

Status Report on Transportation Management Association Development in California

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The results of a research project commissioned by the California Department of Transportation (Caltrans) to explore development of transportation management associations (TMAs) in California are presented. Through a TMA survey and a series of workshops, several characteristics of California TMAs are identified: geographic distribution, funding, activities, and stage of development; impetus for TMA formation; and organizational and technical areas in which TMAs need assistance. The role of a Caltrans TMA formation funding program in TMA development was also examined. Recent experience with TMAs following the implementation of a statewide TMA assistance program and changes by Caltrans to the grant program are also recounted.

In late 1990, there were 56 transportation management associations (TMAs) in California, 75 percent of which were in Southern California. Most were initiated after 1988, the year the state funding program began. TMAs were divided into three stages of development: exploration (37 percent), formation (27 percent), and operation (36 percent). Most of the services provided by TMAs were of an informational or promotional nature. Services that directly offered commute alternatives were provided only by the most mature TMAs.

TMA formation was largely prompted by the existence of a transportation-related problem or trip reduction regulations. The availability of grant funds, although not a reason for TMA formation, did contribute to the timing.

TMAs needed advice with many aspects of their development and operation. Primary needs included data collection and analysis (exploration stage); business organization, membership development, and financial management (formation stage); and service planning and evaluation (operation stage).

In December 1988, the California Department of Transportation (Caltrans) initiated the Transportation Management Association Formation Grant Program with funding from the Federal Highway Administration. During the next 2 years, Caltrans awarded 43 TMA grants to 40 groups for a total of over \$2.4 million. The intent of the grants was to provide seed funding to support TMA start-up; this funding was to be matched by private funds.

In fall 1990, Caltrans commissioned a research project to explore three aspects of TMA development in California: the current status of TMAs in California—their locations, funding experience, activities, and stage of development; the factors that led to TMA formation; and organizational and technical areas in which TMAs need and desire future assistance.

Much of this paper is excerpted from the final report of that assessment project (1).

Following completion of the research project, Caltrans modified the grant program and implemented a new statewide program administered by COMSIS Corporation of one-on-one assistance to TMAs. This paper also draws on recent experience with TMAs following these changes.

DATA COLLECTION

To assess the current status of California TMAs, the project collected background information on the 56 TMAs in existence in fall 1990. Information was obtained through numerous sources, but key insights were gained directly from TMAs through surveys and TMA workshops held in five locations around the state. Both TMAs funded by Caltrans under the grant program and those that had not received Caltrans grants were included in the assessment.

Of the 56 TMAs then operating in California, 45 provided information by completing the survey form, attending one of the workshops, or both. The comprehensive survey, which was mailed to all TMAs and collected at the workshops, was completed by 38 TMAs. It gathered information on

- Development and operations activities being undertaken,
- Primary impetus for TMA formation,
- Funding sources and amounts,
- Current and past assistance needs during different stages of development,
- Role of the grant program in TMA formation,
- Indicators of potential locations for TMA development,
- TMAs' future vision of themselves, and
- Perceived results to date.

Five 1-day workshops also were held to augment information received through the survey. The workshops were held regionally, for Los Angeles–Ventura County, Orange County–Inland Empire, Sacramento–Central Valley, San Diego, and San Francisco. Workshop participants included managers and board members from 35 TMAs, Caltrans representatives, representatives of regional planning and ridesharing agencies, and other groups involved with TMA development in California. During the morning session of the workshops, the participants discussed descriptive information on each of the TMAs present, local conditions that led to their formation, the role of the Caltrans grant program in TMA development,

and information on existing sources of assistance and the role of other agencies. The afternoon discussion focused on identifying problems specific to TMAs and needs for further assistance.

Discussion during the workshops was recorded by the consultant and used with the survey data to develop a profile of TMA development in California, identify the primary reasons for TMA development, and identify assistance needed by TMAs.

PROFILE OF TMAs IN CALIFORNIA

Through the survey and workshops, information was collected on six characteristics:

- Distribution within California,
- Funding sources,
- Distribution by geographic focus (service area land use type),
- Distribution by development stage,
- Typical activities, and
- Impetus for TMA formation.

Distribution Within California

The data showed that in late 1990, TMAs were distributed throughout the state, but were clustered in five urbanized areas: (a) South Coast Basin (Los Angeles, San Bernadino, and Riverside Counties) and Ventura County, (b) Orange County, (c) San Diego County, (d) San Francisco Bay Area, and (e) Sacramento–Central Valley.

As shown in Figure 1, 42 of the TMAs were in Southern California. Los Angeles County led the state in TMAs, with 15, primarily located in dense employment areas such as Pasadena, Century City, and downtown Los Angeles. One was located in San Bernadino County and three others were located in Ventura County. Orange County was the base for 12 TMAs, most located in or near the I-405 corridor. The 11 TMAs in San Diego County were distributed throughout the county, but except for one downtown area TMA, others in San Diego have emerged in newly developing areas north of the city and along the I-15 corridor.

Fourteen TMAs were located in Northern California: six in the San Francisco Bay area, five in the Sacramento area, and three in other Northern California areas. The six San Francisco TMAs were evenly divided among downtown San Francisco, the east Bay, and other suburban counties. In Sacramento, one TMA was located downtown; the others were located in high-growth corridors and suburban activity centers.

Funding Sources

TMA funding sources and amounts varied. Over 70 percent of the TMAs that participated in the study cited Caltrans as a funding source. Most indicated that they had been awarded \$60,000 from Caltrans, the grant limit in a 50-50 matching program. Sixteen percent mentioned having received grants

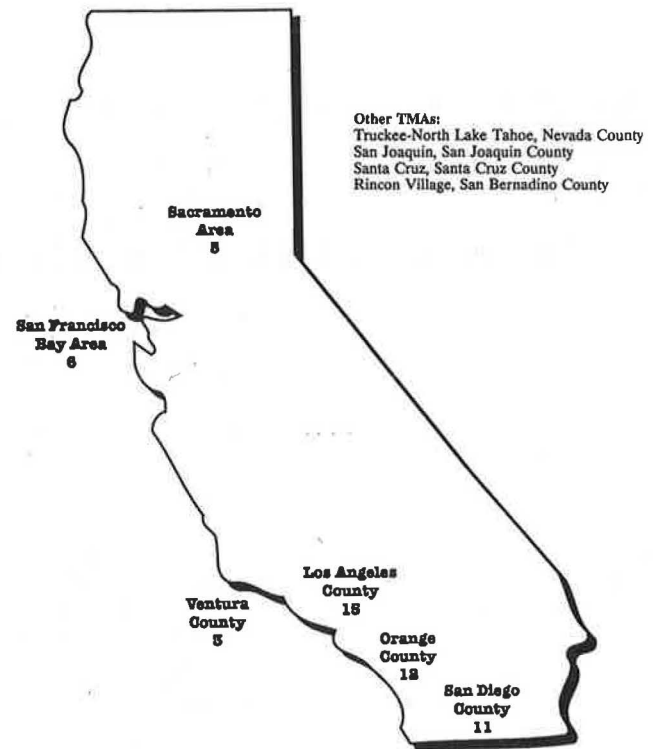


FIGURE 1 Geographic distribution of California TMAs.

from the former Urban Mass Transportation Administration (UMTA) (now the Federal Transit Administration), in amounts ranging from \$45,000 to \$1.2 million total for the life of the grant (up to 3 years). Another 16 percent had received funds ranging from \$3,000 to \$280,000 from other public groups such as cities, counties, and rideshare agencies.

Most TMAs (63 percent) also indicated that they were funded in part by membership dues consisting of from \$4,000 to \$300,000, and nearly half (47 percent) had private in-kind contributions of \$400 to \$100,000. Finally, other sources, such as developer fees and donations from chambers of commerce, were reported by 21 percent of TMAs, in amounts from \$15,000 to \$350,000.

Distribution by Geographic Focus

TMAs were also characterized in the study by their geographic focus, that is, the type of development or land use in their service area. They were grouped into four categories:

- Existing suburban,
- New suburban,
- CBD (downtown), and
- Other.

Existing Suburban

Over half (30) of the TMAs in California in late 1990 were located in existing (developed) suburban areas. These TMAs served existing non-CBD activity centers, usually dense em-

ployment areas with existing transportation problems. They were formed primarily to provide centralized, coordinated services to current employers, to assist employers to develop and implement in-house transportation demand management (TDM) programs, and to address localized transportation-related problems.

New Suburban

Twelve of the California TMAs served new suburban areas and emerging commercial or residential developments. Developers were typically the catalysts in TMA formation, because there were no employers or residents yet. TMA formation was often seen as a mechanism to mitigate traffic or air quality impacts of planned development. In some cases, developers were required by agreements negotiated with localities to mitigate trips to the site or in the area, and a TMA was initiated to assist in this effort.

The preponderance of suburban TMAs in California, 75 percent of the total, is not surprising given that much of the recent employment growth in California, as in many areas of the United States, has occurred outside downtown centers. It could also point, however, to a possible lack of transportation services and facilities in suburban settings as compared with downtown areas. Downtowns often have organizations, services, facilities, and programs to support transportation, as well as a history of greater awareness and acceptance of commuting options by employers and employees.

CBD (Downtown)

Six of the California TMAs (11 percent) were located in central business districts (CBDs) or downtown areas. They served CBDs in San Diego, Glendale, Los Angeles, Pasadena, San Francisco, and Sacramento. TMAs located in downtowns worked with employers, but often also worked with managers of the multi-tenant buildings frequently found in downtowns. CBD TMAs more often focused on transit promotion and parking management than did suburban TMAs, because of typically better access to transit and lower availability of free employee parking in the CBD. They also promoted accessibility to and within downtown for employers and merchants.

Other

The remaining eight of the 56 California TMAs served other areas, neither in suburban centers or downtown. This category included TMAs that serve entire regions, corridors, or industries. Regional TMAs often played a significant role in areawide transportation planning and advocacy and a lesser role in local service delivery. Corridor TMAs tended to focus on development along a particular transportation corridor or were formed to mitigate impacts of highway reconstruction. Industry TMAs served a single type of employer, such as hospitals, within a region or area, and often developed services and programs unique to employers and employees in that industry.

Distribution by Development Stage

The fourth characteristic examined was stage of development, that is, how far from TMA initiation to maturity was the TMA. TMAs were divided into three development stage categories that correspond to the stages Caltrans has defined in its TMA grant program: exploration, formation, and operation.

Exploration

The exploration stage represented a study effort that determined the feasibility of and need for forming a TMA and the conditions under which it would be formed. The effort might have considered the appropriateness of a TMA compared with another organizational form to address transportation problems, but most often exploration simply examined whether a TMA made sense at the time.

TMAs in this stage were also developing their core group of supporters and beginning to define problems and solutions. In some cases, they were pursuing formation tasks, such as drafting bylaws and developing a work plan, although operating funds had not been secured and TMA formation was not certain. Twenty-one (37 percent) of the TMAs in California were in the exploration stage.

Formation

The formation stage answered the questions, "Now that we want to be a TMA, what will we look like and what will we do? How will the TMA be structured and what services will be provided?" Fifteen California TMAs (27 percent) fell into this development stage. During this stage, a TMA expanded its support beyond the core group and planned services. Formation tasks included hiring staff, adopting a legal status, establishing an office, and so on. As with exploratory TMAs, the line between formation and the next development stage, operation, was often ill defined. TMAs in formation often were also undertaking operational activities such as initiating a few services, but the primary focus was on formation tasks.

Operation

The remaining 20 TMAs (36 percent) fell into the operation stage, which included two categories of activities—administration and service delivery. Administration refers to the efforts needed to maintain membership and funding and activities related to running the TMA office and serving the Board of Directors. Service delivery refers to provision of services such as rideshare matching to members' employees. This stage was characterized by a maturation of the organization; development of stable, ongoing, private funding from membership sources; and a track record of service delivery.

The combination of four geographic area types and three development stages resulted in 12 distinct types of TMAs. They include, for example, TMAs located in downtowns in the formation stage of development, existing suburban TMAs in the operation stage, and new suburban TMAs in the ex-

ploratory stage. The 56 California TMAs were divided into the 12 categories as shown in the matrix in Table 1.

Several points have already been highlighted about the geographic distribution of TMAs, but the matrix suggests several other observations. First, TMAs were not evenly distributed over the three development stages; only about one-fourth of TMAs were in the formation stage, whereas the balance were evenly divided between exploration (infancy) and operation (maturity). The unequal distribution of TMAs by development stage could be the result of noncontinuous TMA initiation, that is, more TMAs having been initiated at certain times than others, or of differences in the rates of growth of different TMAs. Probably both are partial explanations.

Table 2 shows the distribution of TMAs by year of initiation and 1990 stage of development. Of the 56 TMAs, 15 (27 percent) were in existence, even if only in embryonic form, before 1989. Twenty-one (38 percent) were started in 1989, and the balance, 20 (36 percent), were started in 1990. The percent distribution of pre-1989, 1989, and 1990 start-ups is roughly the same as the distribution of TMAs in the operation, formation, and exploration stages in late 1990. Also, as Table 2 shows, most TMAs in the operation stage had been started before 1989, most formation TMAs in 1989, and most exploration TMAs in 1990. This would also suggest that 12 to 24 months is required for a TMA to reach the operational stage.

Because only five TMAs were operating in California in 1987, it is noteworthy that 20 were operating in late 1990. Thus, 15 TMAs were able to move to operation from an earlier stage. It is possible that the presence of trip reduction regulation, increased awareness of and interest in TMAs as a mechanism for TDM implementation, and the increased availability of public seed funding contributed to this progress.

A second observation from Table 1 is that, except for the existing suburban category, the overall distribution of TMAs by stage of development does not hold in individual geographic categories. In the new suburban category, for example, exploration TMAs account for 50 percent compared with the overall average of 37 percent. This could suggest a recent interest in transportation demand management (TDM) on the part of developers, the typical catalysts for new suburban TMAs, perhaps because of increased application of transportation-related development conditions by planning and zoning agencies. Alternatively, it could suggest that the time needed to move from exploration to formation is greater in areas where mobility problems do not yet exist.

Also, in the "other" TMA category, the number of formation TMAs is higher than would be expected from the averages and the number of operating TMAs is lower. This might suggest that it is more difficult to develop a TMA in one of these settings or it might signal increased recent interest in developing TMAs in nontraditional areas.

TABLE 1 DEVELOPMENT STAGE BY TMA GEOGRAPHIC TYPE

Devel. Stage	Geographic Area Type				Total
	Existing Suburban	New Suburban	CBD	Other	
Exploration	11	6	1	3	21 (37%)
Formation	7	2	3	3	15 (27%)
Operation	12	4	2	2	20 (36%)
Total	30 (54%)	12 (21%)	6 (11%)	8 (14%)	56 (100%)

In June 1990, in its fourth cycle of grant awards, Caltrans awarded 18 TMA grants, one for TMA formation and 17 for exploration (see section entitled "Recent Experience"). Of these grants, nine (50 percent) were awarded to groups in existing suburban areas, three (17 percent) to groups in new suburban areas, five (28 percent) to CBD groups, and one (5 percent) to an "other" group. Although grants to suburban groups still outnumbered those to nonsuburban groups, the percentage of TMA grants awarded to CBD groups more than doubled in this recent award cycle, whereas the percentages in all other categories declined from the past average. Most of the CBD groups were, however, in either suburban CBDs near major metropolitan areas or in the CBDs of smaller towns.

Typical Activities

The survey also explored the typical activities of TMAs at different stages of development. The activities differed by the development stage of the TMA, but nearly all TMAs undertook or were planning to undertake the following activities during their development:

- Problem definition,
- Establishment of organizational status and structure,
- Membership development and relations,
- Service delivery, and
- Planning and evaluation.

Problem Definition

Seventy-nine percent of TMA survey respondents had completed the problem definition task. Most generalized their problem as "traffic congestion" or "mobility constraints," however, rather than citing specific, localized, and tangible problems. Of the respondents, 82 percent had secured the commitment of the core steering group, but only 58 percent had reached a consensus on the problem.

The dilemma of fostering commitment among the members without first forming a consensus on an only generally defined problem was an issue for many TMAs. Consensus on a specific problem is extremely important, because without a common understanding of the nature and source of the problem, it is difficult to develop services that will be effective and offer real benefits to members.

Organizational Status and Structure

Organizational status was broadly defined to mean the structure and independent status of the TMA. Nearly 70 percent

TABLE 2 CALIFORNIA TMAs: FALL 1990 DEVELOPMENT STAGE BY YEAR OF INITIATION

Year	Development Stage				Total
	Exploration	Formation	Operation	Total	
Pre 1989	1 (1.7%)	2 (3.6%)	12 (21.4%)	15 (26.7%)	
1989	5 (8.9%)	9 (16.1%)	7 (12.5%)	21 (37.5%)	
1990	15 (26.8%)	4 (7.1%)	1 (1.7%)	20 (35.7%)	
Total	21 (37.5%)	15 (26.8%)	20 (35.7%)	56 (100%)	

had decided on their legal status, but only 58 percent had determined their tax status (for-profit status or type of not-for-profit status). This is probably because TMAs first decide whether to be independent or part of an existing group, and then, if having decided to be an independent corporation, explore the appropriate tax status.

Eighty percent of the TMAs polled had established a place of business. Two-thirds had formed a Board of Directors; the remaining one-third were in the process of board formation.

Membership Development and Relations

About half of the TMAs had completed three tasks related to membership development: member identification, development of employer or employee data bases, and preparation of a membership recruitment plan. In the early stages of development, TMAs often have a fluid membership, but even TMAs in the operation stage can experience considerable turnover from year to year. The number of members ranged from 1 for a developer-initiated TMA in a new suburban area to almost 100 for a CBD TMA. Membership of 10 to 20 was average.

Member and board relations were also explored in the TMA workshops. Several TMAs noted difficulty in getting firm commitment and even direction from the board. Boards were seen as a valuable resource, but many TMAs found it difficult to get members to deliver on promised assistance.

Service Delivery

TMAs were asked to check the services they offered or planned to offer in the future. The most frequently cited services offered (mentioned by over one-third) were

- Member information services (55 percent),
- Rideshare promotion and fairs (53 percent),
- ETC network coordination (47 percent),
- Government relations and advocacy (47 percent),
- Input to local planning process (42 percent),
- Ridematching (42 percent),
- Transit pass sales and distribution (39 percent),
- Trip reduction plan preparation (39 percent),
- Employee surveys and analysis (39 percent), and
- Vanpool formation (34 percent).

The most frequently mentioned services being planned were

- Shuttles (39 percent),
- Guaranteed-ride-home programs (36 percent),
- Vanpool formation (34 percent),
- Parking management (34 percent),
- Vanpool leasing (32 percent), and
- Child care-transportation link (32 percent).

Services now offered were largely of an informational or promotional nature. Only ridematching and vanpool formation directly offered commuting alternatives. The other services were primarily targeted at employer members or involved general information exchange with commuters. They

were aimed at educating commuters and employers rather than offering actual commute alternatives.

The major conclusion from the services that are planned is that they tended to be more tangible services oriented toward directly providing commute alternatives or affecting commuting, as through parking management or child care. These services, which usually have the greatest effect on commuter behavior and trip reduction, were primarily implemented by TMAs well into the formation and operation stages. The likely reason for the differences between existing and planned services is that informational and promotional services were far easier and less costly to implement than services such as shuttles or vanpool programs and less controversial to implement than parking management.

Planning and Evaluation

About 50 percent of formation TMAs had completed work and marketing plans, and another 30 to 40 percent were working on them. Of those in the operation stage, approximately 60 percent reported having a work plan. The fact that not all TMAs, particularly in the operation stage, have prepared a work plan is significant, because a work plan is an important activity guide. Also, both Caltrans and UMTA [now the Federal Transit Administration (FTA)], funders to many TMAs, require their grantees to develop work plans.

Fewer TMAs reported monitoring and evaluation as activities, particularly in the earlier development stages. Only 24 percent of TMAs in the formation stage had a program evaluation plan. But of operational TMAs, 55 percent were implementing program evaluation and 32 percent were evaluating services. The relatively low level of service evaluation could be due to the fact that many TMAs have not fully implemented services or that program evaluation (what the TMA is doing) might be seen as a higher priority than service evaluation (how effective the services are).

Impetus for TMA Formation

The project also examined the impetus for TMA formation, that is, what the conditions were that led to the TMAs' being formed. This information was gathered to help in predicting when, how, and where future TMAs might be expected to form.

Information gathered both in the workshops and through the surveys suggested two primary reasons for formation of the California TMAs. One was to respond to a specific or general transportation-related problem. Problems such as traffic congestion and labor market accessibility were mentioned as contributing to their formation by over one-half of the TMAs. In some cases, the TMA was formed by employers interested in "doing something" about traffic.

The second reason was to respond to traffic or air quality regulations. Regulations such as the South Coast Basin's Regulation XV on air quality and local developer traffic mitigation agreements were mentioned by about half of the survey respondents as a factor in the TMA's formation. Many of these TMAs said that although a problem also existed, the regulatory environment spurred the TMA's development.

A factor mentioned by TMAs as contributing to their development was the availability of public-sector grants for TMA start-up. It was not cited as a reason for forming a TMA, but was mentioned by some TMAs as influencing the timing of their initiation. In most cases, survey respondents said that their TMA would have been formed without the grant, but probably not as soon or as quickly.

The responses of some TMAs also indicated that grants from the public sector influenced the choice of a TMA over another organizational form to address local transportation problems. If grants were available "to form TMAs," some groups that might have addressed transportation problems through a chamber of commerce, ETC network, or other organization might have decided to form a TMA instead.

These results suggest that new TMAs are likely to form in areas of rapid employment growth, primarily suburban centers, where transportation services and facilities are not adequate to accommodate the growth. The results also point to locations in which local or state regulations require employers or developers to reduce vehicle trips. Recent legislation points toward a growing trend among state and local governments to mandate trip reduction requirements for employers and developers. If development growth continues to create congestion problems, trip reduction legislation is passed in other locations, and governments reinforce the choice of a TMA as a TDM mechanism, there will likely be more demand for TMA formation.

ASSISTANCE NEEDED BY TMAs

A substantial part of both the TMA surveys and workshops was devoted to identifying the assistance needs of TMAs in each of the three stages of development. TMAs cited two primary needs: financial assistance and one-on-one information assistance.

Financial Assistance

TMAs stated a desire to have public funding beyond the start-up or "seed" period. Some also mentioned the desire for funding to support the initiation or testing of specific services or to support functions that benefitted the public as well as the private sector. Most TMAs have problems with raising private-sector funds and establishing a continuing revenue stream. TMAs are often undercapitalized and operate on a shoestring. The quest for funding preoccupies the attention of many TMA managers, especially during the formation stage. But even TMAs that have been in existence for several years report not feeling secure about their continued funding.

Information Assistance

In the survey TMAs were asked to indicate specific organizational and technical areas in which they currently needed assistance. TMAs that had completed an activity were asked if they would have liked assistance with that activity in the past. The results were organized by the three development stages mentioned earlier.

Exploration Stage

Data collection and analysis were the highest priorities of TMA managers who completed the TMA survey. Two-thirds of TMAs surveyed need or have needed assistance in this area. Having made the decision to pursue the exploration of a TMA, fledgling groups required assistance to develop data needed to assess conditions in their areas, define problems, and identify feasible solutions. TMAs also needed help in working with potential members to build consensus on both the problem and potential solutions. The survey revealed that member identification and commitment of a core group were the second and third priorities of TMA managers.

Formation Stage

The primary thrust of assistance needed by TMAs in the formation stage was in setting up a business. Much of the TMA staff came to their jobs with little experience in forming a new enterprise, and new staff were often overwhelmed by the many challenges they encountered. Based on information from the workshops and surveys, formation TMAs also needed assistance with program evaluation, development of work plans, membership recruitment, and financial planning.

Operation Stage

In the operation stage of TMA development, assistance needs focused on administration and service delivery. The highest priority among survey respondents was planning for financial stability. Concern for financial self-sufficiency continued to preoccupy staff attention. TMAs also needed help identifying and selling benefits to members. At this point it is essential that return on investment be documented to maintain member interest and attract new members. Program monitoring and evaluation were mentioned as the greatest need by survey respondents.

Another area of assistance needed by operation-stage TMAs was service delivery. Most TMAs come into existence to provide services that make it easier for members to meet trip reduction mandates or operate in-house programs that are best provided centrally. TMAs must determine what these services should be and deliver them. Most TMA staff required assistance in assessing the demand for services, developing performance specifications, and initiating services.

RECENT EXPERIENCE

The TMA assessment project was not intended to evaluate the effectiveness of individual TMAs nor to determine whether the concept was worthy of continued funding and attention. It was intended, however, to provide recommendations to Caltrans on changes or additions to the TMA Formation Grant Program that would enhance the success of TMAs as TDM implementation mechanisms. Caltrans chose not to implement all of the recommendations, but did implement many. Several concerned the provision of technical assistance to TMAs. Others involved changes in the funding guidelines. These changes are discussed herein.

Caltrans Fourth-Cycle Grant Process

On the basis of the recommendations of the TMA Assessment Report, Caltrans has made several significant changes in its TMA grant program. Of the grants awarded during fiscal years 1988 through 1990, nearly all were one-for-one matching grants of \$60,000 for TMA formation, although a \$15,000 feasibility grant was also an option. The discussions in the workshops suggested, however, that some of the grantees applied for formation grants even though they were actually only in the feasibility stage. Thus, some formation grantees were still conducting exploration tasks. This perhaps resulted in their being less secure and less well-developed at the end of the formation funding period than expected.

In spring 1991, Caltrans announced the fourth cycle of the TMA grant program, that is, the fourth announcement of solicitation for applications for new TMA grants. In the fourth-cycle guidelines, Caltrans cited "several ways in which the TMA Development Grant program could better assist in the (TMA) development process:

- Assist TMAs in clearly defining the problems which they, as organizations, are to address.
- Assist in developing a solid business organization to support the TMA prior to its initial operation.
- Assist the TMA in designing saleable and effective transportation demand management services."

Each of these areas was identified in the assessment project as a potential stumbling block for new TMAs. The research suggested that some TMAs were experiencing development problems because of premature formation, poor definition of problems or solutions, or lack of sound structural organization.

Therefore, for the fourth cycle, successful completion of a distinct feasibility step is now a prerequisite to award of a formation grant, in a two-part award. The first part is a \$15,000 exploration grant (no match required) to be used to identify the conditions under which the TMA would form and to assess the appropriateness of a TMA to address the area's problems. In the feasibility study, expected to be completed within 6 months, grantees define their service areas, identify the existing and projected transportation problems and potential TDM strategies, and estimate business community support for the TMA and TDM strategies.

If the exploration study concludes that the TMA is an appropriate organization to address the issues and grantees have accumulated at least \$15,000 in private cash contributions for TMA support, they may apply for the second part of the award, the formation grant. The formation grant, \$60,000 with one-for-one match by the TMA, is seed funding intended to give the grantee time to establish a TMA structure and establish initial TMA services.

Nineteen grants (17 feasibility and 2 formation) were awarded in the fourth cycle. The changes to the funding program encourage groups interested in forming TMAs seriously to assess their potential markets and services and develop a consensus on the problem and the role of a TMA in addressing that problem during the exploration stage. This exploration will put them in a stronger position to undertake formation tasks if TMA feasibility is determined. Some of the exploration

studies funded in the fourth cycle may lead to the award of TMA formation grants, and others could result in decisions by groups to form ETC networks, regional public-private advisory councils, or other groups to address transportation issues. With this new focus, Caltrans expects to continue to foster TMA development in California, but also to enhance their prospects for longevity by supporting new TMAs in several critical initial tasks.

TMA Assistance Program

A second recommendation, recently implemented, was for development of a program of one-on-one assistance to TMAs. In March 1991, Caltrans announced the availability of a new program, the TMA Assistance Program, designed to provide management and technical assistance to California TMAs.

The program, which is administered by COMSIS, consists of two assistance elements. The first is management consulting assistance. In this element, TMA staff request assistance on specific topics and a one-on-one meeting is scheduled with one of the six TMA advisors on the consulting team. Nearly all the TMAs surveyed said that they would benefit from assistance with a TMA expert or advisor, preferably in a one-on-one format rather than in group workshops. In the meeting, the TMA advisor helps the TMA develop solutions tailored to its stated immediate need, but also identifies other areas in which the TMA could benefit from the experience of the advising team.

The second element is "quick response" assistance. This is assistance that is available on a limited but ongoing basis to help with brief, easily answered questions. It can be used at any time, but it is envisioned primarily as follow-up to the in-depth management consulting assistance. The advantage of a TMA's meeting first with one of the advisors is that the advisor would then be familiar with unique aspects of the TMA and its operation and could answer future questions with little or no additional research.

Assistance Requested

As of November 1991, 23 TMAs had requested assistance. Most of the requests came from newer TMAs, primarily those initiated since 1989. Only one TMA that existed before 1989 had requested assistance, but the director of that TMA was new to the position. Requested topics have ranged widely. The most common requests have been as follows:

<i>Description</i>	<i>No. of Requests</i>
Membership development	15
Membership dues structures	10
Program and service evaluation	9
Development of TDM or TMA services	9
Data collection and analysis	7
Work plan development	7
Board relations and participation	7
Financial planning	7
Shuttle service development	4

Although it is difficult to draw firm conclusions about the TMAs that have requested assistance, there are commonalities, some quite encouraging to the long-term future of TMAs,

but other less so. The large number of requests for assistance with membership development suggests that membership recruitment is difficult for many TMAs. Many TMA managers report finding this task more time-consuming and less rewarding than they had expected. Persuading employers of the benefits of the TMA seems to be easier in areas with employer or developer trip reduction requirements, but far from easy even there. Many managers did not realize how much salesmanship they would need in their positions. Recognizing this need to persuade, many have asked for assistance in measuring their successes (evaluation) to document TMA benefits to members.

TMAs do seem to be well aware of the need to provide desirable, effective services to attract new members and keep existing members. Both new and mature TMAs have stressed their desire to be up and running with services as quickly as possible, and nearly all have asked for assistance on one or more service-related topics.

There is a danger in the rush to provide services, however. Although many TMAs have completed a baseline survey of commute patterns in the area and others have asked for assistance in this task, few have done any significant market analysis of what services their constituents need or want. This is due in part to constrained resources; TMAs do not have either the money or the time to conduct the full range of market research studies needed. There is a growing awareness among TMAs that they must tailor services to their areas, but too many still choose services and model many aspects of their programs on what other TMAs do.

For some services, such as rideshare matching, this might be appropriate, but TMAs are possibly spending valuable resources to provide services that are not the most effective or that their members do not consider worthwhile at the expense of other, more valuable services. The strong interest in shuttle services is a case in point. Four of the requestors have asked for information on shuttle services despite the cautions of transportation professionals that most shuttles, especially those in suburban areas, fail.

An interesting request that has come from seven TMAs concerns staff interaction with the Board of Directors. It is interesting particularly because it has come from both start-up and more mature TMAs. Most of these TMAs have asked for ideas on ways to involve their Boards of Directors more deeply in membership recruitment and long-term planning, but several also are interested in rejuvenating their boards' enthusiasm for TMA activities. An increasing focus on board participation in strategic planning is especially encouraging, because it indicates that some TMAs are thinking beyond day-to-day crisis management and taking time to develop a future vision of the TMA and an action plan to achieve its goals.

Interest in guidance on how to reach financial self-sufficiency has also been common. Several TMAs have asked for help in pricing their services at an appropriate level, that is, high enough to cover the costs of providing the services and generate adequate revenue for TMA operation but low enough to attract a large number of members. This is a delicate balancing act, and over one-third of the TMAs have asked for assistance in developing a member dues or fee structure. Other TMAs have asked for information or ideas on other potential sources of ongoing funding and assistance with financial planning.

Planned Assistance Additions

The assistance program will soon be adding business training for TMAs as a complement to the organizational and technical assistance now provided. Many TMA managers, especially those with TMAs in the formation stage, cited the need for assistance in establishing and running a business. TMA staffs are usually small, and few managers bring a business background to the TMA. This training, which will be available to all TMA managers in California through the University of Southern California Entrepreneurial Services Program, will teach a business approach to TMA management. It will focus on strategic business development, the process of developing and marketing new services, and financial management.

A soon-to-be-implemented change to the assistance program will be its extension to fourth cycle grantees. It was clear from the assessment research that problem definition, development of mission and goals, and consensus building were important early tasks overlooked by many TMAs. Recent contact with existing TMAs has further confirmed the impression of this omission. As a result, assistance will now be offered to the steering committees of recent TMA feasibility grants to help them address these issues early in the TMA exploration process. This assistance is expected to lead to more realistic exploration studies and development of more solidly founded TMAs.

Caltrans' TMA Assistance Program will continue to evolve to meet TMAs' needs. The assistance is tailored to each request and follow-up is provided to ensure that the assistance is responsive. Written guidance materials also are being developed in response to specific requests, and these materials will be available to other TMAs in the future. As more TMAs are formed, through future Caltrans funding cycles and the natural development of TMAs, the program will need to evolve with these changes.

FINDINGS AND CONCLUSIONS

The research undertaken for the TMA Assessment Project and presented in this paper suggests several notable conclusions about the status of TMAs in California that likely apply to TMA development in other locations as well.

TMA Development Stages and Critical Developmental Issues

TMAs pass through three distinct stages from inception to maturity and face specific challenges in each stage:

1. The first stage, exploration, represents a study effort of the feasibility of a TMA to address the area's problems. The primary challenges during this stage are defining specific, tangible problems and developing member consensus on both problems and solutions.
2. The second stage, formation, involves the establishment of an organization structure and identification of appropriate TDM strategies. During this stage, TMAs must develop secure funding sources and effective services that are perceived as valuable to members and potential members.

3. The third stage, operation, is characterized by financial self-sufficiency and a track record of service delivery. In this stage, the TMA challenges are to maintain member interest beyond the initial core support and to document benefits and successes.

Length of Development Period

TMAs differ in the speed of their development, but 18 to 24 months seems to be the average time required to progress from exploration to operation. Movement to operation is enhanced if the exploration stage includes a thorough identification of the problems to be addressed and development of consensus on both problems and solutions.

Reasons for TMA Formation

TMAs reported two primary reasons for formation: to address a transportation-related problem and to respond to traffic or air quality regulations.

This suggests that new TMAs are likely to form in areas with rapid employment growth and insufficient transportation systems and services. The results also point to TMA development in areas where employers and developers are required to reduce vehicle trips. Although not cited as a reason for formation of a TMA, the availability of grants for TMA start-up was mentioned as contributing to the timing of formation.

Funding

TMAs draw funding from a variety of public and private sources, but most are undercapitalized and operate on a shoestring, particularly during the early stages. Even TMAs in the operation stage report concerns over financial self-sufficiency.

Services

TMAs typically begin to develop services during the formation stage, but actually implement few until the operation stage. Initial TMA services are frequently informational in nature, such as rideshare promotion, but offer few tangible alternatives to commuters. As the TMA matures, its services are generally broadened to include services, such as vanpool leasing and guaranteed-ride-home programs, that can more directly affect commuting behavior.

Evaluation

Few TMAs now actively monitor or evaluate their services. This could be due to the fact that many have not fully implemented services, or that program evaluation (what the TMA is doing) is seen as a higher priority than service evaluation (effectiveness of services). The absence of evaluation data makes it difficult to determine how effective TMAs are

as TDM implementation mechanisms, either individually or as a group.

Assistance Needs

TMAs report needing assistance on a wide variety of topics related to TMA operation and service planning and delivery. Primary assistance needs vary by stage of development:

- Exploration stage: data collection and analysis, problem definition and consensus building, member identification.
- Formation stage: business start-up, program evaluation, member recruitment, and financial planning.
- Operation stage: service development, service monitoring, financial planning, and board and member relations.

Research Needed

The TMA Assessment Project identified many of the characteristics of current TMAs, that is, what TMAs are and do. Little is known, however, of the effectiveness or cost-effectiveness of TMAs as mechanisms for TDM implementation—whether what TMAs do improves area mobility or reduces trips in an area. This is due in large part to the absence of data on TMAs' impact on trip-making patterns or on transportation decision-making processes that can lead to increased commute options.

Interest in determining TMAs' effectiveness is increasing, however, as both public and private groups demand to know if the resources they allocate to TMAs are well spent. A thorough evaluation of the results achieved by existing TMAs is greatly needed. Many of the findings noted in this paper suggest that TMAs require several years of growth before they are fully operational and before they should be expected to produce trip reduction results. A point in TMA development is now being reached, however, when TMAs are both numerous and mature enough for a rigorous study of their effectiveness to be contemplated. TMAs, their members and other funders, and many other public and private groups would benefit from such research.

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1. *Status Report on TMA Development in California: Findings and Recommendations*. California Department of Transportation, Sacramento, 1991.

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