Los Angeles County residents rely overwhelmingly on the private automobile and their fine street and highway system for mobility.¹ This auto dependence contributes heavily to a number of serious regional problems, including rising fuel consumption, severe air pollution, and worsening traffic congestion. Although there exists considerable potential to ameliorate these problems via expansion of public transit and increasing average occupancy of private automobiles, the present situation and short-term prospects of public transit and carpooling in Los Angeles appear dismal.

The metropolitan area lacks a modern rapid transit system² and ballot measures authorizing sales tax increases to fund construction and operation of such systems were defeated in 1968, 1974 and 1976. Meanwhile, public resistance to the most powerful high occupancy vehicle (HOV) incentive, the HOV preferential freeway lane, has caused both the California Department of Transportation (Caltrans) and the Southern California Association of Governments (SCAG) to back off considerably from their 1974 espousal of HOV lanes on numerous Los Angeles area freeways.

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Continued inadequate local and state government funding of the Southern California Rapid Transit District (SCRTD), the region's principal bus company, necessitated fare increases, a cutback in already inadequate service, and a substantial layoff of SCRTD employees beginning July 1, 1977.³

Although much time and money have been spent over the past decade by state and local planning agencies such as SCRTD, Caltrans, and SCAG to plan a "balanced transportation system" for Los Angeles, practical results have been lacking. This paper seeks to explain this failure and recommends an urban transportation development strategy with greater potential for success.

Past Failures

A variety of cultural factors contributed to defeat of rapid transit ballot propositions by Los Angeles County voters in 1968, 1974 and 1976, including addiction to the driving habit, lack of experience with modern rapid transit, social stigma attached to transit ridership, and general preference to spend income on private consumption rather than on public projects. But the underlying factor in the defeats was the inherent defectiveness of the transit proposals.⁴

In 1968 the SCRTD proposed construction of an 89-mile, double-track, heavy mass transit system focused on downtown Los Angeles. This five-corridor system was to be fed by existing bus lines augmented by 850 additional buses operating over 300 miles of new bus routes. Parking lots and "kiss and ride" facilities planned at suburban stations would increase the accessibility of the system.⁵ In its promotional literature, the SCRTD stressed easy access to the system, noting that

... more than two-thirds of the entire population of Los Angeles County live within ten minutes travel time of the recommended rail routes;
42% of the estimated 1980 employment in Los Angeles County will be employed within one mile of the Rapid Transit System;

kiss and ride facilities, expansive station parking areas and the new feeder bus system coupled with the District's existing bus fleet will make public transportation readily accessible to virtually all residents of the District.\(^6\)

Incongruously, SCRTD's travel projections indicated that the rapid transit system would divert only about 6 percent of the daily medium and long haul auto trips along the five corridors, and 20 percent of such trips in peak travel periods.\(^7\) Clearly, the results of the modal split analysis, based chiefly on comparative travel times and costs of alternate modes, differed considerably from what one would have expected from SCRTD's impressionistic and propagandistic discussion of accessibility.

The public was not seduced by the media campaign, and soundly defeated the Transit District's ballot proposition. Although it was supported strongly by low income transit-dependent individuals and by many high income voters, it was unpopular among the largest segment of the population, the middle income group. A plausible interpretation of this voting pattern is that the poorest elements of the population regard any improvement in public transportation as vital to their welfare; high income groups tend to support such public projects altruistically; and the majority middle income group, which is not transit-dependent and does not expect to use public transit unless it offers clear cost and time savings, will not support tax increases to fund facilities to be used by others.\(^8\) The general public clearly saw the costs of the proposed rapid transit system as exceeding the benefits. Specifically, they could not justify expending 2.5 billion dollars to build an 89-mile mass transit system that would be
underutilized because its high capacity lines were too far from their residences and/or trip destinations, and/or inconvenient to utilize. It is difficult to fault the negative consensus of the electorate when one considers that most rapid transit users would have had to use a car or feeder bus service to connect to the rapid transit system at one or both ends of the trip, with accompanying inconvenience and time losses, and that most Los Angeles residents have one or more cars available for door-to-door travel. The proposal simply did not offer improved public transit to enough people to win majority support.

Recognizing that public perception of rapid transit as lacking personal utility in areas distant from the system was a factor in the electoral defeat, the SCRTD sought to develop a transit proposal for the 1974 election that would meet the needs of a larger constituency. Its consultants considered three alternate approaches: an all-bus rapid transit system, an all-fixed-guideway system, and a bus and fixed-guideway system.

An all-bus rapid transit system with buses receiving priority access to freeways and use of exclusive bus or bus/carpool lanes on freeways and surface streets offered a number of advantages, including wide and intensive coverage of service area, energy efficiency, low capital costs, and potentially quick implementation, as very little construction would have been required. It was rejected ultimately because large areas of Los Angeles lie too far from freeways to benefit from the kind of high-speed service which only a grade-separated facility such as a freeway can provide ... [and because] many of the areas that are too far from freeways to make bus rapid transit attractive, exhibit high transit-dependency rates.10

Also of concern were frequent "tie-ups at major freeway
interchanges" which would seriously increase average travel times.11

An all-fixed-guideway rapid transit system was rejected because ... "in order to fulfill anywhere near all of the rapid transit requirements of the Los Angeles area, any fixed-guideway system would be inordinately expensive,"12 and the high capital costs per mile of track would have necessitated wide spacing of lines resulting in poor service to large areas of the sprawling Los Angeles region.

SCRTD consultants ultimately recommended and the District adopted a compromise proposal for a "balanced rapid transit system." Its key elements were a "near-term bus improvement program," and a long-term plan for construction of fixed-guideway rapid transit along selected heavily travelled corridors.13 The bus improvement program featured addition of 1,000 buses to the District's 1,900 bus fleet over a three-year period, and expansion of express bus service with preferential treatment on freeways and surface streets.14 The long-term plan was more ambiguous. It envisaged ultimate development of a 240-mile rapid transit corridor network, but noted that not all of it need be served by a single (fixed-guideway) technology. The initial implementation plan for guideway construction foresaw a 145-mile system, but hedged as to the "proper phasing of [construction of] the system ... [and its] precise configuration."15 Financial aspects of the plan were likewise nebulous. The capital cost of the initial implementation program was 4.7 billion in 1974 dollars, and it appeared likely that anticipated sales tax revenue and matching federal funds would prove inadequate after year two of the program. Thus the District found itself in the unenviable position of planning "to proceed with the near term program as adopted, relying on prospective Federal
programs and/or other public fund sources which may become available...."16

In view of the generality of the plan, the price tag of 4.7 billion dollars, for stage one, and the fact that most middle income voters did not see themselves as potential transit riders under any circumstances, the sound defeat of the 1974 SCRTD ballot proposition was not surprising.

In the aftermath of the 1974 electoral defeat, the SCRTD was neither technically nor emotionally prepared to offer a new plan to the voters in 1976. But Los Angeles County Supervisor Ward Baxter, an able politician and amateur transit planner, did not suffer from such limitations. Harking back to Pacific Electric's Big Red Cars (electrically powered light rail vehicles), which provided outstanding intraurban transit in Los Angeles before the triumph of the automobile, Ward developed a plan for a massive 232-mile, 5.8 billion dollar light rail system to be called the Sunset Coast Line.17 However, the Line would not directly serve many areas of dense population. To keep capital costs as low as possible, its route network was deliberately aligned along cheap rights-of-way such as publicly owned river channels, storm drains, freeways, and existing or abandoned railroad tracks. As expected, despite last-minute SCRTD sponsorship, the ballot proposition to fund construction of the Sunset Coast Line via a sales tax increase was defeated in the 1976 election.

SCRTD efforts to provide an alternative to almost exclusive dependence on the private automobile in Los Angeles were paralleled in the 1970's by Caltrans and SCAG. Caltrans reoriented state transportation planning from expansion of the existing transportation system to increasing its efficiency.18 To this end, Caltrans works closely with SCAG, which has been designated by the Governor of
California as the "Metropolitan Planning Organization" responsible for meeting the Transportation System Management (TSM) and Transportation Improvement Program (TIP) requirements of the Urban Mass Transit Act in the greater Los Angeles region. Unfortunately, SCAG's politicians have found it impossible to implement, or in some cases even support, vital elements of a TSM program recommended by Caltrans, even though many of its elements were included in the 1974 short-range transportation plan developed by SCAG planners.

SCAG's 1974 short-range transportation plan was a strong affirmation of the need to reduce energy consumption, traffic congestion, and smog in the region by reducing average vehicle miles travelled. It included preferential treatment on freeways and major arterials for high occupancy vehicles, carpool action programs, transit development strategies, bicycle programs, and commuter rail service. 19

Preferential treatment for high occupancy vehicles was the key element in the 1974 plan; it alone could provide the incentives necessary to encourage carpooling and diversion of motorists to alternate modes. In this context, a review of the Draft 1977 Regional Transportation Plan of SCAG and recent SCAG urban transportation policies is disquieting. Public resistance to the most powerful high occupancy vehicle (HOV) incentive, the HOV preferential freeway lane, caused SCAG to retreat markedly from its 1974 position. The Santa Monica and Hollywood freeway HOV lanes were deleted from the 1977 plan, and a resolution of the SCAG executive committee urging immediate opening of a completed but unopened nine-mile section of the San Diego freeway HOV lane as a general use lane was implemented by Governor Brown. 20 SCAG's commitment to HOV lanes on the Long Beach and Artesia freeways, and to the remainder of the preferential lane project on the San Diego freeway, is now
only lukewarm. The 1977 plan defers judgment on whether the new median lanes being constructed on these freeways should be preferential or general use lanes, or safety shoulders, until preliminary engineering data on potential traffic flow become available. In the face of such uncertainty, Caltrans announced that HOV lanes will not be opened on Los Angeles area freeways until they have the support of the public and local politicians. Likewise, little has been done to establish HOV lanes on heavily travelled boulevards, to improve bus service, to develop commuter rail service, or to encourage use of bicycles for transportation. This failure to implement program goals has left the Caltrans-SCAG transportation system management program in shambles.

Summary and Recommendations

A file of expensive technical reports is the only tangible evidence of efforts over the last decade to provide a viable alternative to the private automobile for urban transit in Los Angeles. The metropolitan area still lacks a modern rapid transit system, its bus system has been improved only modestly, and the regional TSM program has not been implemented because of citizen and media opposition to the HOV lane, its most powerful inducement to use of carpools and public transit.

This paper has contended that poor transit planning has been the basic factor in the paralysis of transportation improvement programs in Los Angeles. Cultural factors, especially the strong preference of Los Angeles residents to drive alone, have also contributed. The defeated 1968 proposal was for a heavy mass transit system with a high carrying capacity inappropriate in the sprawling, low population density Los Angeles region. Such a system would have met the transportation needs of few Los Angeles residents because of the wide spacing of its routes, and would
have been very expensive relative to expected ridership. The 1974 transit proposition offered essentially more of the same and was likewise not approved by the electorate. Ward's defeated 1976 proposal was also technically deficient. It recommended a light rail system more appropriate to the carrying capacities required in Los Angeles, but would have been built along existing rights-of-way in industrial or low density residential areas.

Poor physical planning does not explain the stymying of the TSM program developed in 1974 by Caltrans and SCAG. Indeed, physical planning to increase average vehicle occupancy and transit use, thereby reducing congestion and air pollution and conserving energy, was sound and entirely consistent with federal guidelines for TSM programs. The failure was behavioral and political, and perhaps inherent in the nature of the two organizations. Caltrans, whose primary function is planning and construction of transportation facilities, was unprepared to plan and wage the kind of public relations campaign required to convince the public and political leaders that the TSM program made sense and was vital to the well-being of the community. As a result, early elements of the TSM program, especially the Santa Monica and San Diego freeway HOV lanes, appeared to many citizens as an unnecessary and inconvenient infringement of "their rights" to unrestricted use of "their freeways". The ensuing storm of protest engendered a sympathetic response from local politicians who were more comfortable "rolling with public opinion" than with risking electoral repercussions. As a result, SCAG failed to pursue implementation of its transportation plans. This put an unsupportable burden on Caltrans, which has had to bear the brunt of criticism of the TSM policies it developed cooperatively with SCAG.
Understanding past failures provides a basis for an urban transportation development strategy with greater potential for success. Such a strategy should include a clear statement of goals, measures required to attain these goals, and a powerful public relations campaign to educate the public of the costs and benefits of the proposed program, and of alternatives.

Three long-term goals of a Los Angeles regional transportation plan should include:

(1) Zero increase in vehicle miles travelled between 1977 and 1995 (SCAG's regional transportation plan projects an increase of 15 percent).

(2) A modal shift from 97.5 percent of person-trips by private auto in 1977 to 85 percent in 1995 (SCAG projects a shift from 97.5 to 94 percent).

(3) Greatly increased use of public transit, carpools, bicycles, etc.

Some progress toward these goals will occur in response to free market mechanisms such as increased cost of auto ownership and operation. But their attainment will require additional measures, some of which may be politically unappealing in the short-term but vital to the long-term economic health of the region. Such measures include:

(1) A massive expansion of the regional bus system;

(2) Vigorous provision of priority treatment for buses and carpools to give them a competitive advantage over single-occupant cars. Priority treatment techniques would include:
   (a) Freeway ramp metering to promote free flow;
   (b) Ramp meter by-pass lanes for high occupancy vehicles;
   (c) Exclusive HOV lanes for high occupancy vehicles on congested segments of the regional freeway network, e.g. on the Santa Monica, San Diego, Ventura-Hollywood, and Harbor freeways;
(d) HOV lanes on congested boulevards such as Wilshire, Olympic, Santa Monica, Van Nuys, and Ventura.

(3) Development of a light rail rapid transit system oriented to major arterials of the densely populated parts of the region by 1995.

The public relations campaign should emphasize that the recommended measures are vital to environmental health, to retention of a high level of mobility, and to the future economic viability of the region in an era of rising energy costs and potential scarcity. It should emphasize that the total program is not expensive compared to the mounting costs of continuing our present ways, and that the sooner a start is made on implementing the plan, the lower ultimate costs will be. In the present inflationary climate, the final point should be an argument the voter can understand.

NOTES


4 Brian Stipak, "Explaining the 1968 Transit Vote in Los Angeles," unpublished research paper, n.d., pp. 1-20. Stipak assessed the influence of partisanship, population density, age, turnout rate, distance from the proposed system, income, and ethnicity, and found that distance from the proposed system was the most important single variable.


6 Ibid.

7 Ibid., p. CC-4.
This interpretation is consistent with Stipak's data. Brian Stipak, op. cit., pp. 18-20.


Southern California Rapid Transit District, A Public Transportation Improvement Program, March 1974, pp. 21-23.

Ibid., p. 23.

Ibid., p. 24.


Ibid., p. 9.

Ibid., pp. 13-16.

Ibid., p. 23.


W. O. Ackermann, Jr., Memorandum to SCAG Executive Committee on High Occupancy Vehicle Program and Preferential Lanes, March 8, 1977, pp. 11-12.

Ibid., p. 9.


Eric Haley, Councilman of City of Riverside and Vice Chairman, SCAG Transportation and Utilities Committee, statement to SCAG General Assembly, Pasadena, California, March 11, 1977.