

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

Minutes of Special Meeting of  
of Board of Directors of the District

January 12, 1976

Upon notice duly given, the Directors of the Southern California Rapid Transit District met at a special meeting in the District Board Room, 1060 South Broadway, Los Angeles, California, at 10:05 a.m. on January 12, 1976, at which time President Byron E. Cook called the meeting to order.

Directors present:

Byron E. Cook, President	Marvin L. Holen
Thomas G. Neusom, Vice Pres.	Jay B. Price
George W. Brewster (entered at 10:10 a.m.)	George Takei
Donald Gibbs	Baxter Ward
Adelina Gregory	

Directors absent:

Victor M. Carter  
Pete Schabarum

Staff present:

Jack R. Gilstrap, General Manager  
Richard T. Powers, General Counsel  
Richard Gallagher, Manager of Rapid Transit  
Joe B. Scatchard, Controller-Treasurer-Auditor  
Jack Stubbs, Asst. General Manager for Administration  
George L. McDonald, Manager of Planning & Marketing  
John S. Wilkens, Manager of Employee Relations  
Robert Williams, Manager of Customer Relations  
Richard K. Kissick, Secretary

Also present were members of the public and the news media.

Resolution  
No. Assigned

Report of President

President Cook reported on meetings with Mayor Bradley and Councilman Ferraro, Chairman of the City Council Ad Hoc Committee on Rapid Transit, and on telephone conversations with Mr. Dee Jacobs, UMTA Regional Administrator, the results of which indicated that the District's actions on January 7 in approving the Alternative Analysis on only the southerly portion of the rapid transit starter line corridor were ill-timed, and that the Board should reconsider and include the entire broad corridor running from Canoga Park to Long Beach. He then called upon General Manager Gilstrap for his report.

Report of the General Manager

General Manager Gilstrap briefly summarized his report dated January 12, 1976 entitled "Rapid Transit Alternatives Analysis Programs."

The report outlined the steps in rapid transit development from concept to revenue operation, and summarized the UMTA requirements at the stage the District finds itself today, and described the alternatives to be analyzed as per those alternatives.

Resolution  
No. Assigned

The report also included the reasons why UMTA had rejected transit proposals in Detroit, New Jersey, Dayton and other areas, and emphasized the UMTA requirements which the District must meet in order to receive UMTA approval of an application for preliminary engineering on a rapid transit starter line. The report outlined two programs for proceeding with an Alternative Analysis, as follows:

PROGRAM "A"

Analysis from the Los Angeles Central Business District south to the Long Beach Harbor area which can be accomplished with an estimated budget of \$150,000.

PROGRAM "B"

Analysis of the entire broad corridor from Canoga Park through the Los Angeles Central Business District southerly to the Long Beach-San Pedro Harbor area at a total estimated budget of \$384,000.

Mr. Gilstrap noted that the Alternative Analysis program, by UMTA's direction, required a thorough and objective comparative analysis of alternative transportation approaches, including:

- . null alternative - consequences of doing nothing

Resolution  
No. Assigned

- . all bus
- . variety of rapid transit modes, alignments, configurations.

The General Manager observed that although the RTD Board is on record favoring a fixed guideway rapid transit system running from Union Station to Long Beach, the District's alternative analysis must give equally rigorous attention to all of the alternatives noted above, which means that the study may well open up discussion and debate on the Wilshire corridor, Burbank alignment, buses instead of rapid transit, etc. Whether this is good or bad is not so much the issue, rather it is that unless the alternative analysis goes back into all of these matters again, RTD apparently will have little chance of UMTA funding for a rapid transit project in Los Angeles.

In briefly describing the type of report the Board can expect from the alternative analysis, the General Manager stressed that no recommendations will be made in the report. Rather, it will set forth the projections of costs, benefits, impacts of the indicated alternatives in a manner by which they may be compared. The weighing of the variety of pros and cons of alternatives can only be done by the policy makers of the involved agencies and the resolution of differences of opinion

Resolution  
No. Assigned

among the agencies must be resolved at this policy level so that a consensus recommendation can be submitted by Los Angeles to UMTA.

The report concluded with the point that it appeared in order to obtain federal help to build a starter line segment and/or to keep our local agency consensus through this phase of the program, the District must perform the Alternatives Analysis on the full corridor, and recommended adoption of Program "B", including the Work Program, Work Flow Schedule, Letter Pre-application to UMTA for Preliminary Engineering capital grant and letters to agencies regarding funding.

A copy of the General Manager's report dated January 12, 1976 is attached to these Minutes as EXHIBIT 1.

(Director Brewster entered the meeting at 10:10 a. m.)

Mr. Harry A. Haufman, 10822 Magnolia Boulevard, North Hollywood, appeared before the Board and urged the Board to reconsider its previous action and consider the 69-mile corridor study, including all alternatives. He also requested an opportunity to appear before the Board at a later date to present his transportation plans.

Resolution  
No. Assigned

Director Ward inquired if the City of Los Angeles had not resisted the line from Canoga Park since last June and pushed for the subway under Wilshire and La Brea. Director Takei said he felt the City had never taken a position.

Mr. Ward felt that SCAG, the Joint Venture and others had all dealt with the Canoga Park portion and felt the corridor had been studied in depth.

Mr. de la Cruz reported that UMTA had proposed guidelines on August 1 regarding administrative procedures and the Act directed the Secretary of Transportation to develop guidelines and criteria by which to approve applications, and that UMTA has in further elaborating on those guidelines was turning down Dayton and others until the necessary analyses were performed, as outlined in the General Manager's report, and the necessary local funds were committed.

Mr. Ward felt we do not have the assurance of all local funding sources and that the Dayton application had been turned down because not all local agencies had committed. He said the CalTrans money is now down to \$60-million and we don't even have the assurance of receiving that, and he felt that the most we could anticipate at this moment was a total of \$775-million which wouldn't even build the line from Long Beach to Union

Resolution  
No. Assigned

Station, and that was the reason he had pushed for adoption of the resolution last week, since we only had the funds to build the southerly portion--that the City of Los Angeles is now telling us what to do and we might now lose the money from the County. He suggested an immediate meeting with Secretary Coleman and ask him to allow us to proceed as rapidly as possible to reach concurrence, and if we can't do that he believed the proposal was dead.

Mr. Neusom concurred that a meeting with Secretary Coleman might be helpful, since much of the work has been done already and it might be possible to obtain his approval. He also felt that if we do not do the work on the entire corridor now we won't have the kind of consensus necessary, and perhaps we should alter the previous motion and proceed with the effort to complete all of the study work in order to get at a timely determination.

President Cook stated he received the impression at the meeting with Mayor Bradley and Councilman Ferraro that the City would not take any action unless the entire corridor was studied, notwithstanding the approval of Secretary Coleman.

At the request of Director Brewster, Mr. Gilstrap reviewed both Programs "A" and "B", and Mr. Brewster wondered if

Resolution  
No. Assigned

maybe the entire broad corridor could be placed into two corridors, instead of one. Mr. Gilstrap stated that UMTA wants a broader corridor and views the 69-mile proposal as one corridor. Mr. Brewster then stated that in order to qualify we must follow the UMTA guidelines and we have no alternative but to do so.

Mr. Ward felt that Long Beach and the County would both pull out leaving the City of Los Angeles funding only, but Mr. Brewster felt that all agencies must pull together.

Mr. Neusom stated that possibly we could get the City of Los Angeles involved in the meeting with Secretary Coleman.

On motion of Director Neusom, seconded and carried as noted below, the following resolution was adopted:

R-76-18

RESOLUTION NO. R-76-18

RESOLVED, that this Board of Directors does hereby adopt at this time the Alternative Analysis for for the entire broad rapid transit starter line corridor as listed under Program 'B' attached to the General Manager's report dated January 12, 1976 and, in addition, authorize personal contact to be made with the U. S. Secretary of Transportation and that he personally be apprised of the studies that have been made in the past and the money spent on those studies, and ask him to analyze those studies and inquire of the Secretary if the District could use the previous studies, as updated, without having to go through the costly process of complete restudy;

Resolution  
No. Assigned

R-76-18  
(Cont'd)

RESOLVED FURTHER, that the staff is directed to furnish the above information to the County of Los Angeles, the Los Angeles City Council, including its Ad Hoc Committee on Rapid Transit, the City of Long Beach, CalTrans, and other entities as deemed necessary.

Ayes: Brewster, Cook, Gibbs, Gregory, Holen  
Neusom, Price, Takei, Ward

Noes: None

Absent: Carter, Schabarum

Mr. Brewster felt we should find out about the funding from other cities, and Mr. Gilstrap referred him to the letter included in the agenda under Program "B".

Mr. Cook stated it was planned for the City Council Ad Hoc Committee on Rapid Transit to meet with the Board at its next Committee of the Whole, and that the County is well represented on the RTD Board.

Mrs. Gregory felt with the problems incurred with the City's Ad Hoc Committee that perhaps we need someone that could act as a neutral arbitrator, possibly UMTA, and could have a diminishing effect of the aggressiveness of one agency or the other. Mr. Neusom felt this could create problems and that we could possibly use CalTrans and Secretary Burns and not attempt to use UMTA for rulings and opinions. Mr. Cook felt that Mr. Burns acted as an observer only and had not been involved in decisions.

Resolution  
No. Assigned

Mr. Ward felt that the City is leaving us in the dark and it would be helpful if they could tell us what they want, and they should join with us in asking Coleman to waive the further studies that have, in essence, already been done.

Mr. King Cushman, City Manager's office, Long Beach, appeared before the Board and made the following statement:

"I'm King Cushman from the Long Beach City Manager's office, and I have been asked by the Mayor to transmit a few comments to the Board this morning. I think your action is somewhat supportive of that direction already. Long Beach is quite concerned with the direction of the alternatives analysis in that if it is not on the original broad corridor that we understand and feel that the consensus was on typically that it probably is a predetermined conclusion that there will be real problems getting the funding commitment from UMTA if we only stick to the single corridor, being Los Angeles to Long Beach. We discussed this with the Mayor and our Council Transportation Committee and they understand that while politically it is certainly in our interest to see that go ahead, and we do want that, we don't want to win short-range battles and lose wars. What we are after, and we do realize is, that the alternative analysis is in fact alternatives for federal people too, and their problem is a cost effectiveness looking at regions, not just segments and corridor. We do wish to strongly urge and encourage the broadest possible cost effectiveness alternative analysis within this corridor, Canoga Park to Long Beach, to be sure that we get the maximum benefits and have the maximum opportunity to achieve accomplishment of a positive application that will be received favorably in Washington. So, basically, what we are saying is that we feel that while we see compatibility also between the starter line corridor and Supervisor Ward's proposal, we see no problem at all in recognizing the financing problems to eventually to hopefully complete a more major system than just the starter line. We think that we have to start some place and we discussed this in Long Beach, and feel that even if it's not on the southern leg that we must begin nonetheless. We

Resolution  
No. Assigned

recognize, too, that there are political implications, as I think Mr. Gibbs has pointed out, that should it not come to Long Beach, that we don't think that should be the overall determining factor in the decision because we think that we risk the chance of losing the opportunity to go ahead if in fact we don't do the absolute best optimum job we can. Thank you."

Mr. Gilstrap stated that the resolution adopted had approved Program "B" of his report, and suggested adoption of the Work Program, Work Flow Schedule, Letter Pre-Application to UMTA and letters to funding agencies as outlined on the agenda under Item 3 (a), (b), (c) and (d).

On motion of Director Neusom, seconded and carried as noted below, the following resolution was adopted:

(Director Ward left the meeting at 11:15 a.m.)

R-76-19

RESOLUTION NO. R-76-19

RESOLVED, that adoption of the Work Program of the Alternative Analysis for the entire broad rapid transit starter line corridor running from Canoga Park through the Los Angeles Central Business District to Long Beach-San Pedro Harbor area, designated as Program "B" attached to the General Manager's report dated January 12, 1976, be and the same is hereby reaffirmed, and the District staff is authorized to proceed immediately with the Alternative Analysis on said Work Program;

RESOLVED FURTHER, that the Work Flow Schedule for the aforementioned Alternative Analysis attached to the General Manager's report dated January 12, 1976 under Program "B" of said report be and the same is hereby adopted;

Resolution  
No. Assigned

R-76-19  
(Cont'd)

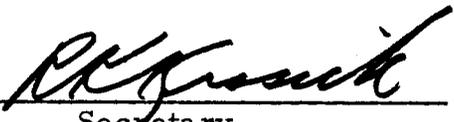
RESOLVED FURTHER, that Resolution No. R-76-4 adopted January 7, 1976 be and the same is rescinded in its entirety, and the General Manager is authorized to revise and submit a Letter Pre-Application to the U. S. Department of Transportation, Urban Mass Transportation Administration, for preliminary engineering on a rapid transit starter line to cover an unspecified segment within the entire broad corridor running from Canoga Park through the Los Angeles Central Business District to the Long Beach-San Pedro Harbor area; together with authorization of the General Manager to execute and file all documents necessary for the completion of said application; form of all documents subject to approval of the General Counsel;

RESOLVED FURTHER, that Resolution No. R-76-5 adopted January 7, 1976 be and the same is hereby rescinded in its entirety, and the submission of a revised letter attached to the General Manager's report dated January 12, 1976 under Program "B" to local agencies regarding funding, including cities within and adjacent to the approved rapid transit corridor, be and the same is hereby approved.

Ayes: Brewster, Cook, Gibbs, Gregory, Holen, Neusom  
Price, Takei  
Noes: None  
Absent: Carter, Schabarum, Ward

Director Brewster remarked that the appearance of the representative from the City of Long Beach indicated the need for all areas to see the problems and seek their cooperation.

There being no further business, the meeting was adjourned at 11:18 a. m.

  
Secretary



# SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

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JACK R. GILSTRAP  
GENERAL MANAGER

January 12, 1976

To: Board of Directors  
From: Jack R. Gilstrap  
Subject: Rapid Transit Alternatives  
Analysis Programs

I would like to take this opportunity to do a couple of things: first, briefly outline the steps in rapid transit development from concept to revenue operation; and secondly, try to summarize the UMTA requirements at the stage we find ourselves today, and describe the alternatives to be analyzed per these requirements.

The total rapid transit development process can be viewed in seven stages as follows:

Rapid Transit Development  
in Brief: Concept to Revenue Service

- I. Initial Planning - During this period, an area identifies its basic transportation needs and initiates broad plans addressing their needs. Although an on-going process, for purposes of the starter line program, this has been completed.
- II. Plan Refinement - During this period, transportation corridors are identified and priorities for implementation are developed. This phase was essentially completed when a rapid transit starter line corridor arose from consensus.
- III. Alternatives Analysis - Wherein Step II the corridor was identified, this Step III carries the decision process to another level of refinement by identifying and comparing alternative alignments, modes, etc., which are arrayed by their costs, benefits and other criteria. This alternatives analysis stage goes into cost estimates, ridership projections, socio-economic and environmental impacts, typical station site layouts, etc.,

III. Alternatives Analysis (continued)

only far enough to permit the decision makers to select an alignment and mode mix for which detailed data will be defined in Steps IV and V. The products of this work, along with the pledges of local funding, result in the submission for approval of a formal application to UMTA for preliminary engineering.

- IV. Preliminary Engineering - This is the stage where we get down to specifics including, among other things: vertical and horizontal alignments, station and yard locations, line haul and feeder/distribution integrations, draft environmental impact statements, construction/acquisition planning and scheduling, and capital and operating costs, to include cash flow requirements for implementation and initial operations. The successful completion of this stage leads to the submission of detailed capital grant applications for final design.
- V. Final Design - Detailed engineering blueprints, bid packages, and the like are prepared at this stage. This is the final step before turning dirt. Based on precise data developed here, we begin to submit a series of capital grant applications for construction and rolling stock acquisitions.
- VI. Capital Construction and Equipment Acquisition - Build the system. Buy the rolling stock. Conduct operational tests prior to revenue service.
- VII. Commence Revenue Service.

Two Courses of Action

Now to discuss the Alternatives Analysis stage where we are today. To enable you to better view possible courses of action, two separate programs, A and B, are attached to this report.

Program A describes that work program, with work flow schedules, that would result from pursuing the alternatives analysis on the southerly portion only of a corridor from Union Station in Downtown Los Angeles to the Harbor area. Along with this program is a copy of a draft of the appropriate pre-application to UMTA for preliminary engineering and its transmitting letter to possible funding bodies.

Program B describes the work program and the work flow schedules that would result from pursuing the alternatives analysis on the entire rapid transit corridor extending from Canoga Park in the San Fernando Valley, through Downtown Los Angeles and proceeding south to the Long Beach-San Pedro Harbor area. Along with this particular program is the draft of the appropriate pre-application to UMTA for preliminary engineering on an unspecified segment within that corridor and its transmitting letter to possible funding agencies.

With both of these programs the staff is working within a guideway construction dollar constraint of \$805 million, which was estimated by CALTRANS in their report dated December 15, 1975 and adopted by your Board as the maximum potential local share. This estimate is based on a five-year period. It has been assumed that over a five-year period commencing this fiscal year that an estimated \$167 million will be available locally to leverage on a 4 to 1 basis \$668 million in federal funds. The following are those basic sources:

\$68.8 million	State of California
50.5	County of Los Angeles
24.7	City of Los Angeles
<u>23.5</u>	City of Long Beach

\$167.5 million or \$167 million

However, Long Beach has estimated that \$30 million of this total amount will be required for its Downtown people mover system resulting in a net \$805 million available for guideway construction. It has been estimated that an additional \$100 million may be needed for rolling stock along with an estimated \$31 million for operating the first year of revenue service. Funds for rolling stock and operations will have to be funded from other than Proposition 5 sources as more

fully described in the application. The estimated local dollars available will vary as other cities within or near the starter line project contribute their Proposition 5 and/or other local funds.

#### UMTA Requirements and Case Examples

In August, 1975 UMTA put forth a policy pertaining to alternatives analysis and evaluation, as a condition of eligibility for federal capital grant assistance for major public transportation investments. This requirement for alternatives analysis has completely changed the manner in which UMTA funds new rapid transit projects.

The proposed UMTA policy states, "An analysis of transportation alternatives will be required as a condition of eligibility for federal assistance for any major mass transportation investment." \$100 million and up is offered as the determining point of a major investment.

According to the policy, the analysis of alternatives should be based on the following general principles:

- o integration of transit services; long-range transportation plans should reflect an awareness that different levels and modes of transportation service may be needed in different portions of the metropolitan area;
- o incremental development; stated implementation should occur with initial segments constructed in corridors and areas having priority needs;
- o improved management of existing transportation systems;
- o systems evaluation: determination of the effects of the various alternatives on local and regional accessibility, air quality, energy consumption, community and regional development patterns and other factors considered important by the area's residents; and
- o full opportunity for timely public involvement.

The essence of the proposed policy is found in the passage affirming, "The extent of the federal commitment for a major mass transportation investment will be determined by the cost of the increment of the long-range plan which provides for the metropolitan area's transportation needs in a cost-effective manner, taking into account the social, economic, environmental and urban development goals of the community." The industry interpretation so far is that local choice may be preserved by permitting the area to use the federal funds to support any of the alternatives evaluated, provided that the locality is willing and able to secure the additional funding required in the event they select other than what UMTA considers to be the most cost-effective alternative. This particular aspect of the UMTA guidelines is being challenged by the transit industry in that it has been argued that through this approach UMTA will de facto end up funding less than 80% of a total rapid transit project, i.e., by funding only the segment they deem worthy of funding.

Based on the foregoing, some conclusions can be drawn about the general implications of the policy and how it affects the planning process and local decisions:

- o the framework for evaluation will make the analysis process more rigorous, explicit, consistent and comparable;
- o cost analysis apparently will be the basis for UMTA's level of funding as well as net project cost;
- o the analysis process will be monitored to determine if adequate analyses, based on relative data, are being or have been made;
- o more attention will be given to implementation of usable segments of capital intensive systems.

Many of these points have been developed on a case-by-case basis. In anticipation of the publication of the new guidelines, UMTA sent a letter to Detroit pointing out the shortcomings of their effort. In essence, UMTA describes in some detail the alternatives analysis requirements and noted the lack of commitment and the shortage of local monies.

On December 16, 1975, UMTA removed from active consideration a capital grant application from the Miami Valley Regional Transit Authority of Dayton, Ohio for construction of a light rail system. UMTA stated that the application suffered from the following deficiencies: "lack of assurance of a local financial share, and lack of a review of transit alternatives involving bus operations on existing streets and freeways." On December 19, 1975, UMTA rejected a \$278 million capital application from the Port Authority Trans-Hudson (PATH) Corporation to extend a line to Plainfield, New Jersey. The reasons for the turndown were as follows: (1) "the comparatively high cost per passenger," and (2) "a lack of state and local legislation and development activity, public investment programs, private real estate activity, and strong land use planning that permits the cost disadvantages...to be overridden by any likelihood of urban preservation impact."

With these rejections in mind, the District has been advised through UMTA Administrator Patricelli's January 6, 1976 letter that in order for this area's "choice of an initial increment to have maximum underpinning, and in order to permit (UMTA) to better review (the) application, it would seem that the entire corridor from the San Fernando Valley to Long Beach should be analyzed." This statement has subsequently been interpreted by both the UMTA Administrator and Regional Director as their urging this complete analysis in the strongest terms.

Quite frankly, this area as well as Detroit, New Jersey, Dayton and others, are at a basic disadvantage of not knowing finite criteria by which UMTA will approve or disapprove an application. Threshold ridership projections which justify busways, light and heavy rail systems are non-existent. What is a reasonable per rider capital cost? What are the parameters for "equitable treatment" under the current UMTA Section 3 Capital program? The staff concludes that as we approach UMTA with our requests for capital funds, that such requests must be based on thorough and rigorous analyses of all possible alternatives, taking into full account this region's transportation needs and its social, economic, environmental and urban development goals tempered by costs and available funds.

## Alternatives in the Technical Analysis Process

In accordance with UMTA's request and our understanding of this, we have herein defined the transportation alternatives that we propose to consider in the technical analysis process for the Starter Line Corridor.

### 1. The Null ("status quo") System

The analysis of alternative transit improvement options requires a baseline system against which alternative "all-bus" and "rapid transit" combinations of route/equipment/level of service improvements can be compared. For lack of better terminology, the baseline is called "The Null System."

This system is basically a description of the present system as it exists today. The Null System is included in order to provide a uniform measurement for comparison with the other alternatives.

Salient features of the Null System include the region's first rapid transit facility, the El Monte-Los Angeles Busway, preferential lanes for buses and carpools on the Santa Monica Freeway, the Spring Street Contra-Flow exclusive lanes for buses in the Los Angeles Central Business District, the South Central and San Fernando Grid Systems, the East Los Angeles Grid, San Gabriel Valley, Mid-Cities and South Bay Improvement Programs, and other service improvements the District has recently implemented, or is in the process of implementing.

Also included in the Null System are the many internal operational improvements the District has recently instituted. These include the Management Information System, the recently completed bus facilities improvements, and the present up-grading of our internal analysis capabilities.

### 2. "All Bus" Alternative

The All Bus Alternatives will build upon the Null System and will consist of preferential lanes on more freeways, priority lanes on arterials, ramp control, highway changes and improvements, area-wide carpooling, increased number of buses and the necessary improved maintenance facilities to accommodate the bus fleet.

The preferential lane treatment will investigate four different implementation and operational strategies.

- a. addition of freeway lanes for buses;
- b. taking away freeway lanes for buses;
- c. use of contra-flow lanes for buses;
- d. preferential ramp access for buses.

The following improvements would be part of an All Bus solution:

- a. Freeways will be equipped with overpass ramps to allow bus traffic to access and egress directly to the preferential lane. All other freeways will have a preferential lane.
- b. stations will be located at two mile intervals; to be selected through demand analysis;
- c. average speeds will be derived from station stops and performance capability of the bus;
- d. maintenance facilities will be defined to support the bus fleet needed to satisfy the demand;
- e. bus fleet will be defined to satisfy the 1990 demand;
- f. feeder bus system will be routed to maximize use of freeway bus network;
- g. freeway buses as well as arterial buses will deboard passengers in the Los Angeles Central Business District at established bus stops.

### 3. Rapid Transit Alternative

The Rapid Transit Alternative will build upon the Null System by evaluating the effect on area-wide transportation service, costs, etc., of a rapid transit line in the approved starter line corridor.

The Rapid Transit Alternative is basically the addition of a fixed guideway system and a re-routing, as appropriate, of the existing bus network to serve as feeders to rapid transit

stations so as to maximize ridership and minimize life cycle costs. It will consist of several combinations of rapid transit lines with feeder bus service to the stations thereon, any one of which can be considered as the starter line or the initial segment of a starter line, which can subsequently evolve into the large regional network as demand dictates and funding permits.

The procedure by which each of the Rapid Transit Alternatives has been defined and characterized has been an evolutionary process conducted in concert with the technical staffs of the various agencies involved in transit planning. While the development of the detailed descriptions is quite time consuming, it is essential to the development of cost data. After the "boiling down" of the 240 mile regional rapid transit network to 11 alternatives by the Rapid Transit Advisory Committee, a series of meetings by the technical subcommittees of RTAC resulted in three principal corridor alternatives to be considered for the initial starter line (each of which have possible variations), all within a broad corridor extending from the San Fernando Valley through Downtown Los Angeles to the Long Beach-San Pedro Harbor area.

The following ground rules will apply to the Rapid Transit Alternatives:

- a. subject to District Board approval, the range of project costs will be a function of the range of the route alignments shown on maps attached to this report (dated January 7 and January 9);
- b. the peripheral corridor alternatives will be segmented into segments that could stand alone if funding so dictated;
- c. alternative guideway technologies to be considered are represented by:

Metro (conventional medium capacity  
rapid transit)

Pre-Metro ("light rail" transit)

New technologies in Group Rapid Transit;

