

# Public Transportation Development and Coordination: San Diego Case Study

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The San Diego Metropolitan Transit Development Board (MTDB) was created by the California state legislation in 1975 and empowered to plan, construct, and operate mass transit guideways and to perform near-term planning. The agency has evolved into an umbrella organization that has broad transit development, planning, programming, and financing powers. Operations of transit services are performed by a variety of operational units controlled by MTDB in a unified system. This system has been officially called the Metropolitan Transit System (MTS). Made up of six fixed-route bus carriers, one light rail transit (LRT) operator, and four general-purpose dial-a-rides, the MTS is characterized by unified fares, transfers, passes, and route numbers.

The San Diego metropolitan area contains 10 cities, of which the largest is the city of San Diego. The current population for the metropolitan area (Figure 1) is just under 1.6 million people, with nearly two-thirds of these residents living within the city of San Diego. The area has faced considerable growth since World War II, and population forecasts show an approximate 30 percent increase over today's levels by the year 2000, resulting in an expected population of about 2.1 million residents (1).

The public transportation system for the area includes a variety of services. The basic system is a fixed-route bus network that has local/feeder, urban arterial, and express/commuter runs and is supplemented by light rail transit (LRT) service in two corridors and a number of general- and special-purpose demand-responsive systems. Approximately 130,000 total passengers are carried by these systems daily. As presented in Table 1, specific operators include six that provide fixed-route bus service, the LRT operator (San Diego Trolley, Inc.), and four general-purpose dial-a-rides. Over 350 transit vehicles—buses, taxis, vans, and light rail vehicles—are deployed during the peak periods to operate this system (Table 2).

This overall public transit network is officially called the Metropolitan Transit System (MTS). However, MTS itself is not an agency, but is the unifying name, logo, or acronym used to represent all of the publicly subsidized transit operators in the San Diego metropolitan area. The purpose of this paper is to explain how the San Diego MTS is organized and governed.

## FUNCTIONS OF THE METROPOLITAN TRANSIT DEVELOPMENT BOARD

The San Diego Metropolitan Transit Development Board (MTDB) was created in 1975 by California state legislation

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(Senate Bill 101) (2). The board is empowered to plan, construct, and operate mass transit guideways and to perform near-term planning and programming in its area of jurisdiction. MTDB is an independent agency governed by a 15-member board of directors: four council members from the city of San Diego, one council member each from nine suburban cities, one supervisor from the county of San Diego, and one representative appointed by the governor of California.

The organizational basis for MTDB took hold with a concept presented to the MTDB board of directors in January 1979 (3). This concept described an agency that

“... would determine overall transit service levels, fares, schedules, and be responsible for public information about transit in the MTDB area of jurisdiction. . . . The LRT operator is but one of several contract operators for transit and freight service operating to specifications established by the regional transit agency. All of these contract operations would thus fit together into a unified system from the point of view of the public.

In a somewhat gradual and incremental way, the concept came together in 1984 after several studies of the matter were completed (4, 5). These studies paved the way for legislative changes completing organization of MTDB in its current form (6). As such, the concept mirrors what has been referred to (7) as a “public marketing agency approach” and has parallels to the transit federations of some systems in the Federal Republic of Germany (8-10).

Over MTDB's first 10 years, the agency was best known as a guideway development organization. MTDB planned, designed, and constructed the 16-mi LRT line between Centre City San Diego and the International Border (i.e., Tijuana) in San Ysidro, followed by the first 4.5-mi leg of the eastern extension, which runs from Centre City to Euclid Avenue. This LRT system initiated revenue service on the South Line in 1981 and on the East Line in March 1986.

In addition to these development functions, MTDB is also responsible for short-range planning and financing for bus and rail transit systems in its area. As depicted in Figure 2, MTDB effectively functions as an umbrella agency. MTDB owns the assets of San Diego Transit Corporation (SDTC) and San Diego Trolley, Inc. (SDTI), the area's two largest transit operators. These two transit units were formed under California law as nonprofit public corporations. In addition, MTDB owns the San Diego and Arizona Eastern Railway Company (SD&AE), a Nevada railroad corporation that covers 108 mi of line and over 2,000 acres of property. The operations and maintenance

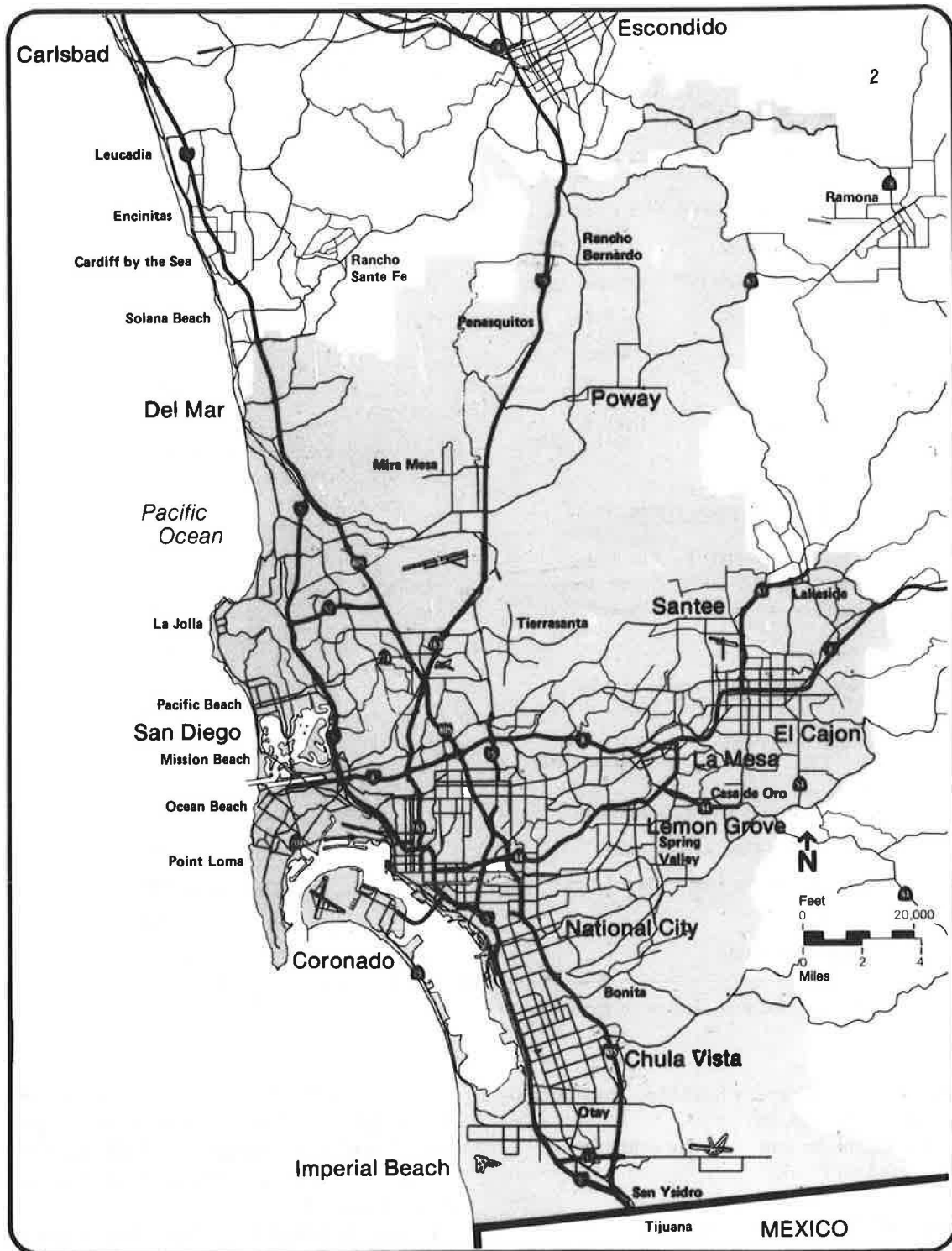


FIGURE 1 MTDB area of jurisdiction.

of these two transit services and for the freight railroad are all handled under separate operating organizations. Essentially, the day-to-day functions, labor matters, and maintenance of facilities are managed by these individual operating corporations.

Outside of MTDB's ownership responsibilities, but essential to the cost-efficient operation of public transit services in the area, are MTDB's coordination powers. These functions are specified through California state legislation (11) that provides state transit fund administration, planning and programming

roles for MTDB over any public transit operator in the area that receives state operating monies. These powers are translated into various formal MTDB controls over public transit services through these means:

- Policies, for example, on fare setting and transfers.
- Plans and programs, for example, the annual Short-Range Transit Plan and the annual Transportation Improvement Program.

TABLE 1 SUMMARY OF MTDB AREA PUBLIC TRANSIT OPERATORS

Operator	Service Area	Number of Routes	FY 86 Total Passengers	FY 86 Revenue Miles
<b>FIXED ROUTE</b>				
Chula Vista Transit	Chula Vista	6	868	538
County Transit Express	North County, Centre City	3	99	128
County Transit Suburban (Includes East County and Poway service)	East County, Poway	8	696	903
National City Transit <sup>(1)</sup>	National City	3	670	274
San Diego Transit	San Diego, South Bay East County, Centre City	29	24,989	9,898
San Diego Trolley	South Bay, Southeast	2	7,003	1,798
Strand Express	South Bay, Centre City	1	893	423
Subtotal		52	35,218	13,962
<b>GENERAL PUBLIC DEMAND RESPONSIVE</b>				
El Cajon Express	El Cajon	1	157	318
La Mesa Dial-a-Ride	La Mesa	1	150	288
Lemon Grove Dial-a-Ride	Lemon Grove	1	40	70
Poway Dial-a-Ride	Poway	1	6	17
Subtotal		4	353	693
<b>SENIOR AND DISABLED DEMAND RESPONSIVE</b>				
Chula Vista HandYtrans	Chula Vista	1	48	121
County Transit WHEELS	South Bay, East County	1	38	249
National City Dial-a-Ride	National City	1	7	21
Poway Call-a-Ride	Poway	1	9	43
San Diego Dial-a-Ride <sup>(2)</sup>	San Diego	1	214	698
Subtotal		5	316	1,132
<b>MTDB Area Total</b>		<b>64</b>	<b>35,887</b>	<b>15,787</b>

Passenger and mile amounts in thousands

- Approval of annual budgets for San Diego Transit Corporation and San Diego Trolley, Inc.
- Approval of claims for state operating assistance.
- Grantee for federal funds.

Thus, although MTDB does not have direct control of the suburban fixed-route bus operations nor the public dial-a-rides, it has direct influence over the route/service definition and fare structure for each of the operators through these powers.

As noted, MTDB's enabling legislation has been amended in recent years to clarify and strengthen the various coordination roles. One amendment provided for a separate fund of state operating monies to be established and available to MTDB for so-called "regional" services (12). These regional transit services are those that are defined to be intercity and generally have a longer passenger trip length than local services. Currently, MTDB uses these regional monies to provide service under contract with three operators. Further, in accordance with

state law, a board policy that would require competitive award of new regional services was prepared and adopted (13). Another piece of legislation granted MTDB authority to administer and resolve disputes with regard to regional service and funding matters (14).

Finally, an important legislative change was one that required maintenance of an areawide farebox recovery rate (FRR) (15). Before this legislation, each operator receiving state transit operating subsidies was bound to maintain a certain individual FRR or possibly face the loss of funds. This legislation aggregated all subsidized transit operations together statistically under MTDB to come up with a unified FRR for the metropolitan area. In this way, an individual operator would not be faced with possible fare structure changes, to the detriment of a unified metropolitan system. Of interest, and of importance locally, is that the areawide FRR has increased from a historical low of 30.85 percent in Fiscal Year 1976-77 to 44.74 percent

TABLE 2 MTDB AREA TRANSIT VEHICLE FLEET DESCRIPTION

Operator	Number of Vehicles/ Peak Vehicles	Type of Vehicle	Owned by Operator or Contractor	Air Conditioned	Wheelchair Lifts
<b>Fixed-Route</b>					
Chula Vista Transit (SCOOT)	13/9	Bus	Operator	0	13
County Transit System Express Bus	10/7	Bus	Contractor	10	0
County Transit System Suburban Bus					
- East County	9/6	Bus	Operator	9	9
- East County	6/5	Van	Contractor	6	0
- Poway	5/4	Bus	Contractor	5	0
National City Transit	11/7	Bus	Operator	8	8
San Diego Transit DART	298/223 15/15	Bus Taxi	MTDB Contractor	297 15	110 0
San Diego Trolley	30/24	LRV	MTDB	6	30
Strand Express	12/12	Bus	Contractor	9	0
Total	358/268 30/24 15/15 6/5	Buses Light Rail Vehicles Taxis Vans		338 6 15 6	140 30 0 0
<b>General Public Dial-a-Ride</b>					
El Cajon Express	25/25	Taxi	Contractor	0	0
La Mesa Dial-a-Ride	15/15	Taxi	Contractor	0	0
Lemon Grove Dial-a-Ride	3/3	Taxi	Contractor	0	0
Poway Dial-a-Ride	2/1	Station Wagon	Contractor	2	0
Total	45/44			2	0

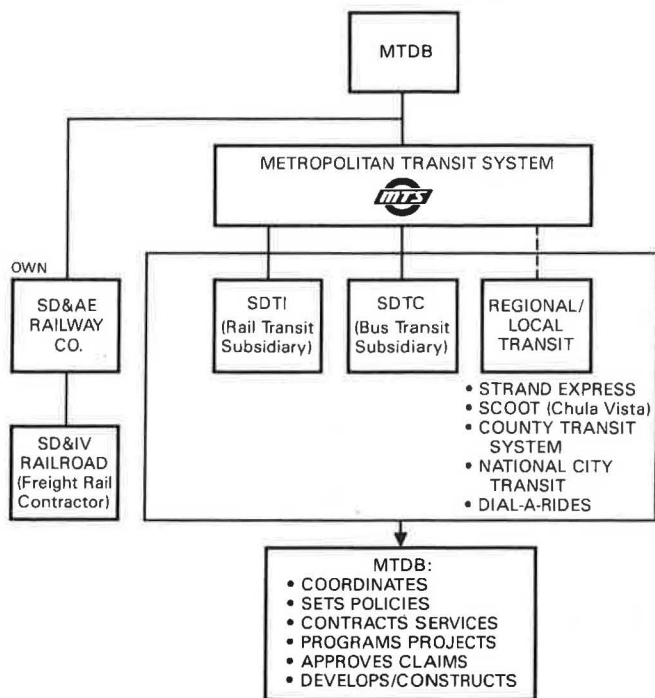


FIGURE 2 MTDB functional organization chart.

in Fiscal Year 1985-86 (16). This increase paralleled MTDB fare policies initially adopted in 1977 and strengthened by the legislation previously mentioned.

**DESCRIPTION OF ORGANIZATION**

MTDB is divided into three basic departments: engineering and construction, planning and operations, and finance and administration. These departments are augmented by in-house legal counsel and a public information office. All design and construction management activities are handled by the engineering and construction department. Included within the planning and operations department are short-range transit planning activities, special fare and operational studies, LRT project planning, area transit marketing, environmental studies, and monitoring of MTS performance. Basic support services for the organization are contained in finance and administration, in addition to grants management and regional transit pass sales administration.

**ANNUAL PLANNING PROCESS**

The annual planning process, as shown in Figure 3, weaves the following within the Short-Range Transit Plan (SRTP) (16)

annual update: the Transportation Improvement Program (TIP), individual operator budgets, claims for state and federal operating assistance, and receipt of state and federal grants. Adoption of transit development goals and objectives takes place in fall each year and leads to the update of the SRTP by the following August. This plan is drafted in the spring to guide final procedures of the TIP, operator budgets, and claims. The SRTP, adopted in the summer, leads to the submittal of grant applications.

In close cooperation with the short-range planning is the long-range planning, as carried out by the metropolitan planning organization, the San Diego Association of Governments (SANDAG). SANDAG is responsible for development and adoption of a Regional Transportation Plan (RTP), which contains the long-range multimodal plan for transportation improvements in the region. The metropolitan SRTP must be found consistent with this long-range RTP. To promote this coordination, two key agreements define the separation and coordination of mutual responsibilities in planning and programming between MTDB and SANDAG (17, 18). As a result, specific planning and programming responsibilities define a partnership to cooperatively establish common goals and objectives.

**UNIFIED MTS SERVICES**

A number of devices are used to coordinate services and projects among the affected agencies and MTS operators. A primary method for communication is through the General Managers' Group. This group, composed of the general managers of all fixed-route operators, normally meets twice monthly. The intent of this body is to foster high-quality MTS services through communication and cooperation, as well as to attempt to resolve any differences at the management level

rather than at the board level. Supporting the general managers' group are other committees:

- Fare pricing and operation task force
- Regional transit marketing group
- Regional transit service advisory committee

The following are examples of key aspects of the MTS that serve to coordinate and unify services:

- Fare structure: an agreement that establishes a uniform fare structure for the metropolitan area providing basic fares and transfers between operators.
- Monthly passes: an agreement (19) that establishes monthly passes valid on all fixed-route transit services in the metropolitan area and a formula for distribution of pass fare revenue.
- Telephone information: a service that provides a central transit telephone information system for all fixed-route operators.
- Route numbering: a system of uniform route numbers established to avoid duplication and confusion between operators.

**CONCLUSIONS**

Because each urban area is unique, it requires a unique approach to the institutional aspects of providing public transportation service. Although the specifics of what works in San Diego may not be transferable to other regions, the ingredients that are needed for providing cost-efficient public transportation services and for programming future developments appear to be transferable. The San Diego MTDB organizational form, through having different organizational units, also possesses the following characteristics:

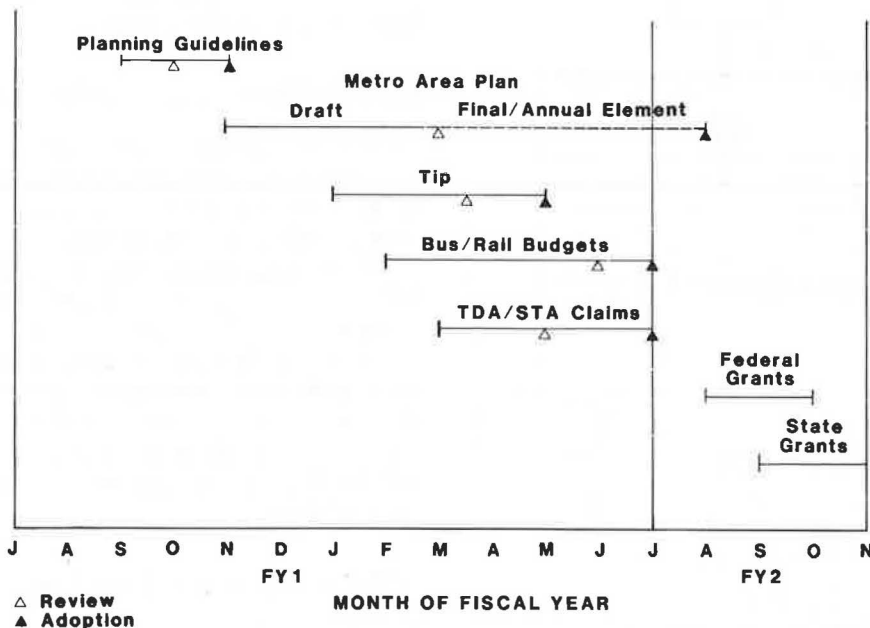


FIGURE 3 MTDB planning process and schedule.

1. *A central, single legislative body that makes all metropolitan transit policy decisions.* The objective of such a body is to set consistent service, development, and investment policy across all transit providers to effect system uniformity and ease of use by all community residents.

2. *A clear and efficient decision-making network.* There must be a conscious effort to coordinate and communicate with all affected agencies. Final decision-making authority must be clearly identified and the decision processes outlined. Ownership of the two major operators and legislated coordination powers solidify the MTDB and force it to have such a network.

3. *The power of financing projects and services.* Primary planning and regulatory authority comes by virtue of holding the funding powers. The management and allocation of financial resources are necessary to carry out required explicit and implicit authorities.

4. *Board members who are locally elected officials and appointed by their city councils.* This board form encourages MTDB management to work closely with counterparts at the local level and promote joint, cooperative MTDB-city actions.

5. *Separation of development functions from operations.* Significant management attention and energies are needed for effectively carrying out both functions—this organization form allows it.

From the San Diego metropolitan area experience, the following are advantages and disadvantages of this organizational form:

#### Advantages

1. Significant attention is devoted to medium- and long-range planning and tying in future transit project services and programs with land use decisions.

2. Apparently because it functions as a development agency and not an operator, unbiased attention can be given to the financial management of operating resources.

3. The separation of planning and development from operations allows operating management to remain closer to the day-to-day operations and maintenance of transit services.

4. Lobbying for operations and capital funds at the local, state, and federal level is on an areawide basis and effectively includes all local jurisdictional units.

5. Inclusion of multiple operating agencies, through constructive competition, sharpens operating decisions as well as policy decisions, leading, it is hoped, to improved cost efficiencies in the provision of service. In addition, the existence of multiple operators forces more attention on the coordination of transfers between routes.

6. The engineering and short-range planning activities for area transit services and projects are centralized and directly related to each other.

7. Independent operator identities create spirit and pride in the individual organizations, promoting innovation and cost-effectiveness.

#### Disadvantages

1. Independent operator identities create spirit and pride in their individual organizations, promoting rivalry and jealousy.

2. Despite what may be clear lines of authority, the existence of multiple operator governing boards has the potential for delaying decisions and promoting jealousy.

3. There is the potential for duplication of work when the paths of authority and decision-making powers are not clearly outlined.

4. To work smoothly requires the cooperation of top management from all agencies, with a corresponding commitment to a unified operation.

5. Financial decisions that might be in the best interest of the region will have different impacts on each of the operating agencies, causing those that receive negative impacts to react adversely to such decisions.

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