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PARTNERS IN TECHNOLOGY

I have been invited to speak to you about the TravTek project in general, and I want to talk specifically about how the TravTek partnership worked. I will give an overview of the TravTek project because, before you can understand the TravTek partnership, you have to understand the TravTek project itself and the complexities involved in undertaking such a project.

To fully understand TravTek, you need to remember the environment in which it was born. The IVHS movement in the U. S. began in 1989. Vehicle miles of travel were skyrocketing and fuel consumption was still going up despite most predictions that the improved fuel economy of the overall vehicle fleet would lead to reduced fuel consumption.

Also, many urban facilities had reached capacity; some of them to the point that even such traditional measures as peak hour volume or directional split had lost much of its meaning. Many of these facilities could not be widened further. In short, traffic congestion was not just a local problem anymore—it had become a national issue.

In that environment, with vehicle miles of travel (VMT) doubling every 20 years, the old answers of building more capacity or improving operational efficiency just didn’t seem to work anymore. The only long-term hope for a real solution seemed to be in NEW TECHNOLOGY. Thus, TravTek was born; it was a really bold attempt to see if new technology could actually make a difference.

But, new technology wasn’t the only thing being tested in TravTek. TravTek also represented a new way of doing business—a public-private partnership was formed to make TravTek a reality.
I said it was a bold project and indeed it was. TravTek created an Advanced Traveler Information System (ATIS) in most of Central Florida. It included 1,200 square miles (over 20 times larger than the Pathfinder project); there were 100 vehicles (4 times more than Pathfinder); and the TravTek system covered all of the routes in this area, not just the major freeways. And, for the first time, the vehicles were to be driven by ordinary people, not transportation experts. In all, over 4,000 people drove these cars during the one-year operational period.

How did TravTek work? There were really three main components—the vehicle, the Traffic Management Center, and the Information and Services Center. The computers placed in the cars were continually being fed information about traffic and highway conditions and they, in turn, furnished travel time information.

The cars were all 1992 Oldsmobile Toronados, each equipped with Global Position System (GPS) antennas. These were truly smart cars, as each car had two 386 computers on board—one to calculate the best route, and one to guide the driver turn-by-turn to the destination.

That is a very brief explanation of the technology used in TravTek but, as I said earlier, TravTek was also an experiment in a new way of doing business for the highway community.

A Public/Private Partnership

Just the fact that there was a partnership for such an important project was unique, but the makeup of the partnership broke new ground as well. There were three levels of government; a watchdog agency (National Highway Traffic Safety Administration) in partnership with a company it regulates (General Motors); a non-profit organization (AAA) and a traditionally neutral government agency (USDOT) helping GM improve their profit potential.

There were several participants who were not partners but who committed themselves to the project—Avis and Motorola to name just two.

I want to stress that this business of partnerships is even more complex than it sounds at first. Each primary partner had several internal partners as shown below:

- City of Orlando—Public Works Department
- Florida Department of Transportation—Orlando District
- Florida Highway Patrol
- GM Research—GM Oldsmobile—Hughes Corporation
- USDOT—FHWA—NHTSA

Each partner, both internal and external, brought something unique to the partnership allowing it to attempt—and, I believe, successfully complete—something that none of them could have done alone.
The FHWA and the Florida Department of Transportation brought a highway infrastructure already equipped with surveillance and detection devices. Imagine the cost if GM had tried to equip a test tract with this equipment to do the project on their own (not to mention the questions concerning the validity of such a test.) They also brought the traffic engineering skills necessary to analyze and predict travel times and the impact of congestion.

Also, AAA was able to enlist their vast membership as drivers and to contribute their marketing and public relations skills. GM supplied the vehicle and the computer and software expertise to make them work. Several of the partners contributed the human factor expertise to make the system as user friendly and easy to learn as possible.

The TravTek Partnership

The success of the TravTek partnership may serve as a model for others involved in IVHS or other high cost/high technology projects. I believe it worked so well because of the following components:

-A WRITTEN AGREEMENT -- in sufficient detail to spell out, at least in general terms, the responsibilities of each partner, including a timetable for the duration of the project and for certain key milestones.

-SOLID COMMITMENT -- from the highest levels of the organization. For instance, the agreement was not signed by the administrators of FHWA and NHTSA, but rather it was signed by the Secretary of the USDOT. The importance of this became particularly clear when, the year after TravTek began (while it was still in the development stage), GM began losing billions of dollars a year. I can only speculate that internally, the pressure was very great on GM to pull out or at least scale back their TravTek effort. But, the strength of their commitment kept them actively involved in the project.

-ORGANIZATION -- The TravTek partnership had a very strong committee structure. Actually, there were four committees:

The Steering Committee -- consisting of top officials from each organization. They met approximately three or four times a year to approve major changes or resolve issues that could not be decided by lower committees.

The Partners Committee -- consisted of approximately twenty-five people, with each partner represented by several key persons.
The Technical Working Group -- consisted of approximately ten persons (again with each major partner represented) to work out the details of vehicle construction, data collection, and communications hardware and software.

The Evaluation Working Group -- consisted of approximately ten persons (again with each major partner represented) assigned to hiring the evaluation consultant, and to conducting independent research into the overall project and into the workings of the individual project components. They also were assigned to produce a report to publicize the results of the evaluation.

**CLEAR BENEFITS FOR EACH PARTNER** -- Each partner was able to use the TravTek project to advance his own interests: General Motors in preparing for future deployment and competition with German, Japanese, and domestic auto manufacturers; USDOT in exploring IVHS system architecture and answering operational and safety questions; AAA in promoting future auto and highway enhancements, etc.

**SHARED FINANCIAL BURDEN** -- The costs were not equally shared, but the benefits were not of equal value to each partner either. Nevertheless, each partner was able to achieve his research goal at a fraction of the total cost of the project.

**SHARED RESOURCES AND PERSONNEL EXPERTISE**

Beyond these more tangible reasons, there was something about TravTek that made it exciting— it had that **SPARK**, it captured the imagination even of those of us who worked on it. It was like being a pioneer blazing a path to the future. Each one of us who worked on TravTek **believed in it**. We believed that we were building something that would change transportation forever. We were thrilled to be a part of it and honored to be in the company of people who were really technical and organizational geniuses who, it seemed, could do anything.

There is one other component that I should add to the list of what made this project, this partnership, a success and it is:

**RESPECT** -- We respected each other—we respected each other personally, we respected each other professionally, and respected the companies and agencies involved. We were able to put aside the old stereotypes that business people think about government employees and that the government employees think about business people.

We were a team; we were proud of TravTek, proud of each other and proud of the work that we were doing!