to move forward with an expansion of the Smart Corridor concept into other parts of the county.

Mr. Rowe ended his discussion by describing how the coordination of traffic signals operated by different cities in the Smart Corridor was being handled. The number of participating agencies has been kept as low as possible, but there are several municipalities involved. The city of Los Angeles has a majority of the intersections in the project, but Beverly Hills and Culver City each have a string of intersections that are included in the Smart Corridor.

After looking at how to coordinate the signals operated by the different cities, it was decided that Beverly Hills and Culver City would upgrade their systems to an ATSAC-type of system. Rather than having each city develop their own control center, the actual control of the signals will take place in the Los Angeles ATSAC control center. This situation required the negotiation of operating protocols and agreements with the other cities that may provide a model for future use in other areas.

## Implementation Issues

## David Roper Roper & Associates

The final panelist was Dave Roper. Mr. Roper discussed Caltrans' role in the area of traffic management, the capabilities it could contribute, and its attitude toward participating in a joint project like the Smart Corridor. The key elements of his discussion are outlined below.

• Many traffic management ideas have been tested on the Santa Monica Freeway over the years. It provides an ideal laboratory because it has the severe problems and necessary facilities for testing traffic management systems. Some of those previous Caltrans efforts on the Santa Monica Freeway included: ramp metering, changeable message signs, closed-circuit television, a traffic operations center, standard operating procedures, and incident management teams. In general, a good traffic management system existed for the freeway before the Smart Corridor project was initiated, but it was not as effective as it could have been.

- Diversion is a very sensitive issue in integrated traffic management. Caltrans and other agencies have almost always relied upon voluntary diversion, but it does not seem to work as planned. Some motorist surveys have been conducted to help understand why voluntary diversion is not very effective, and the results are very revealing. Many reasons were given for not diverting, including getting lost, concerns about personal security off the freeway, and the whole issue of credibility. As an agency, Caltrans was also hesitant about the idea of forcing diversion because there was very little information about the conditions on the surface streets, or even about its own freeways.
- It is imperative to develop staff expertise within the operating agencies for traffic management systems. Over a period of time, particularly during and since the 1984 Olympics, both Caltrans and the Los Angeles DOT developed the necessary staff for operating and maintaining the systems. In addition, a very important factor is the strong commitments made by both state and local agencies to these systems. Too often, systems are implemented without enough commitment given to their operation.
- One of the most important aspects of a system like the Smart Corridor is interagency trust. There was a history of trust between key staff members from Caltrans and the city of Los Angeles, but it had to be taken a step further. Each organization had to be willing to trust the other, because they were being asked to share information to effectively operate the corridor. Essentially, Caltrans had to give up something in the interest of the surface streets, and the city had to give up something in the operation of

the freeway. That is a major hurdle that must be overcome for a project like this.

• Caltrans had some specific needs from the project. First, it was essential to maintain control of their portion of the system. No agency would be willing to give up the responsibility or authority over its portion of the transportation system. Indeed, most agencies have enough problems of their own without taking on the responsibility for operating someone else's facilities. At the same time, it did see the need to share or coordinate its control for the benefit of the corridor. Caltrans also had the need to build on what it had already accomplished in the corridor.

Mr. Roper concluded by emphasizing the value of cooperation in projects like the Smart Corridor. The history of cooperation between Caltrans and the city of Los Angeles has been helpful when problems arise. It is essential for the success of integrated traffic management systems to develop cooperative attitudes and trust at all organizational levels.