

Introduction

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Four years have passed since the Urban Mass Transportation Administration and the Federal Highway Administration issued the joint regulations that embody the concept known as transportation system management (TSM). What is TSM, aside from something in the category of "we know it when we see it"? One way to define it is to quote from the federal regulation:

Automobiles, public transportation, taxis, pedestrians, and bicycles should be considered as elements of one single urban transportation system. The objective of urban transportation system management is to coordinate these individual elements through operating, regulatory and service policies so as to achieve maximum efficiency and productivity for the system as a whole.

The TSM policy formalized what, at that time, many transportation professionals were already beginning to realize—that the era of massive construction of highway and transit facilities was coming to an end and that more-effective use of the extensive transportation infrastructure already in existence in most U.S. cities was going to be necessary. The response to the TSM policy, however, was problematic and gave rise to a number of serious substantive and procedural questions at all levels of government. As a result, in 1976 the Transportation Research Board (TRB) sponsored a Conference on Transportation System Management that was designed to answer many of the questions relating to definitions, consequences, and future directions of TSM (1). The environment for transportation planning changes rapidly, however, and government policies and programs either respond to these environmental changes or are ignored in favor of other, more flexible, means of addressing new issues. Thus, the purposes of this, the second TRB Conference on TSM, were to identify what has happened in TSM planning since 1976 and to develop recommendations that should lead to better assimilation of the TSM concept in both the urban transportation planning process and the ongoing transportation programs of every urban community. To accomplish this, individuals representing private and public transportation agencies, universities, consulting firms, and federal agencies were brought together for two and a half days in Arlington, Texas, to examine the many dimensions of current TSM practice and to propose new directions for both TSM and transportation planning. These proceedings are a report of what occurred at this conference.

The conference was structured to address three major issues in TSM planning and implementation—the identification of organizational roles in TSM planning, programming, and implementation, including the roles of the private sector and the professional disciplines; an

understanding of why certain high-achievement TSM actions have been neglected; and the relationship of TSM to major national goals and to the comprehensive transportation planning process in metropolitan areas. Each of these issues was assigned to a workshop where the participants discussed, debated, and produced a position paper presenting specific recommendations. Because these issues could not be addressed independently of each other, the workshop chairpersons presented the latest findings of the workshops in conference plenary sessions so that every participant was aware of the direction that each group was taking. These plenary sessions proved most useful in finding and establishing the themes that were common in all workshop discussions and in highlighting those areas where substantive agreement on underlying issues could not be obtained.

The organization of this report reflects the structure of the conference. The papers presented at the opening session, which provided background information on TSM, established a common point of departure for the workshop discussions, and identified topics in TSM that merit further attention, are found in the first section of this report. The next three sections are devoted to the activities of the three workshops; each includes the resource papers prepared by the workshop participants and a workshop summary. The conference summary presents the major conclusions and recommendations of each workshop (although the workshop summaries will provide the interested reader with a better sense of how these conclusions were reached).

This conference was held at a most propitious time for TSM planning specifically and for transportation planning in general. One month before the conference, the Comptroller General of the United States in a report to Congress (2) had concluded that the TSM regulations have not been as effective as they could have been because

[1.] The two Federal agencies have not administered the regulations consistently,

[2.] Urban areas have not been able to institute planning processes that result in unified plans, [and]

[3.] Projects that have the most potential for improving the efficiency of existing transportation systems have not been widely adopted.

Thus, the conference, coming one month after publication of these conclusions, was the first gathering of transportation professionals that could make recommendations on policy actions that would alleviate some of the problems of TSM identified in the Comptroller's report.

Elements of the Surface Transportation Assistance Act of 1978 also provided an opportunity for this confer-

ence to influence transportation policy. Section 160 of this act required that the U.S. Department of Transportation undertake a study of those factors affecting the integration of rules and regulations concerning transportation, air quality, and energy-contingency planning. Because many of the concerns and the types of actions considered in these planning processes relate quite strongly to the concepts underlying TSM, it was apparent that this conference could contribute to a better understanding of how these many planning processes could be linked.

Finally, the potentially serious situation of gasoline shortages and their impacts on travel behavior and on the ability of the transportation system to respond to changing travel patterns had been of much interest in the months before the conference. TSM actions should not be viewed as a means of significantly reducing the level of fuel consumption but rather as a means of minimizing the amount of confusion during a crisis by having an in-place physical and institutional infrastructure capable of providing alternative forms of transportation. The un-

certainty surrounding the supply of fuel thus provided added impetus for conference participants to establish policy guidance for TSM.

As can be seen in the conference summary, many of the original objectives were achieved but, because of the limited time available, not all of the issues raised were addressed and many suggestions on policy actions did not receive the level of debate needed to examine their feasibility in any detail. The number of issues raised and the importance they have on the future of transportation planning in this country indicate that further attention from the transportation community is needed.

REFERENCES

1. Transportation System Management. TRB, Special Rept. 172, 1977.
2. Comptroller General. Stronger Federal Direction Needed to Promote Better Use of Present Urban Transportation Systems. U.S. General Accounting Office, CED-79-126, Oct. 4, 1979.