land use patterns had been and would continue to be structured by the motor vehicle. Rapid transit would complement freeways, carrying peak-hour commuters who would not be able conveniently to travel by automobile. The transit system would function most efficiently and would make its greatest contribution when the freeways were congested.

Interestingly enough, in a recent interview President Carter's new Secretary of Transportation Neil Goldschmidt envisioned a "...redefinition of the role of transit in this country..." in the 1980s. "No longer should transit systems be designed and operated simply as adjuncts to the highway network, content to carry the overflow of white-collar, rush hour commuters and those who do not have access to an automobile." Spacious parking lots were crucial features of an era of transit history that is, apparently, about to end; their design and location were one of the

clearer manifestations of the neo-colonial nature of PBHM's regional transit plan.<sup>10</sup>

Parking facilities were not planned for downtown San Francisco, nor for downtown Oakland. However, all stations outside these two central cities would contain extensive parking and kiss-and-ride accommodations; the number of spaces ranged from 350 to 1,000.<sup>11</sup> The size and ubiquity of these facilities set the proposed Bay Area system apart from other commuter railroad and rapid transit operations; their importance was indicated by the regional land use plan that was the basis for the transit proposal. The regional land use plan confirmed the present trend and forecast continued construction of low-density communities of single-family homes. PBHM hoped these communities would be planned so as to minimize sprawl-induced infrastructure and related costs. The great majority of transit commuters, who would come from these communities, would drive or be driven to the parking lots. While PBHM expected some high-density residential development near stations in outlying areas, such developments would not supply an important share of peak-hour transit travelers.

Spacious parking lots would consume a great deal of land. Moreover, if the parking facilities were to perform their transfer function efficiently, access to them would have to be convenient, via relatively uncongested streets. Consequently, parking facilities, and therefore transit stations, would have to be located some distance away from existing suburban business districts. The closer to such suburban commercial concentrations, the more expensive the land and the more congested the access streets. Maximizing the effectiveness of the regional rapid transit system at the least possible cost would mean, therefore, minimizing the role a transit station could play in stimulating growth and high-density

development in these outlying business centers. The regional rapid transit system would advantage downtown San Francisco and downtown Oakland relative to suburban business districts.

The neo-colonial nature of the plan was reinforced by the location of large portions of the transit routes in existing railroad corridors; in the final three-county plan thirty-four of the system's seventy-five miles followed existing railroad rights-of-way.<sup>12</sup> This effort to minimize right-of-way acquisition costs contributed to distancing regional transit system stations from suburban commercial centers.

These immense, exciting, and innovative features constituted a monumental public work; the Optimum Plan was a proposal behind which many powerful interests, in addition to the downtown alliance could unite. The project would require huge construction and equipment supply efforts; this aspect of the undertaking was obviously interesting to a wide variety of local and national firms in these industries and their workers. The tremendous financial size of the venture meant potentially large profits for the investment and commercial banking firms that would underwrite the sale of an unprecedented amount of locally supported general obligation bonds.

It's important to recall that several less expensive alternatives to the Optimum Plan were technically feasible and were advocated by thoroughly respectable individuals and organizations. One major set of alternatives involved using the space occupied by the Bridge Railway. CPUC and its staff proposed bus rapid transit there, and ACTD's 1962 exclusive Bridge bus lane operation provided an empirical demonstration of this option. The other Bridge Railway option involved using a modernized facility which would connect with either subways or elevated lines

in the East and West Bays. Such an operation was frequently advocated before 1956, and chiefly by DeLeuw, Cather afterwards.

PBHM's Minimum Plan linked continued use of the Bridge Railway with a southern crossing. Throughout the entire period under consideration the San Francisco Labor Council consistently and with great vigor supported a southern crossing. Prior to 1959 the Labor Council was joined by official San Francisco, particularly by San Francisco city planners. The common element uniting planners and the labor movement was a concern with the future of industrial production within the city; manufacturing firms were concentrated along the city's bayshore in the vicinity of a southern crossing. A southern crossing would facilitate freight transportation between San Francisco's manufacturing district and related firms in the East Bay; the bridge would provide transport infrastructure important to attracting and holding industrial production in the district. In addition, travel conditions between working class residential areas in the southeastern sector of the city and industrial production zones in southern Alameda county would be similarly improved. While city planners focused on Downtown as San Francisco's most valuable economic resource, and looked to a southern crossing to divert through traffic away from the central core and the transbay corridor, they were also interested in the industrial production jobs and the workers that would help constitute a "balanced" community.

It is important to note that official city policy represented this labor-planning coalition. For much of the period this policy prevailed against opposition from San Francisco's major downtown business groups. The priority accorded a southern crossing reflected the strength of organized labor in city politics during the 1940s and through the middle

1950s; it was one of the ways city political leaders sought to maintain labor support for their own electoral careers as well as for other city projects.

The official freeway revolt in 1959 was another instance of conflict between city policy and a program promoted by downtown business groups. The revolt represented a victory by coalition of outlying district merchants and property-owning groups over not only downtown business, but also organized labor and city technical leaders. These instances of conflict illustrate the variability and contingent nature of urban mercantilist politics.

The downtown alliance wanted transbay transport capacity concentrated in the downtown corridor; a southern crossing was, therefore, out of the way, yet also in the way. The bridge project had top priority claim on surplus Bay Bridge toll revenues; BARTC leaders wanted those tolls to partially finance construction of the Optimum Plan. Recall that PBHM said the Optimum Plan would eliminate the need for a southern crossing for at least fifteen years. Continued use of the Bridge Railway space, then, would keep a southern crossing project afloat. This threatened to disrupt the downtown alliance and to reduce the contribution regional transit could make to downtown development. Led by San Francisco financiers, the transit movement was instrumental in defeating a southern crossing.

A likely consequence of the failure to build a southern crossing was an accelerated decline of San Francisco as a manufacturing site. Additional transbay motor vehicle capacity was, of course, supplied; Bay Bridge reconstruction and expansion of the San Mateo-Hayward Bridge made up for a southern crossing, at least partially. However, inadequate

transport capacity during the latter 1940s and through the 1950s further handicapped San Francisco in the locational competition for postwar manufacturing investment.

The other major set of less expensive alternatives to the Optimum Plan was in the West Bay. Recall a Commonwealth Club section approved substituting buses for trains on the Marin route. In addition, several transit experts proposed improving the connection between Southern Pacific's San Francisco depot and the city's central business district as an effective solution to the peninsula commuting problem. However, both these alternatives violated the spirit as well as the planning guidelines embodied in the regional transit plan. The important point to note is that these two suggestions concerned the quality of transit service that would be available to commuters from those Bay Area counties with the highest median incomes. These commuters were people whose choice of journey-to-work transport mode was not financially constrained; they had high standards regarding their conditions of travel.

Buses on the Marin route would not have a grade-separated private right-of-way; they would be unable to supply truly rapid transit because they would be enmeshed in highway, bridge, and street-traffic congestion. Even with an improved downtown connection, peninsula commuting via Southern Pacific would still require two transfers. Recall PBHM insisted on a maximum one-transfer policy; two transfers would seriously compromise the quality of service. Moreover, overall speed on the SP route was further compromised by numerous grade-crossings and freight train conflicts. Skimping on West Bay transit would of course, reduce the capital cost of the regional rapid transit system. However, from the downtown San Francisco vantage point these would be false economies.

Once the Optimum Plan cemented a downtown alliance the practical questions of organization and financing were addressed. The major contextual feature confronting the transit movement was that private capital was unable to supply the amount and kind of regional transit service the alliance demanded.

Throughout the nineteenth century cities sought to deploy turnpikes and plank roads, canals, and railroads to gain competitive advantages. Carter Goodrich noted that "The overriding problem was to obtain enough capital: from what sources and by what means were secondary questions...Whatever general views were held on the role of government intervention, the local authorities in many parts of the country found no compelling doctrinal arguments to deter them from investing public money..."<sup>13</sup> Oakland leaders were ideologically hostile to government ownership. However, as former Key System president Alfred Lundberg argued, this hostility had become self-destructive: "We have to face frankly the issue that transit in a large city must be furnished with capital facilities that cannot come from private capital and what is more, that cannot earn their salt. If you are going to load the capital charges on the riders you either get the fares up to the point where you will not have solved the congestion, the parking, the decentralization and all of the other problems with which this city in common with every American City is beset."<sup>14</sup>

The transit movement, therefore, required government action if it were going to develop and implement a plan. Marvin Lewis explained, however, that a special kind of government intervention was necessary because metropolitan areas were "...composed of so many different types of local government that they're just standing still and stagnating because of the inability of all these planning commissions...and all of

these local governments to get together. You can never get a politician to give up his job. So, it is a very difficult thing to ever hope to look toward consolidation. We may never see that in our lifetime. So, the only answer...is through the formation of districts or authorities which transpose and go over the heads of the local politicians, where they can deal with the state and accomplish these purposes without actual consolidation of the local governments."<sup>15</sup> The attractions of such a special government were similar to those of private consultants; it was intended to overcome the mercantilism that delayed and fractured the movement. Moreover, the financial and administrative autonomy, technical competence, and leadership composition of a special government would serve to insulate it from threats to the project priorities established by movement activists and to the security and confidence of the bondholders.

In its final report to the state legislature in 1957 BARTC noted that of the twenty-two urbanized areas of more than 600,000 people in the United States and Canada, nine were being served by government transit agencies. Two of these (San Francisco, Detroit) were departments of city government; the others (Boston, Chicago, Cleveland, Montreal, New York, Seattle, Toronto) were managed by separate organizations. Therefore, while this was not yet the modal form, there were several precedents for government ownership. Moreover, some of these transit systems were subsidized by taxes; San Francisco, Boston, and New York,<sup>16</sup> for example, received government financial support.

In the context, however, of the severe financial, patronage, and service=quality declines being experienced by these government operations and by privately owned companies, the products of the Bay Area transit



movement were extraordinary. The two transit districts, ACTD and BARTD, were unique in the scope and autonomy of their financing, planning, and managing powers.

BARTC wanted a special governmental unit that would be sufficiently powerful to impose a regional program on recalcitrant local interests. The partial disintegration of the movement represented by the withdrawals of Santa Clara and San Mateo counties signalled the failure of this quest. Informal state legislative rules of procedure were instrumental in preserving this local capacity to withdraw as well as to delay. When an issue was predominately local in impact and did not involve significant sums of state money, the state legislature as a whole was extremely reluctant to impose anything; local level conflicts made the legislature still warier of intervention. Moreover, state legislators were tied in personal, political, and philosophical ways to local leaders and local economic activities; their concerns smoothly resonated with those of local constituencies seeking to protect local autonomy. The importance of state legislative action for the development of the regional transit movement is indicated by the fact that, including bridge legislation, more than a dozen consequential state laws were enacted during the 1945-1963 period regarding Bay Area urban transportation.

The deep splits at both state and regional levels also reflected the inability of any private organizations to contain urban mercantilist pressures. The Bay Area Council, for example, which claimed to represent the class interests of Bay Area capital as a whole, repeatedly failed to unite the many places in the region behind a common transportation program; BAC's inability to resolve the bridge crossing controversy in the early postwar period, the partial disintegration of the regional transit

movement, and the defeat of the Golden Gate Authority proposal clarified the continuing depth and strength of mercantilist politics.

Business and political leaders in San Mateo and Santa Clara counties interpreted the regional rapid transit plan as an instrument of downtown San Francisco's neo-colonial ambitions; their criticism of the plan illuminated another sense in which San Francisco's regionalism was ideological. San Francisco leaders argued the concentration of higher-order functions in their city's central core was natural and necessary, rather than historically contingent, based on changing political, economic, and technical relationships. Dispersion of core San Francisco activities was considered an unnatural act; a blight on the entire region and on downtown property values would result. Peninsula leaders argued that multi-centered, less specialized regional development patterns were not only possible, but also desirable.

Downtown Oakland leaders delayed the transit movement's progress until they were assured a role as co-neo-colonialist. San Mateo and Santa Clara county leaders withdrew from the regional movement in order to deprive the downtown alliance of the use of rapid transit as a neo-colonial tool. It is important to note the active presence of peninsula manufacturing and freight transportation interests, in addition to local commercial and real estate groups, among the transit opposition forces; their opposition reflected, as in the southern crossing case, the inter-industrial dimension of the general mercantilist conflict.

Withdrawal from the regional transit movement did not mean, however, that peninsula business and political leaders were uninterested in transit; they were simply not interested in the particular regional transit plan being promoted by the downtown alliance. Another important

neo-colonial aspect of the proposed regional rapid transit system was the nearly total disregard of local transit issues and concerns. Recall there were significant political and economic reasons for this studied inattention; the San Francisco demand for a great deal more local transit service than originally proposed highlighted many of the manifest and latent conflicts involved in this delicate subject. The result, however, was that the enormously expensive regional rapid transit plan contained very little that would facilitate local development aspirations.

Recall that David Bohannon's real estate organization led the opposition to Southern Pacific commuter fare increases during the early postwar years. In this period residential development was the primary concern; commercial and manufacturing interests developed more slowly. Peninsula leaders continued to be concerned about Southern Pacific fares and service, reflecting a recognition of their ties to San Francisco, even as they sought to increase their economic independence. In the middle 1950s, though, peninsula business and political activists primarily sought transit service that would facilitate the autonomous growth of their local economies. San Mateo and Santa Clara counties did not participate in the regional transit district's project. They did, however, form their own transit districts, continuing a pattern begun with the creation of ACTD.

While it contained neo-colonial elements, ACTD was also, in comparison with Key System, the first postwar transit expression of local development aspirations. The fact, however, that downtown Oakland leaders directed the ACTD formation process in large measure accounted for continuing support for the regional transit movement in central Contra Costa and southern Alameda counties, and even in downtown Oakland. Mercantilist

and neo-colonial politics within the East Bay produced the permanent withdrawal of the rapidly growing sections of central Contra Costa County from ACTD; the Fremont area in southern Alameda County was likewise not included in the District. Moreover, transit services in these mushrooming areas were seriously underdeveloped. Financial and service conditions on Pacific Greyhound's central Contra Costa routes were deteriorating; southern Alameda received little or no Key System service. The situation in these areas was different from the peninsula's, where Southern Pacific continued to offer relatively good commuter service. Business and political leaders in these growing East Bay areas sought transit facilities that would connect them with employment centers throughout the region and would provide them with opportunities to stimulate their independent development. They perceived that participation in an East Bay district dominated by downtown Oakland would not serve these aspirations as well as their support for BARTD's project.

One of the more interesting outcomes produced by the regional transit movement was a flowering of independent transit agencies. In the 1940s and 1950s four major transit carriers served the Bay Area; three of these were private and one was governmental. In the 1970s there were eight carriers serving the same territory, with overlapping services on many routes and minimal cooperation on transfers, fares, schedules, and related service issues; six of these were governmental, and two were private.

The profusion of government transit operations geared to promoting local development is not in itself surprising. PBHM and many transit movement activists expected increasing local government intervention in this sphere. The fascinating point, however, is the extent to which the many

transit governments reproduce within the Bay Area transit industry the pattern of mercantilist political conflict generally prevailing in the regional political economy.

The financial deterioration of privately owned transit catalyzed the postwar regional transit movement. It seems likely the worsening financial situation of the many Bay Area transit agencies in the 1980s will generate continuing efforts to overcome the new mercantilist pattern.

The direct efforts of the Bay Area movement to supply an integrated regional rail rapid transit system were only partially successful. Downtown Oakland emerged from the partial disintegration, however, with its priorities intact. Indirectly, though, and even contrary to the movement leadership's intentions, a great deal of Bay Area physical and organizational transit capacity was produced.

Capacity was the movement's primary goal. All transit activists, including those who remained within the movement proper and those who withdrew, saw adequate transport capacity, freeways and parking as well as transit, as being necessary in order to realize their economic, governmental, and status ambitious.

Modern efficient transport capacity appeared so important largely because, through the middle of the 1950s, so little of any kind was in place. Moreover, transport investment had certain political advantages in addition to the economic and status benefits usually attached to large public works projects. Government intervention in the urban transportation field was relatively unproblematic. Governments had been building highways and bridges for generations; and private transit capital had so thoroughly failed that it was vulnerable. Private companies usually welcomed the takeover, no matter how difficult they made the actual

transition. Furthermore, transport investment represented the mode of intervention available to local business and political leaders that would exercise the greatest potential leverage over locational decisions without directly interfering with the "freedom" of capital and labor to locate in pursuit of private advantage.

Competition between places structured transport investments; capital mobility structured this competition. Transport investments were obviously not sufficient to realize the economic and status goals that local leaders sought. They appeared necessary, however, in order to be competitive; they were promoted precisely in order to divert growth from one place to another. Given the existing political economy, what else could a place do?

In the twelve-month period ending June 30, 1978, BART and AC Transit combined carried a little more than 28 million revenue passengers across the Bay. During the same period a little more than 89 million people crossed the Bay Bridge in automobiles.<sup>17</sup> Altogether, then, almost 118 million people traveled transbay. In 1947 Key System and Pacific Greyhound carried about 27 million people across the Bay. There were about 41 million transbay automobile passengers in that year, so total 1947 Bay Bridge corridor traffic amounted to about 68 million people; 1947 transit patronage was 25% below the 1945 peak of about 36 million. In 1954, the year PBHM conducted its traffic studies, there were 49 million transbay auto passengers and about 13 million transit patrons, for a total of 62 million person-crossings. The total 1977-1978 transbay traffic volume was, therefore, about 74% greater than in 1947, and about 90% greater than in 1954. These figures indicate that in this particular corridor, and from the vantage point of downtown San Francisco, the

truncated version of the Optimum Plan and its accompanying Bay Bridge reconstruction is accomplishing pretty much what it was supposed to accomplish.

In 1976 former PHBM planner Melvin Webber wrote a critical evaluation of BART. One of his major concerns was that regressive sales and property taxes were used to finance construction of the system and are used to finance the major portion of its operation. Webber concluded: "Clearly, the poor are paying and the rich are riding."<sup>18</sup> A year later Paul Taylor and Richard Gallagher, technicians with the Southern California Rapid Transit District, which has been trying for years, unsuccessfully, to build a rail rapid transit system in the Los Angeles area, published a scathing critique of Webber in Transit Journal; this periodical is published by the American Public Transit Association, whose executive director is B. R. Stokes. Stokes is a former BART general manager and journalist with the Oakland Tribune. With regard to financing Taylor and Gallagher thought Webber exhibited "...a debilitating naivete...(W)ithout political acceptance of financing, of course, there would have been no BART."<sup>19</sup> Another former BART general manager, Frank Herringer, shrugged off Webber's equity concerns. Herringer told an interviewer, "It's not BART's fault. That just happens to be the way public finance works."<sup>20</sup>

Ironically enough, taxes on private real property were considered politically progressive in the 1940s, and BARTD was originally denied sales taxing power. Financing the regional rapid transit project was, however, coldly realistic, expressing a final neo-colonial dimension. The riders simply could not be expected to pay fares that would cover total costs. Therefore, everybody in the District would have to pay to make it attractive for peak-hour downtown commuters, who had a transport

choice, to choose transit. In the eyes of Bay Area transit activists, who had so much at stake, this appeared a small price to ask the citizens of the region to pay.



## XXII EPILOGUE

Following their successful bond issue in November, 1962, the BARTD Directors met to discuss a proposed contract to build the regional rail rapid transit system. The same joint venture firms--Parsons, Brinckerhoff, Tudor, and Bechtel--were involved. There was discussion as to whether or not the joint venture should be required to furnish a bond. John Kiely, senior Bechtel vice-president, stated that his firm had never been required to furnish a bond in connection with contracts for professional services.<sup>1</sup>

There was discussion as to whether or not the contract ought to make some provision for arbitration to settle deadlocked disputes between the joint venture and the District. Kiely stated that none of the three firms in the joint venture had ever been engaged in litigation with a client; he indicated the chance of a deadlocked dispute was very remote inasmuch as the joint venture would be the servant of the District and would be endeavoring to carry out the District's desires.<sup>2</sup>

The Directors then took up the matter of Arthur Dolan's resignation; Dolan had been a transit movement activist representing San Francisco since 1949. Dolan was disturbed, however, by newspaper reports that he was resigning as a District Director because of a pos-

sible conflict of interest between his being a Director and his position as an officer in the Blyth and Company investment banking firm. Dolan denied any such conflict of interest issue. He was leaving the District to devote more time to his firm's business. Of course, Blyth and Company would offer a bid to handle the bonds the BARTD would soon be selling, in competition with other firms.<sup>3</sup>

A general discussion of conflict of interest ensued. The Division of Highways's John J. Fleming, who had attended ten years' worth of BARTC and BARTD meetings, recorded that several Directors expressed the view that "a complete absence of conflict of interest would be very difficult to achieve since most persons likely to be well qualified to be members of the Board are either engaged or have investments in some business that will be dealing with the Transit District."<sup>4</sup> Naturally.

Dolan's resignation was accepted. The construction phase of the project, with its own set of intensely controversial issues, was finally on the Bay Area transportation agenda.

## XXIII POSTSCRIPT

## METROPOLITAN TRANSPORTATION POLITICS:

## AN INVENTORY OF PROPOSITIONS

This review of the history of Bay Area transportation policies suggests a number of propositions that might also be generally applicable to metropolitan transportation planning elsewhere. It is tempting to search for the larger implications of the events reported here--to try to distill out the generic meanings of the rivalries, coalitions, and cooperation that marked the Bay Area history. On the other hand, the Bay Area is a special case, and the outcomes of the local contests may not mirror outcomes in other places. For those reasons, the propositions listed here should be taken only as suggestive hypotheses, rather than as summary conclusions. They indicate some potential directions for subsequent research focused upon other metropolitan areas. They are recorded here as an inventory of propositions that have grown out of this inquiry, perhaps as guides for future research into the processes of policy making in these fields.

I. CONTEXT

1. Large, rapid population increases in automobile-structured suburban developments.
2. Large, rapid increases in automobile ownership and use.
3. Large, rapid increases in office employment and commercial activities in automobile-oriented suburban business centers.

4. Absence of metropolitan-scale rapid transport facilities.
5. Financial decline and service deterioration of existing interurban transit operations.
6. Street traffic congestion in and around established central business districts.

## II. STRUCTURE

### Economic

7. Investment capital is mobile, although at any time capital is invested in particular industries located in particular places.
8. Interest groups coalesce around existing and potential investment places to defend and advance place-interests.
9. Competition between place-interests, to enhance the value of existing investments and to attract new economic activity, occurs within and between cities in a metropolitan area, as well as interregionally and internationally.
10. There is no transportation system or project that is neutral in its impact or which is in the class interest of capital as a whole.  
The design, location, financing, and control of transport facilities create competitive advantages that are unevenly distributed across regional places and among industries.
11. The primary dimension of conflict in metropolitan transportation politics is competition between places for locational advantage, rather than between passenger modes (rail vs. bus vs. auto). Inter-industry and social class conflicts are secondary but significant dimensions.

Conflicts between passenger modal interests derive their political significance from their relations to the other main conflict dimensions.

#### Governmental

12. Local government officials act to provide physical and social infrastructure that will enhance the value of existing investment and attract new capital investment to the jurisdiction.
13. The particular infrastructural projects advanced by local governments depend on the relative political strengths of contending place-interests within the jurisdiction.
14. An urban mercantilist coalition is constituted when local government officials join with particular industry-place-interests to supply infrastructure.
15. State and national legislatures are mainly composed of representatives of local mercantilist coalitions. These legislators act to promote the interests of the particular coalitions they represent and to protect local autonomy.
16. Higher-level legislatures are extremely reluctant to impose binding programs on local areas, especially when local conflicts are intense. New forms of government intervention incorporate protection for local autonomy. This reluctance reinforces competition between urban mercantilist coalitions.

### III. DYNAMICS

#### Infrastructural Choices

17. Coalitions based in established central business districts attempt to deploy neo-colonial rapid transport facilities. Their goals are: (1) to increase downtown reception capacity; (2) to overcome distance and related locational disadvantages; and (3) to defend historic patterns of regional domination.
18. Neo-colonial projects supply radial rapid transport facilities connecting downtowns with growing peripheral areas. They are designed to facilitate travel between center and periphery, rather than within or between peripheral areas.
19. Downtown coalitions articulate an ideology of regionalism that asserts (1) the naturalness and superiority of highly specialized, functionally interdependent areas, and (2) the special significance of high-density regional cores to legitimate neo-colonial initiatives.
20. Suburban office-commercial district coalitions attempt to deploy transport facilities that will enable them to establish their commercial independence and will supply infrastructure that will facilitate autonomous local economic growth.
21. Suburban coalitions articulate an ideology asserting the superiority of less specialized, mutli-centered forms of regional organization in order to legitimate opposition to downtown coalition initiatives.

The Bond-Financed Public Works Planning Process

22. Mercantilist coalitions support government intervention in particular industries when private capital is unable to perform profitably or to promote coalition interests.
23. Anti-government ideologies are reformulated in such instances to conform to coalition interests.
24. The planning process is a structured interaction involving competing mercantilist coalitions, private consulting firms, and commercial and investment bankers.
25. The primary structuring element is dependence on financial capital institutions for funds to construct bond-financed projects.
26. Representatives of these institutions are central actors in every project phase; they articulate institutional requirements.
27. Private consulting firms occupy a strategic position in the planning process, serving as the technical representatives of financial institutions.
28. These firms are able to occupy such a position because they appear as outsiders, standing apart from political pressures exerted by mercantilist coalitions.
29. The firms themselves are private ventures whose success depends on the strength of their reputations within the financial community; their attention to the requirements of the community are reinforced.
30. The presence of a vigorous private consulting industry subject to market discipline represents an attractive alternative for all private capital interests to the creation and continuing support of large, potentially powerful government planning agencies.

The Political and Planning Significance of Metropolitan-Scale  
Rapid Transport Facilities

31. Rapid transport facilities appear to be the governmental intervention that will exert the greatest degree of leverage over private metropolitan location decisions while avoiding direct controls on the mobility of capital.
32. This rapid transport focus represents a theory of planning--the minimum sufficient intervention--that reflects the political limits of governmental planning practice.
33. Private transit capital was failing and no longer capable of playing a progressive role in the urban development process. Government intervention in this industry, given a history of intervention in other branches of transportation, was relatively unproblematic.

Alliances Between Mercantilist Coalitions

34. Alliances are formed when choices among various project technical alternatives allow some coalitions to realize their ambitions jointly. Particular technical choices made depend on coalitions' relative political strengths and are made in order to enhance the prospects of certain alliances.
35. There is no private or government agency that can overcome coalition autonomy and enforce alliances against opposition, although some agencies claim to represent the common interests of all places in the region. Mercantilist competition permeates all such private and governmental efforts.





IV. OUTCOMES

36. The outcomes of urban mercantilist competition are: (a) protracted stalemate; and/or (b) projects and transport agencies that represent several limited alliances within a metropolitan area. These reproduce the pattern of urban mercantilist competition prevailing in the regional political economy.
37. Both outcomes generate continuing pressures to overcome urban mercantilist competition, as attempts either to create location advantages or to deal with the financial and service problems resulting from place-interested efforts of the many agencies.

## SOURCES AND NOTES

The California State Archives in Sacramento contained a great deal of material relevant to my research. I used four major collections: (1) the files of the Bay Area Rapid Transit Commission (BARTC); (2) the Earl Warren Papers; (3) the files of the California Toll Bridge Authority (CTBA); and (4) transcripts of state legislative hearings. The California State Library, also in Sacramento, contained a number of legislative hearing transcripts.

The Institute of Transportation Studies Library at the University of California, Berkeley, contained a tremendous amount of information about Bay Area transit issues. Three special collections, kept in an attic atop McLaughlin Hall, were particularly important for me: files of newspaper clippings compiled by the Library from the 1940s through the 1960s; the files of District IV of the California Division of Highways relating to Bay Area rapid transit. The Division of Highways files contained newspaper clippings, memoranda, correspondence, and minutes of Bay Area Rapid Transit Commission, Bay Area Rapid Transit District, and San Francisco Board of Supervisors meetings recorded by Division of Highways personnel; and a file on the Bay Area Transportation League.

The libraries of two state agencies provided important historical

data: the California Public Utilities Commission and the California Department of Transportation (formerly the Division of Highways). The California Public Utilities Commission supplied me with transcripts of hearings and exhibits relating to the 1956 Key System case. The California Department of Transportation library contained project reports, which included transcripts of hearings, about the Bay Area freeway network. These were available in the District IV offices in San Francisco.

I used special collections at two university libraries. The Bancroft Library at the University of California, Berkeley, contained an oral history interview with Alameda Senator Arthur Breed, Jr., the Papers of Merced Senator George Hatfield, and newspaper clipping files compiled by journalist Mary Ellen Leary. Stanford University Library has the Francis V. Keesling, Jr. Papers.

Minutes of the various Section meetings of the Commonwealth Club of California were available at the offices of the Club in San Francisco.

Finally, the libraries of the Bay Area Rapid Transit District and the Alameda-Contra Costa Transit District, both in Oakland, contained a great deal of relevant material. Abbreviations used in the Notes:

ACTD	-- Alameda-Contra Costa Transit District
BARTC	-- Bay Area Rapid Transit Commission
BARTD	-- Bay Area Rapid Transit District
CPUC	-- California Public Utilities Commission
CTBA	-- California Toll Bridge Authority
DPW	-- Department of Public Works, State of California
PBHM	-- Parsons, Brinckerhoff, Hall and MacDonald
PBTB	-- Parsons, Brinckerhoff, Tudor, Bechtel
SFBS	-- San Francisco Board of Supervisors

## NOTES: II SAN FRANCISCO TRANSIT

<sup>1</sup>San Francisco Transportation Technical Committee, History of Public Transit in San Francisco, 1850-1948, June, 1948, pp. 32-33.

<sup>2</sup>Glen Holt, "The Changing Perception of Urban Pathology: An Essay on the Development of Mass Transit in the United States," in Cities in American History, Kenneth Jackson and Stanley Schultz, eds., New York: Alfred A. Knopf, 1972, pp. 324-343; Glen Holt, "Urban Mass Transit History: Where We Have Been and Where We Are Going," in The National Archives and Urban Research, Jerome Finster, ed., Athens: Ohio University Press, 1974, pp. 81-101; Robert Fogelson, The Fragmented Metropolis: Los Angeles, 1850-1930, Cambridge: Harvard University Press, 1967, pp. 85-95, 164-185; Delos Wilcox, Analysis of the Electric Railway Problem, New York: The Author, 1921, pp. 35-77; George Hilton and James Due, The Electric Interurban Railways in America, Stanford: Stanford University Press, 1960; Sam Warner, Streetcar Suburbs, Cambridge: Harvard University Press, 1962; Clay McShane, Technology and Reform: Street Railways and the Growth of Milwaukee, 1887-1900, Madison: State Historical Society of Wisconsin, 1974; Joel Tarr, "From City to Suburb: The 'Moral' Influence of Transportation Technology," in American Urban History, Alexander Callow, ed., 2nd edition, 1973, pp. 202-212.

<sup>3</sup>Hilton and Due, Ibid., pp. 208-239; Melville Ulmer, Capital

in Transportation, Communications and Public Utilities, Princeton:  
Princeton University Press, 1960, p. 33.

<sup>4</sup>San Francisco Transportation Technical Committee, op. cit.,  
pp. 28-29.

<sup>5</sup>Ibid., pp. 38-41.

<sup>6</sup>Ibid., p. 39.

<sup>7</sup>Miller McClintock, Report on San Francisco Citywide Traffic  
Survey, Works Progress Administration Project 6108-5863, 1937, p. 47.

<sup>8</sup>San Francisco Transportation Technical Committee, op. cit.,  
pp. 50-52.

<sup>9</sup>San Francisco Public Utilities Commission, Annual Report, 1945-  
1946, p. 259.

<sup>10</sup>E.G. Cahill, "Report on the first six months of operation  
of the Municipal Railway," March 20, 1945, pp. 20-21.

<sup>11</sup>Marmion D. Mills, "Report on the Rehabilitation of the San  
Francisco Municipal Railway from 1947 to 1951," April 1, 1951, p. 3.

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<sup>13</sup>Leonard Newton, Postwar Transit Plan for Municipal Railway,  
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<sup>14</sup>Technical Committee of the Mayor's Administrative Transporta-  
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<sup>15</sup>Technical Committee of the Mayor's Administrative Transporta-  
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<sup>17</sup>Bauer and Costello, op. cit., pp. 30-119.

<sup>18</sup>San Francisco Public Utilities Commission, Annual Report, 1946-47, p. 246; 1947-48, p. 167; San Francisco Examiner, 7/11/49, 2/1/50.

<sup>19</sup>Traffic, Transit and Thoroughfare Improvements, op. cit., pp. 12, 13, 15, 17, 35.

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<sup>23</sup>SFBS, Journal, 12/10/45, pp. 2632-2633, 12/17/45, pp. 2673-2674, 12/31/45, p. 2746; San Francisco Progress, Haight-Stanyan edition, 1/17/46, editorial.

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<sup>25</sup>Ibid., 5/13/46, pp. 1243-1253.

<sup>26</sup>San Francisco Chronicle, 7/19/46; San Francisco Examiner, 11/16/46, 12/20/46.

<sup>27</sup>San Francisco Chronicle, 4/7/49.

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<sup>31</sup>San Francisco City Planning Commission, Woodruff and Sampson, engineers, "The Master Plan of San Francisco--Transportation--Utilities," Revised, 4/1/46, Appendix II, pp. 1-2.

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<sup>48</sup>San Francisco Congress of Industrial Organizations Council, Housing and Planning Committee, "Analysis of the Master Plan for San Francisco, Section on Transit Facilities," n.d., pp. 4-5; San Francisco Chronicle, 1/20/46.

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<sup>54</sup>Jenkins, ...Municipal Railway..., op. cit., pp. 15, 180-184; San Francisco Examiner, 4/22/49.

<sup>55</sup>San Francisco Chronicle, 8/16/49, editorial.

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<sup>17</sup>Alameda Times, 6/1/46.

<sup>18</sup>Joint Army-Navy Board, An Additional Crossing of San Francisco Bay, 1/25/47, p. 18.

<sup>19</sup>SFBS, Journal, 2/11/46, pp. 271, 278, 7/15/46, p. 2261; San Francisco Chronicle, 4/15/47, 5/6/48.

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<sup>48</sup>U.S. Senate, Committee on Armed Services, "Hearings," Easement for Construction of Toll Crossing of San Francisco Bay, 7/8/49, pp. 96-99.

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<sup>5</sup>Ibid., p. 132.

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<sup>7</sup>Ibid., p. 133.

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<sup>9</sup>East Bay Transit Company, Annual Report, 1939.

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<sup>11</sup>See Moody's, Manual of Investments--Public Utilities, under National City Lines, Los Angeles Transit Lines, Key System, Metropolitan Coach Lines and San Diego Transit for the 1940s and 1950s.

<sup>12</sup>San Francisco Chronicle, 6/17/47; Bus Transportation, 9/52.

<sup>13</sup>CPUC, Decisions, #47577, 8/11/52.

<sup>14</sup>Moody's Manual of Investments--Public Utilities, 1946, under Key System and Los Angeles Transit Lines.

<sup>15</sup>Passenger Transport, 8/24/45.

<sup>16</sup>Ibid., 7/27/45, editorial; Oakland Tribune, 5/15/46; San Francisco Call-Bulletin, 5/15/46.

<sup>17</sup>Bus substitution on College Avenue and another line was permitted by the CPUC in Decisions, #39403, September 10, 1946. The fare increase was granted in Decisions, #39437, 9/24/46.

<sup>18</sup>Remaining rail abandonment and bus substitutions were authorized in four subsequent CPUC Decisions, #41306, 3/9/48; #41385, 3/30/48; #41652, 5/25/48 and #42199, 11/4/48. The second fare increase was granted in Decisions, #42200, 11/4/48.

<sup>19</sup>San Francisco Examiner, 8/10/46; Oakland Tribune, 9/5/47, 9/30/47; Oakland Post-Enquirer, 10/2/47.

<sup>20</sup>Harland Bartholomew & Associates, A Report on Transit Facilities and Mass Transportation in the Oakland Metropolitan Area, March, 1947, pp. 12, 21-23, 35.

<sup>21</sup>Ibid., pp. 42-53

<sup>22</sup>Ibid., p. 44.

<sup>23</sup>Oakland Tribune, 8/28/47.

<sup>24</sup>Oakland Tribune, 11/21/47, 11/26/47.

<sup>25</sup>Oakland Post-Enquirer, 1/20/48; Oakland Tribune, 1/2/48, 2/3/48, 8/27/48; San Francisco Chronicle, 11/18/48; Oakland Post-Enquirer, 12/1/48; CPUC, Decisions, #44113, 5/2/50.

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<sup>28</sup>Richmond Independent, 7/2/48.

<sup>29</sup>Passenger Transport, 4/11/47, 3/18/49.

<sup>30</sup>Oakland Post-Enquirer, 6/13/46.



<sup>31</sup>Oakland Post-Enquirer, 8/14/47; Oakland Tribune, 2/3/48, 2/5/48, editorial; East Oakland Times, 4/23/48; Oakland Tribune, 12/10/48; San Francisco Chronicle, 1/5/49.

<sup>32</sup>Oakland Post-Enquirer, 4/16/48; Oakland Tribune, 4/20/48.

<sup>33</sup>Oakland Post-Enquirer, 4/14/47.

<sup>34</sup>Oakland Tribune, 8/14/47.

<sup>35</sup>Oakland Tribune, 7/25/47.

<sup>36</sup>Hayward Review, 7/29/47.

<sup>37</sup>San Francisco News, 8/1/47.

<sup>38</sup>Hayward Review, 8/8/47, editorial.

<sup>39</sup>Oakland Tribune, 8/6/47.

<sup>40</sup>Bay Area Transportation League file; Berkeley Daily Gazette, 8/20/47; Hayward Daily Review, 10/15/47; Alameda Times-Star, 10/17/47.

<sup>41</sup>Ibid., Hayward Review, 4/22/48; Berkeley Daily Gazette, 8/18/48.

<sup>42</sup>San Francisco Examiner, 6/10/49; Oakland Post-Enquirer, 2/23/50; Bay Area Transportation League file; San Francisco Examiner, 3/11/49.

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THE MOVEMENT BEGINS

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- <sup>2</sup>Oakland Tribune, 2/5/48.
- <sup>3</sup>San Francisco Examiner, 2/12/48.
- <sup>4</sup>San Francisco Examiner, 2/27/48; Oakland Post-Enquirer,  
2/28/48.
- <sup>5</sup>Ibid.; San Francisco Daily Commercial News, 2/27/48.
- <sup>6</sup>San Francisco Examiner, 2/28/48.
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- <sup>8</sup>Hayward Daily Review, 2/27/48, editorial.
- <sup>9</sup>Commonwealth Club of California, Highways and Transportation Section, "Minutes," 3/25/48.
- <sup>10</sup>San Francisco Examiner, 5/14/48.
- <sup>11</sup>Oakland Tribune, 5/21/48.
- <sup>12</sup>Oakland Tribune, 6/4/48.
- <sup>13</sup>San Francisco Examiner, 6/4/48.
- <sup>14</sup>San Francisco Chronicle, 6/10/48.
- <sup>15</sup>Oakland Tribune, 6/18/48.
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- <sup>19</sup>Ibid.
- <sup>20</sup>East Bay News, 8/12/48.
- <sup>21</sup>San Francisco Chronicle, 11/14/48.
- <sup>22</sup>San Francisco Chronicle, 12/2/48.
- <sup>23</sup>San Francisco Examiner, 1/2/49.
- <sup>24</sup>San Francisco Chronicle, 1/13/49.
- <sup>25</sup>Oakland Tribune, 3/13/49; 3/18/49, editorial.
- <sup>26</sup>San Francisco Chronicle, 4/27/49; Commonwealth Club of California, City Planning Section, Draft of Section Report, 1949.
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- <sup>28</sup>Ibid., amended May 23, 1949.
- <sup>29</sup>Ibid., section 2.
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- <sup>31</sup>Ibid., amended May 26, 1949, section 2.
- <sup>32</sup>Ibid., amended 6/9/49.
- <sup>33</sup>Ibid., amended 6/10/49.
- <sup>34</sup>Oakland Tribune, 6/16/49.
- <sup>35</sup>Oakland Post-Enquirer, 5/25/49; Oakland Tribune, 5/29/49; Berkeley Gazette, 6/2/49; Oakland Tribune, 6/2/49; San Francisco Examiner, 6/10/49.
- <sup>36</sup>Berkeley Gazette, 6/2/49; Oakland Tribune, 6/2/49.
- <sup>37</sup>Oakland Tribune, 6/2/49.
- <sup>38</sup>San Francisco Chronicle, 7/31/49; San Francisco Examiner, 9/8/49; San Francisco Examiner, 11/15/49, 12/21/49.

<sup>39</sup>Vincent Carosso, Investment Banking in America, Cambridge: Harvard University Press, 1970, p. 498.

<sup>40</sup>Richard Nelson and Frederick Aschman, Real Estate and City Planning, Englewood Cliffs: Prentice-Hall, 1949, pp. 74-75.

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<sup>42</sup>Vining T. Fisher, "Policy, Program and Progress of San Francisco Parking Authority," Traffic Quarterly, October, 1950, pp. 419-429.

<sup>43</sup>Oakland Post-Enquirer, 7/28/50.

<sup>44</sup>Oakland Tribune, 7/26/50.

<sup>45</sup>California Assembly Interim Committee on Transportation and Commerce, Subcommittee on the Transportation Problems of Alameda and Contra Costa Counties, "Transcript of Proceedings," May 17, 18, 1954, pp. 92-93, 100.

<sup>46</sup>California Railroad Commission, Transportation Department, Results of Emergency Transportation Survey, Los Angeles and Vicinity, April, 1942; San Francisco and Vicinity, May, 1942

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<sup>48</sup>Harold Passer, The Electrical Manufacturers: 1875-1900, Cambridge: Harvard University Press, 1953, pp. 340-343.

<sup>49</sup>General Electric Corporation, "Rapid Transit: Cure for Congestion," 1955.

<sup>50</sup>San Francisco Public Utilities Commission, Municipal Railway Annual Report, 1946-47, p. 45-47; 1956-57, p.5.

<sup>51</sup>San Francisco Chronicle, 8/16/49; San Francisco Examiner, 1/17/50, 1/31/50.

<sup>52</sup>San Francisco Public Utilities Commission, Municipal Railway Annual Report, 1956-57, p. 5; 1958-59, p. 7, 8; 1962-63, p. 2, 9.

<sup>53</sup>Ibid., 1952-53, p. 50; 1954-55, p. 45-46, 48.

<sup>54</sup>Ibid., 1957-58, pp. 16-17.

<sup>55</sup>California Public Utilities Commission, Application 36656, Exhibit #11, "Comparison of Annual Number of Persons Traveling Across San Francisco-Oakland Bay Bridge By Auto and Key System, 1941-55 Inclusive," p. 47.

<sup>56</sup>Moody's, Manual of Investments-Public Utilities, 1946-1954, Key System Transit Lines entries.

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<sup>58</sup>Oakland Tribune, 9/2/49, 9/28/49.

<sup>59</sup>Oakland Tribune, 8/7/49.

<sup>60</sup>Oakland City Planning Commission Staff, The Transit Problem in the East Bay, March, 1950, pp. 38, 46.

<sup>61</sup>San Francisco Examiner, 6/17/50; The CPUC granted Key fare increases in 1949 in Decisions, #43248, 8/23/49. Another increase was granted in Decisions, #45205, 12/28/50.

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<sup>63</sup>CPUC, Decisions, #44670, 8/15/50.

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<sup>65</sup>CPUC, Decisions, #44670.

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<sup>67</sup>CPUC, Decisions, #45785.

<sup>68</sup>San Francisco Chronicle, 1/14/50.

<sup>69</sup>CPUC, Decisions, #45785.

<sup>70</sup>Ibid., Oakland Tribune, 2/15/50.

<sup>71</sup>CPUC, Decisions, #45785.

<sup>72</sup>Ibid.

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<sup>74</sup>California Assembly Interim Committee on Transportation and Commerce, op. cit., pp. 28-29.

<sup>75</sup>Paul Wendt, Central City Property Values in San Francisco and Oakland, Washington, DC.: Highway Research Board, 1953, pp. 120, 132, 135, 137, 141.

<sup>76</sup>Ibid., pp. 150-152.

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<sup>2</sup>San Francisco Chronicle, 11/1/49; San Francisco Bay Area Council, "Chronological History: Additional Crossings of San Francisco Bay," 11/2/51. Earl Warren Papers, Box 311, Division of Highways-Bridges, July-December, 1951.

<sup>3</sup>San Francisco Bay Area Council, Ibid.

<sup>4</sup>California Senate, Bills, Senate Bill 457, 1951.

<sup>5</sup>Ibid., California Toll Bridge Authority, "Transcript of Meeting," November 27, 1951, pp. 45, 55.

<sup>6</sup>CTBA, Ibid., pp. 32-35.

<sup>7</sup>San Francisco Bay Area Council, "Memorandum of Meeting with Mayor Elmer Robinson re: San Francisco-Oakland Bay Bridge," 8/3/51; Letter from Oakland Mayor Clifford Rishell to Governor Earl Warren, 10/26/51. Earl Warren Papers, op. cit., July-December, 1951.

<sup>8</sup>Frank Marsh to Earl Warren, 8/14/51. Warren Papers, Ibid.

<sup>9</sup>CTBA, "Transcript of Meeting," 11/27/51, pp. 1-31.

<sup>10</sup>Ibid., pp. 32-45.

<sup>11</sup>Ibid., pp. 49-55.

<sup>12</sup>Ibid., pp. 45-49.

<sup>13</sup>Ibid., "Resolutions."

<sup>14</sup>California Supreme Court, "California Toll Bridge Authority vs. Kuchel," 40 California (2d)43, pp. 43-54.

<sup>15</sup>Office of the Mayor of San Francisco, "Statement of Mayor Elmer E. Robinson, Reference Bay Bridges, November 20, 1952, Warren Papers, op. cit., September-December, 1952.

<sup>16</sup>Bay Crossing Committee of East Bay Communities, "Resolution," 11/26/52; Frank Marsh Memorandum to the San Francisco Bay Area Council, 11/21/52, Warren Papers, Ibid.

<sup>17</sup>Frank Durkee to Earl Warren, 12/3/52, Warren Papers, Ibid.

<sup>18</sup>B.W. Booker to John J. Fleming, "Report on Meetings of State Assembly Sub-Committee on Bay Area Regional Problems," 12/22/52. Warren Papers, Ibid.

<sup>19</sup>Ibid.

<sup>20</sup>B.W. Booker to John J. Fleming, "Meeting of San Francisco County Board of Supervisors' Committee on County, State, and National Affairs," 1/2/53, Warren Papers, January 1953.

<sup>21</sup>Ibid.

<sup>22</sup>B.W. Booker to John J. Fleming, "Report of Meeting of Supervisors, City and County of San Francisco," 1/5/53, 1/12/53, Warren Papers, Ibid.

<sup>23</sup>California Statutes, Chapter 1056, 1953, signed into law June 6, 1953.



<sup>24</sup>Marvin Lewis and F.V. Keesling, Jr., "Telephone Conversation," no date, Keesling Papers, Box 2, folder 44.

<sup>25</sup>Committee on Public Works, U.S. House of Representatives, "Hearings," 6/23/53, p. 83.

<sup>26</sup>Ibid., pp. 84-93.

<sup>27</sup>Marvin Lewis and Joseph Knowland, "Transcript of Telephone Conversation," 6/30/53, Keesling Papers Box 2, Folder 44.

<sup>28</sup>Ibid.

<sup>29</sup>Bay Crossings Committee of East Bay Communities to Marvin Lewis, 6/30/53, Keesling Papers, Box 2, Folder 44.

<sup>30</sup>Federal Law, Public Law 154, Chapter 248, 83rd Congress, 1st Session, approved 7/27/53.

<sup>31</sup>San Francisco Examiner, 8/20/53, editorial.

<sup>32</sup>Ibid.

<sup>33</sup>San Francisco Examiner, 8/25/53; San Francisco Chronicle, 8/26/53; San Francisco Examiner, 9/2/53; San Francisco Call-Bulletin, 9/11/53; Bay Region Business, June 26, 1952, September 4, 1953.

<sup>34</sup>Division of San Francisco Bay Toll Crossings, Progress Report, Southern Crossing, December, 1954.

NOTES: VII BAY AREA RAPID TRANSIT COMMISSION AND  
PARSONS, BRINCKERHOFF, HALL AND  
MAC DONALD

<sup>1</sup>San Francisco Examiner, 1/19/51; California Senate, Bills,  
Senate Bills 548, 878, 879, 1951.

<sup>2</sup>California Senate, Bills, Senate Bill 549, 1951.

<sup>3</sup>California Senate, Bills, Senate Bill 548, 878, 879, 1951.

<sup>4</sup>Oakland Tribune, 2/13/51, 2/14/51, 2/15/51; San Francisco  
Examiner, 2/13/51.

<sup>5</sup>San Francisco Examiner, 2/27/51.

<sup>6</sup>California Senate, Bills, Senate Bill 549, introduced 1/18/51.

<sup>7</sup>Berkeley Gazette, 2/13/51.

<sup>8</sup>California Statutes, Chapter 1760, signed 7/25/51.

<sup>9</sup>BARTC, "Minutes," Spring and Summer, 1952; BARTC files,  
Technical Advisory Board, folder A5-6.

<sup>10</sup>BARTC, "Minutes," July 10, 1952.

<sup>11</sup>Ibid., 7/10/52.

<sup>12</sup>Ibid., 7/10/52, 9/25/52.

<sup>13</sup>Ibid., 8/27/52.

<sup>14</sup>Ibid., 10/22/52.

<sup>15</sup>Ibid., 10/22/52.

<sup>16</sup>Ibid., 11/6/52.

<sup>17</sup>Ibid., 11/6/52.

<sup>18</sup>Ibid., 8/14/52, 10/22/52, 11/12/52.

<sup>19</sup>San Francisco Bay Area Rapid Transit Commission,  
Preliminary Report, 12/30/52.

<sup>20</sup>California Senate, Bills, Senate Bill 109, introduced  
1/8/53.

<sup>21</sup>BARTC, "Minutes," 3/12/53.

<sup>22</sup>California Senate, Bills, Senate Bill 109, amended  
5/26/53; California Statutes, Chapter 1212, signed 6/18/53.

<sup>23</sup>BARTC, "Minutes," 11/6/52.

<sup>24</sup>Passenger Transport, 12/7/51.

<sup>25</sup>BARTC, "Minutes," 11/6/52.

<sup>26</sup>CPUC, Decisions, #49307, 11/10/53; CPUC Application  
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7/15/53, Report by CPUC Transportation Division, pp. 1, 3, 15.

<sup>27</sup>Coverdale and Colpitts, Report on the Bridge Railway  
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<sup>28</sup>BARTC, "Minutes," 8/6/53.

<sup>29</sup>Ibid., 8/6/53.

<sup>30</sup>Ibid., 8/6/53.

<sup>31</sup>BARTC files, Technical Advisory Committee, 6/8/53,  
folder A5-6.

<sup>32</sup>BARTC, Memo from A. Cohan to J. Beckett, 7/24/53, Minutes  
of Engineering Committee, folder A5-1.

<sup>33</sup>Walter Douglas, An Enduring Heritage: Ninety Years of  
Progress in Engineering, Planning and Architecture, Address to the

Newcomen Society in North America, Princeton: Princeton University Press, 1975, pp. 8, 9, 12, 13.

<sup>34</sup>San Francisco Bay Area Rapid Transit Commission, Report to the Legislature of the State of California, December, 1957, p. 29.

<sup>35</sup>BARTC Prime Contractor Files, A5-3, #1.

<sup>36</sup>Douglas, op. cit., p. 5.

<sup>37</sup>A. Walsh, The Public's Business, Cambridge: MIT Press, 1978, pp. 89-102, 172-183.

<sup>38</sup>BARTC, "Minutes," 11/12/53; Memo, J. Fleming to B.W. Booker, 9/16/53, Division of Highways BART files.

<sup>39</sup>BARTC, "Minutes," 11/12/53.

<sup>40</sup>San Francisco News, 5/12/55.

<sup>41</sup>BARTC, Prime Contractor Files, 8/17/54, A5-3.

<sup>42</sup>BARTC, Engineering Committee, 9/29/54, A5-1.

<sup>43</sup>Ibid., 9/29/54.

<sup>44</sup>Ibid., 9/29/54.

<sup>45</sup>Ibid., 9/29/54.

<sup>46</sup>Memo, J.J. Fleming to B.W. Booker, 10/4/54, Division of Highways BART Files.

<sup>47</sup>Ibid.

<sup>48</sup>BARTC, Engineering Committee, 10/20/54, A5-1.

<sup>49</sup>Ibid.

<sup>50</sup>Ibid.

<sup>51</sup>Ibid.

<sup>52</sup>BARTC, Contract between BARTC and PBHM, Prime Contractor files, A5-3.

<sup>53</sup>BARTC, Engineering Committee, 12/2/54, A5-1.

<sup>54</sup>Ibid.

<sup>55</sup>Melvin Webber, "Metropolitan Growth and the Role of Transportation," in Proceedings of the Second Annual University of California Conference on City and Regional Planning, "Moving People in Metropolitan Areas," Berkeley, 1954, pp. 9, 13-15.

<sup>56</sup>Melvin Webber, "Alternative Metropolitan Structures," in Ernest Engelbert, ed., The Nature and Control of Urban Dispersal, Southern California Planning Institute, University of California Press, 1960, pp. 12-13, 15.

<sup>57</sup>Los Angeles Chamber of Commerce, Rapid Transit Action Group, "Rail Rapid Transit--Now," February, 1948.

<sup>58</sup>California Statutes, Chapter 1319, signed June 25, 1955.

NOTES: VIII ORIGINS OF THE ALAMEDA-CONTRA COSTA  
TRANSIT DISTRICT

<sup>1</sup>Memo, J.J. Fleming to B.W. Booker, 9/11/53, Division of Highways BART files.

<sup>2</sup>Oakland Tribune, 5/22/47, 6/11/47; Berkeley Daily Gazette, 6/28/47.

<sup>3</sup>Oakland Tribune, 9/9/53.

<sup>4</sup>Memo, J.J. Fleming to B.W. Booker, 9/11/53, op. cit.; Bus Transportation, January, 1954, p. 23.

<sup>5</sup>Oakland Tribune, 9/24/54.

<sup>6</sup>San Francisco News, November 30, 1954.

<sup>7</sup>Ibid.

<sup>8</sup>Ibid., 12/7/54.

<sup>9</sup>BARTC, "Minutes," 12/9/54.

<sup>10</sup>Senate Interim Committee on Rapid Transit Problems, "Minutes of the Morning Session," 12/20/54, BARTC, Senate Interim Committee files, A18-1.2.

<sup>11</sup>Ibid.

<sup>12</sup>Ibid.

<sup>13</sup>Ibid.

<sup>14</sup>Special Committee of BARTC, "Minutes of Meeting," 1/6/55,  
A-8.

<sup>15</sup>BARTC, "Minutes," 1/13/55.

<sup>16</sup>California Senate, Bills, Senate Bill 987, introduced  
1/18/55.

<sup>17</sup>California Senate, Bills, Senate Bill 987, amended 3/30/55.

<sup>18</sup>California Senate, Bills, Senate Bill 987, amended in  
Assembly, 4/30/55.

<sup>19</sup>Ibid., 4/1/55.

<sup>20</sup>Oral History Interview, Arthur H. Breed, Jr., Regional  
Oral History Project, Bancroft Library, University of California,  
Berkeley, p. 25.

<sup>21</sup>BARTC, "Minutes," 7/11/56.

<sup>22</sup>Oakland Tribune, 5/1/56, 9/20/56, editorial.

<sup>23</sup>Robert Nisbet, "Relation of the Alameda-Contra Costa  
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Address to the Section on Highways and Transportation of the Common-  
wealth Club of California, San Francisco, 7/10/56.

<sup>24</sup>Oakland Tribune, 9/12/56.

<sup>25</sup>Oakland Tribune, 11/8/56.

NOTES: IX PARSONS, BRINCKERHOFF, HALL AND  
MAC DONALD AND REGIONAL RAPID TRANSIT

<sup>1</sup>Parsons, Brinckerhoff, Hall and MacDonald, Regional Rapid Transit, 1/5/56.

<sup>2</sup>Ibid., pp. 60-64.

<sup>3</sup>Ibid., p. 64.

<sup>4</sup>Letter from F.V. Keesling, Jr., to U.S. Senator Lester Hunt, 10/25/49, Keesling Papers, Box 3, folder 45; U.S. House of Representatives, Committee on Expenditures in the Executive Department, "Investigation of Surplus Real Property and Consolidation of Facilities of the Armed Services in the San Francisco Bay Area," Thirteenth Intermediate Report, 6/2/48, p. 7.

<sup>5</sup>San Francisco Chronicle, 6/9/55, 6/10/55.

<sup>6</sup>PBHM, "Status Report to the Engineering Committee," May 4, 1955, p. 2; BARTC, Engineering Committee files, A5-1.

<sup>7</sup>Ibid., p. 3.

<sup>8</sup>Ibid., p. 3.

<sup>9</sup>Ibid., p. 4.

<sup>10</sup>Ibid., p. 4.

<sup>11</sup>PBHM, Regional Rapid Transit, op. cit., pp. 31, 37-39.

<sup>12</sup>Ibid., p. 105.



<sup>13</sup>Memo from PBHM to BARTC, 4/1/54, BARTC, Prime Contractor files, A5-3.

<sup>14</sup>Herbert Cerwin and staff, "Future Public Relations Projects for San Francisco Bay Area Rapid Transit Commission," 2/8/56, BARTC, Public Relations files, A7-3.

<sup>15</sup>Nestor Barrett to Herbert Cerwin, 5/2/56, BARTC, Public Relations files, A7-3.

<sup>16</sup>"A Story of 'Rapid Transit'," Presentation of Material for San Francisco School System on San Francisco Bay Area Rapid Transit, 7/16/56, BARTC, Public Relations files, A7-3.

<sup>17</sup>See the literature cited in footnote 2, Chapter 1. Also, John McKay, Tramways and Trolleys: The Rise of Urban Mass Transport in Europe, Princeton: Princeton University Press, 1976; James Scobie, Buenos Aires: Plaza to Suburb, 1870-1910, New York: Oxford University Press, 1974, pp. 161-207.

<sup>18</sup>BARTC, "Minutes," 1/16/57.

<sup>19</sup>Coleman Woodbury, The Future of Cities and Urban Redevelopment, Chicago: University of Chicago Press, 1953, Part II, "Industrial Location and Urban Redevelopment," by C. Woodbury with the assistance of Frank Cliffe, Tables 5 and 6, pp. 253-261.

<sup>20</sup>War Production Board, Program and Statistics Bureau, War Manufacturing Facilities Authorized through December, 1944, 6/15/45. My calculations from the charts in this document.

<sup>21</sup>PBHM, Regional Rapid Transit, p. 20.

<sup>22</sup>Stuart Walsh, "Changing Labor Patterns and Decentralization," Proceedings of the First Annual University of California Conference on City and Regional Planning, "Problems of Decentralization

in Metropolitan Areas," Berkeley, 5/22/53, p. 28.

<sup>23</sup>Ibid., p. 28.

<sup>24</sup>Ibid.

<sup>25</sup>PBHM, Regional Rapid Transit, pp. 20, 31.

<sup>26</sup>Ibid., p. 43.

<sup>27</sup>Ibid.

<sup>28</sup>Senate Interim Committee on Rapid Transit in the San Francisco Bay Area, "Transcript," November 19-20, 1956, pp. 154, 156, 157.

<sup>29</sup>Ibid., p. 158.

<sup>30</sup>PBHM, Regional Rapid Transit, p. 43.

<sup>31</sup>Ibid., p. 105.

<sup>32</sup>Ibid., pp. 39-42.

<sup>33</sup>Henry Quimby, "Technical Report on Rapid Transit Traffic," 1/5/56, p. 25.

<sup>34</sup>Ibid., pp. 71-73.

<sup>35</sup>Ibid., pp. 6-7, Exhibit 4.

<sup>36</sup>PBHM, Regional Rapid Transit, pp. 72-73. All total traffic and patronage projection figures are my calculations from the bar graphs on these pages.

<sup>37</sup>Ibid., p. 34

<sup>38</sup>Division of Highways, California Department of Public Works, Report to the CTBA on the Bridge Railway Situation on the San Francisco-Oakland Bay Bridge, October, 1954, I-41; CPUC, Application #36656, Exhibit #11, op. cit.

<sup>39</sup>Division of Highways, op. cit., I-52-64.

<sup>40</sup>Ibid.

<sup>41</sup>San Francisco Department of City Planning, Daily Trips in San Francisco, April 1955, pp. 78-79; PBHM, Regional Rapid Transit, p. 27.

<sup>42</sup>San Francisco Department of City Planning, op. cit., pp. 23, 35-36; "Modernizing Downtown San Francisco," January, 1955, pp. 9-10.

<sup>43</sup>PBHM, Regional Rapid Transit, p. 42.

<sup>44</sup>Ibid., pp. 103, 2.

<sup>45</sup>Ibid., p. 55.

<sup>46</sup>Ibid., pp. 2-3.

<sup>47</sup>Ibid., p. 57.

<sup>48</sup>Rush Ziegenfelder and Elwyn King, Technical Report on San Francisco-Oakland Bay Bridge, 4/4/55, revised 8/15/55.

<sup>49</sup>PBHM, Regional Rapid Transit, p. 103.

<sup>50</sup>Ibid., pp. 2-3.

<sup>51</sup>BARTC, "Minutes," 5/9/56.

<sup>52</sup>Melvin Webber, "Metropolitan Growth and the Role of Transportation," op. cit., p. 15.

<sup>53</sup>Stanford Research Institute, "Organizational and Financial Aspects of the Proposed San Francisco Bay Area Rapid Transit System," February, 1956. (Included as an appendix to San Francisco Bay Area Rapid Transit Commission, Report to the Legislature of the State of California, December, 1957.

<sup>54</sup>Ibid., pp. 108-110, 117.

NOTES: X REACTION TO REGIONAL RAPID  
TRANSIT

<sup>1</sup>San Francisco Chronicle, 2/28/56; San Francisco Examiner, 2/25/56.

<sup>2</sup>Memo, J.J. Fleming to B.W. Booker, 2/28/56, Division of Highways BART files; San Francisco Chronicle, 3/30/56; California Senate, Bills, State Constitutional Amendment #3, introduced March 21, 1956.

<sup>3</sup>Marmion Mills, Rapid Transit for San Francisco: Monorail-Elevated-Subway? A Report of Possibilities for Mayor Elmer E. Robinson and the Public Utilities Commission of San Francisco, June, 1952.

<sup>4</sup>San Francisco News, 4/22/53; Memo, J.J. Fleming to B.W. Booker, 4/23/53, Division of Highways BART files; BARTC, "Minutes," 5/14/53; San Francisco Chronicle, 5/15/53.

<sup>5</sup>San Francisco Chronicle, 4/23/56, 4/24/56.

<sup>6</sup>Joint Interim Committee on Transportation Problems, "Transcript," San Francisco, 11/29/55, testimony of Sherman Duckel, Director of Public Works for San Francisco, p. 8.

<sup>7</sup>Bay Region Business, 4/13/56.

<sup>8</sup>Memo, J.J. Fleming to B.W. Booker, 7/12/56, Division of Highways BART files.

<sup>9</sup>CPUC, Decisions, #51391, 4/26/55, #61268, 12/28/60.

<sup>10</sup>CPUC, Application #30095, "Transcript of Hearings," p. 1200.

<sup>11</sup>Commonwealth Club of California, Highways and Transportation Section, "Minutes of Meetings," 6/12/56, p. 1.

<sup>12</sup>Ibid., pp. 4-5.

<sup>13</sup>Ibid., p. 5.

<sup>14</sup>Ibid., p. 5.

<sup>15</sup>San Francisco Chronicle, 3/7/56; BARTC, "Minutes," 3/14/56; California Senate, Bills, Senate Bill 43, introduced 3/13/56 by Marin Senator John McCarthy.

<sup>16</sup>Oakland Tribune, 8/15/56.

<sup>17</sup>Richmond Independent, 10/18/56; Oakland Tribune, 12/12/56.

<sup>18</sup>Oakland Tribune, 12/12/56; Alameda-Contra Costa Transit District, "Official Statement Relating to...Bonds," 8/17/60, pp. 4-5.

<sup>19</sup>Commonwealth Club of California, Highways and Transportation Section, "Minutes of Meetings," 8/14/56.

<sup>20</sup>Ibid., 8/28/56.

<sup>21</sup>San Francisco Section, American Society of Civil Engineers, "The Rapid Transit Proposal for the San Francisco Bay Area: An Appraisal by the Special Committee on Rapid Transit," 12/18/56, pp. 12-14.

<sup>22</sup>Ibid., pp. 20, 21.

<sup>23</sup>PBHM, Regional Rapid Transit, p. 51.

<sup>24</sup>BARTC, "Minutes," 5/9/56.

<sup>25</sup>Ibid.

<sup>26</sup>Senate Interim Committee on Rapid Transit in the San Francisco Bay Area, "Transcript," November 19-20, 1956, pp. 3-4,

9-10, 14, 17.

<sup>27</sup>Ibid., p. 119.

<sup>28</sup>Ibid., p. 14.

<sup>29</sup>Ibid., pp. 19-21; BARTC, "Minutes," 10/10/56.

<sup>30</sup>Senate Interim Committee on Rapid Transit in the San Francisco Bay Area, op. cit., p. 25.

<sup>31</sup>Ibid., pp. 17-21.

<sup>32</sup>Ibid., see the testimony of the various local governments.

<sup>33</sup>Ibid., p. 118.

<sup>34</sup>Ibid., pp. 57-58, 164-165.

<sup>35</sup>Ibid., Oakland and Richmond testimony.

<sup>36</sup>Ibid., pp. 62-68.

<sup>37</sup>Ibid., pp. 74-75.

<sup>38</sup>Ibid., pp. 205-206.

<sup>39</sup>Ibid., p. 210.

<sup>40</sup>Ibid., pp. 218-220.

<sup>41</sup>Ibid., pp. 239-240.

NOTES: XI CALIFORNIA PUBLIC UTILITIES COMMISSION  
AND KEY SYSTEM

<sup>1</sup>CPUC, Decisions, #51834, 8/16/55; #54242, 12/11/56.

<sup>2</sup>BARTC, "Minutes," 2/10/55.

<sup>3</sup>California Senate, Bills, Senate Bill 1843, introduced 1/21/55; California Assembly, Bills, Assembly Bill 1419, introduced 1/15/55.

<sup>4</sup>BARTC, "Minutes," 2/10/55.

<sup>5</sup>CPUC, Application #36656. Hearings began April 23 and lasted through July 19, 1956.

<sup>6</sup>Ibid., "Transcript of Hearings," pp. 7-10, 648-649.

<sup>7</sup>Ibid., p. 17.

<sup>8</sup>Ibid., pp. 161-162, 305.

<sup>9</sup>Ibid., pp. 164-165.

<sup>10</sup>Ibid., pp. 162-164.

<sup>11</sup>Ibid., pp. 218-219.

<sup>12</sup>Ibid., pp. 342-343, 354-355.

<sup>13</sup>Ibid., pp. 350-352.

<sup>14</sup>Ibid., pp. 366-367.

<sup>15</sup>Ibid., pp. 868-869.

<sup>16</sup>Ibid., pp. 386-388.

<sup>17</sup>Bus Transportation, 2/56, p. 54.

<sup>18</sup>Ibid., 8/56, p. 50.

<sup>19</sup>PBHM, Regional Rapid Transit, p. 105.

<sup>20</sup>Division of Highways, DPW, Report to CTBA on the Bridge Railway..., October, 1954, pp. IV-4-5.

<sup>21</sup>Ibid.

<sup>22</sup>CPUC, Application #36656, "Transcript of Hearings," pp. 1050-1051.

<sup>23</sup>Division of Highways, Report to CTBA..., p. III-1.

<sup>24</sup>CPUC, Application #36656, "Transcript," pp. 1050-1051.

<sup>25</sup>Ibid., pp. 1177-1183.

<sup>26</sup>Ibid., pp. 1184-1185.

<sup>27</sup>Division of Highways, Report to CTBA..., October, 1954, Part III.

<sup>28</sup>CPUC, Application #36656, "Transcript," pp. 1185-1187.

<sup>29</sup>Ibid., pp. 1187-1189.

<sup>30</sup>Ibid., pp. 680-682, 1493-1502.

<sup>31</sup>Ibid., pp. 1384-1392.

<sup>32</sup>Ibid., pp. 1170-1173.

<sup>33</sup>Ibid., p. 558.

<sup>34</sup>Ibid., p. 567.

<sup>35</sup>Ibid., pp. 570-571.

<sup>36</sup>Ibid., pp. 571-572.

<sup>37</sup>Letter from Alan Browne to Captain Cohan, 6/8/56, BARTC, Senate Interim Committee files, A18-1.

<sup>38</sup>CPUC, Application #36656, "Transcript," pp. 1466-1473, 1492.



<sup>39</sup> Ibid., p. 1489.

<sup>40</sup> Ibid.

<sup>41</sup> Ibid., pp. 1489-1490.

<sup>42</sup> Ibid., pp. 1491-1492.

<sup>43</sup> Ibid., pp. 1581-1583.

<sup>44</sup> Ibid., p. 1584.

<sup>45</sup> Ibid., pp. 1634-1635.

<sup>46</sup> Ibid., pp. 1653-1656.

<sup>47</sup> Ibid., pp. 1656-1664.

<sup>48</sup> CPUC, Decisions, #54242, 12/11/56, p. 322-323.

<sup>49</sup> Ibid., pp. 331-332.

<sup>50</sup> CTBA, "Minutes," 12/12/56.

## NOTES: XII BRIDGE CROSSINGS III

<sup>1</sup>Division of San Francisco Bay Toll Crossings, California DPW, Report to the DPW on the Southern Crossing of San Francisco Bay, December, 1955, VIII-55.

<sup>2</sup>San Francisco Chronicle, 3/3/56.

<sup>3</sup>California Statutes, Chapter 67, 1st Extra-ordinary Session, 1956, signed April 30, 1956.

<sup>4</sup>San Francisco Examiner, 4/3/56.

<sup>5</sup>San Francisco Chronicle, 3/16/56.

<sup>6</sup>San Francisco Chronicle, 3/19/56, editorial.

<sup>7</sup>San Francisco Chronicle, 3/13/56, 3/17/56.

<sup>8</sup>San Francisco Chronicle, 3/15/56; California, Statutes, Chapter 40, First Extraordinary Session, 1956, signed April 13, 1956.

<sup>9</sup>CTBA, "Minutes," 12/12/56.

<sup>10</sup>California, Statutes, Chapter 27, 1957.

<sup>11</sup>Division of San Francisco Bay Toll Crossings, Reconstruction of the San Francisco-Oakland Bay Bridge, March, 1957, p. 21.

<sup>12</sup>CPUC, Application #36656, "Transcript," pp. 1677-1678.

<sup>13</sup>CPUC, Decisions, #54669, 3/12/57, pp. 4-6.

<sup>14</sup>Ibid., pp. 8-10.

<sup>15</sup>California Senate, Bills, Senate Bill #1643, introduced 1/22/57, amended 4/24/57.

<sup>16</sup>California Senate, Bills, Senate Bill #1643, amended in Assembly, 5/23/57.

<sup>17</sup>California, Statutes, Chapter 2416, 1957.

<sup>18</sup>CTBA, "Minutes," 4/3/58.

<sup>19</sup>CTBA, "Minutes," 4/30/58.

<sup>20</sup>California, Statutes, Chapter 1954, 1971.

## NOTES: XIII BAY AREA RAPID TRANSIT DISTRICT

<sup>1</sup>California Senate, Bills, Senate Bill #850, introduced 1/17/57; Commonwealth Club of California, Highways and Transportation Section, "Remarks of A.M. Cohan," 6/25/57.

<sup>2</sup>California Senate, Bills, Senate Bill #850, introduced 1/17/57.

<sup>3</sup>BARTC, "Minutes," 1/16/57.

<sup>4</sup>San Francisco Chronicle, 2/21/57.

<sup>5</sup>Letter from Nestor Barrett to Alan Browne, 2/25/57, BARTC Commission Progress Reports, A18-1.1.

<sup>6</sup>BARTC, local government testimony on SB 850, ibid.

<sup>7</sup>California Senate, Bills, Senate Bill #850, amended 3/7/57; amended 4/4/57; Commonwealth Club of California, op. cit.

<sup>8</sup>San Francisco Labor Council, "Official Minutes," 4/26/57; "Official Bulletin," 5/15/57.

<sup>9</sup>Commonwealth Club of California, op. cit.

<sup>10</sup>California Senate, Bills, Senate Bill #850, amended in Assembly, 5/13/57.

<sup>11</sup>Ibid., 5/25/57.

<sup>12</sup>Commonwealth Club of California, Rapid Transit for the Bay Area? 5/25/57, pp. 104-105.

<sup>13</sup> Ibid., p. 104.

<sup>14</sup> Ibid., p. 105.

<sup>15</sup> BARTC, "Minutes," 6/14/57.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

## NOTES: XIV ACTD, BARTD, AND THE BRIDGE RAILWAY

<sup>1</sup>ACTD, "Minutes," 1/10/57.

<sup>2</sup>ACTD, "Minutes," 2/6/57, 2/14/57.

<sup>3</sup>ACTD, "Minutes," 3/14/57.

<sup>4</sup>ACTD, "Minutes," 4/11/57.

<sup>5</sup>Ibid.

<sup>6</sup>ACTD, "Minutes," 5/9/57.

<sup>7</sup>Ibid.

<sup>8</sup>Oakland Tribune, 2/6/57, editorial.

<sup>9</sup>ACTD, "Minutes," 5/23/57.

<sup>10</sup>ACTD, "Minutes," 6/13/57.

<sup>11</sup>ACTD, "Minutes," 7/11/57, 8/27/57.

<sup>12</sup>ACTD, "Minutes," 7/11/57.

<sup>13</sup>Ibid.

<sup>14</sup>DeLeuw, Cather and Company, Preliminary Report on Trans-Bay Transit, November, 1957, p. 1.

<sup>15</sup>ACTD, "Minutes," 11/14/57.

<sup>16</sup>DeLeuw, Cather, op. cit.

<sup>17</sup>Ibid., pp. 24-28.

<sup>18</sup>ACTD, "Minutes," 11/14/57.

<sup>19</sup>Ibid.

<sup>20</sup>DeLeuw, Cather and Company, Report on an Initial Transit Plan, December, 1957.

<sup>21</sup>Ibid., p. 18.

<sup>22</sup>Oakland Tribune, 11/10/57.

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<sup>46</sup>Ibid., pp. 7-9.

<sup>47</sup>Ibid., pp. 14-17.

<sup>48</sup>Ibid., pp. 20-21.

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<sup>59</sup>Transit Times, 7/58, 11/58, 1/59, 2/59, 3/59, 9/59.

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<sup>3</sup>Ibid., pp. VII, 13.

<sup>4</sup>Ibid., pp. IX-X.

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<sup>9</sup>Arthur Jenkins and Associates, "Abstract of Purchase Agreement," Appendix 2 in ACTD, "Official Statement...Bonds," op. cit.

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<sup>6</sup>Scott, pp. 193, 199.

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## REDUNDANCY IN PUBLIC TRANSIT

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