

and the effects of the things we are doing.

There are some quiet revolutions going on in this country. We do not know about most of them because we do not measure them. Half of the people in the United States now get to work in some kind of multiple-occupancy vehicle. Some TSM proposals may be aimed at solving a problem that is taking care of itself. Another quiet revolution that is already happening is the trend toward flexible work hours. This, too, is helping solve peak-hour transportation problems. Urban destination patterns are changing as well, and points of stress in our transport system may not always be where we think they are. Mark Twain once said: "It isn't what you don't know that gets you into trouble in this world, it's what you know that isn't true." And there are some things that we may think we know about energy efficiency, cost efficiency, and when and where and how people get to work that may not be true. So let us be sure that we address TSM projects to real problems and to the right problems. And that means doing some measurement of the problem before we jump to the solutions.

I was, therefore, surprised that the conference discussions seemed to be predominantly about getting downtown. Downtown is an important place in our cities, but it is not the only place in our cities. I was further surprised by a statement made that the TSM concept is not

applicable to the suburbs and that TSM actions that improve the quality of transportation in the suburbs are counterproductive to the city's goals. I hope that such a position represents only a few cities because I do not think that we want to reduce mobility. I do not think that we want to reduce the freedom of choice of people or coerce them to live and work in ways or in places that fit our plan but not their plans. There is a theory, and not a bad one, that the sum of a series of individual optimizations is going to be a total optimization for the group. Plans that are designed to let people optimize their situations, their mobility, and their travel will produce a better city.

And finally, if we are going to have the right objectives and be able to implement the right solutions, we need to communicate. We need to hear as much as if not more than we say. And if we do not hear, we are not going to have an answer to the question that was mentioned in one of the first conference panels on Monday morning, "Who is the council of governments to tell me how I have to live?" If the answer is not convincing or if the public's attitude toward what we are doing is negative, we can not succeed. We will have wasted a great deal of effort and lost a great opportunity to improve the contribution of transportation to urban life.

*Thomas B. Deen
Alan M. Voorhees and Associates*

One wishes that, after having heard so many thousands of well-chosen words about TSM, that one could produce an eloquent and creative concluding statement. Failing that, I will instead observe from three different perspectives what I think we heard at the conference and perhaps should remember.

FEDERAL PERSPECTIVE

Federal government officials at the conference were indeed sponsors of it, and there were some messages there for them. The first one is that TSM is accepted. Six months ago I am not so sure that was true. I did not hear anyone at the conference say that TSM is a bad idea and we ought to forget it. We heard many quotations from learned sources saying that conservation and the things that TSM is aiming for are worthy, are in the national interest, and are in fact essential.

The second message is that it will be a long time before the impacts are seen. As Americans, we have two sacred notions: We can solve all problems in 1 year or less, and we can solve anything if we have enough money.

TSM runs counter to both of those notions. I think those at the federal level have to accept the fact that TSM actions are longer term and are not necessarily a quick fix to troublesome situations. The Minneapolis Skyway that we saw during the conference is an example. I was impressed with how long ago it had been started on the one hand, and how effective and really quite impressive it is on the other.

TSM solutions are not highly visible. You cannot see car-pool programs. You cannot see staggered hours. A computerized signal system looks like any other signal system. We may, therefore, feel we have not done anything even if we have been successful. And

the public may feel the same way. For that reason, we may need more of the kinds of things that were suggested by the conference panel than we have been used to in other programs—more citizen participation, more public relations, and maybe some funds for that sort of thing.

The third message is that the federal agencies are going to have to be gentle in their application of TSM regulations. TSM action agencies have to be concerned with the combination of all the modes, the long-range and short-range aspects, the operational planning, and long-term capital planning all at once. And there is no methodology to pursue. As a result, at the end we are left with whoever it is who reviews the program at our local level and decides whether we made it or not. This is an extremely exposed position.

The top-level federal officials at the conference said that they intended to apply the regulations gently, and I believe they intend to do that. But sometimes something happens to top-level intentions before they reach the lower levels, and therein lies some danger.

LOCAL PERSPECTIVE

What were some messages with regard to the local level, which is the action level? First the diversity of local institutional arrangements and the essentialness of that diversity were stressed. A number of the case studies indicated that communities that have a history of successful intergovernmental relations will be able to accommodate TSM with no difficulty. On the other hand, those that have a history of tension and struggle for a variety of reasons may have great difficulty in instituting TSM actions. We must therefore have a variety and a diversity of ways to handle TSM. And I am not so sure that I see that metropolitan planning organizations (MPOs)

present such a problem. MPOs have been in operation for some time; some of them work, some of them do not. The amount of state influence in the way an MPO works varies. In some communities, the state influence predominates; in others, local influence is heavily dominant. In each case, the MPO can plan but has limited or no implementation power. It has some control on money flows. And all of that is true with TSM. A few more agencies are involved, and fewer federal "carrots" are available to lead the action along, but otherwise not much has changed and the initiative still lies largely with the local government.

We heard a lot about bottom-up planning, and if that is to be effective then the local professionals—the traffic engineers and the transit operators—are going to have to move quickly into TSM planning. The MPOs may move more heavily into it than need be (although I think that they have a role) because of the vacuum created by inaction on the part of the local agencies themselves.

And the other message is that many TSM elements may satisfy some objectives but hurt others, and we do not have many good tools for trading these things off. And even if our tools were perfect and we had a perfect model that measured to the last decimal place the impact of all potential actions, the issue is still mobility versus other social values such as the environment and energy conservation, and public attitudes and choices will differ at any given time. That is why we need community participation and involvement of officials and the media. As technicians, we can only display and measure and show what the options are.

PROFESSIONAL PERSPECTIVE

Finally, what are the messages to the profession? And I mean a profession of transportation officials, whether

planners, engineers, transit operators, or whatever. We have been finely honed as a group to be expert at deciding how best to expand our transportation system and, although there is some more expansion yet to happen, that is not our main goal these days.

We have heard that the government cannot be smarter than the people, and neither can transportation professionals. We cannot move too far ahead of public expectations. Some TSM elements can have dramatic effects; in Singapore peak-hour travel was reduced 50 percent within 2 weeks after a pricing scheme was instituted. On the other hand, one conference speaker told about the problems that you can get with big, bold solutions that have not been well planned. And a lack of success with some of these big, bold moves may keep us from being prepared when conditions and constituencies change so that those kinds of solutions are wanted. In other words, we cannot be smarter than the people, but we should not be dumber than the people either. And we should be aware that constituencies change and be prepared for that change. In San Francisco, for example, a constituency formed and heavily taxed itself to build a modern rail rapid transit system. I suspect that we can have only marginal influence in forming these constituencies, but we had better be ready to do the bold things when they become practical. What is practical one year may be impractical the next and vice versa. Pricing strategy seems impractical now, although we are beginning to get into it a little bit with parking and so on. Our energy situation is such that people may agree that certain things are practical next year that are not this year. Like the airline in its commercial, we had better be in a position to say, "We're ready when they are."