

## **INTELLIGENT TRANSPORTATION SYSTEMS**



Intelligent Transportation Systems (ITS) is a fancy way of saying “using new technology for travel”. Developed under a landmark transportation legislation in 1991, ITS has rapidly grown to be a viable means of helping travelers have an easier commute. ITS, at its core, provides information to travelers on a variety of modes, including the personal automobile. ITS components have become so popular, many automobile manufacturers are offering variations of ITS as a standard option. Although ITS can work as a stand-alone program, it is best utilized as a supporting strategy to other TDM programs.

ITS relies upon computer technology to maximize the efficiency of the existing transportation system. In fact, ITS was originally conceived as a way to increase the capacity of the nation’s transportation system without building more roads and lanes to meet ever-increasing demand. This technology can be relatively simple, such as providing an information site on the World Wide

Web, or complex, such as San Diego’s active demonstration of automated cars and highways.

Although it may be fun to think about cars that drive themselves, this is not yet practical for any portion of the transportation network in Colorado. However, there are other aspects to ITS that have already been implemented in Colorado communities and have the potential to be a valuable asset to your community’s TDM pursuits.

ITS strategies that compliment TDM programs include:

### **Smart Cards**

Similar to a credit card, a smart card can be used for fare payment on transit service. For bus users, smart cards reduce the need to carry cash, eliminate the need for transfers in larger transit systems, and improve customer convenience. However, smart cards can also carry-on a life of their own, as they can become a community-icon. For example, local retailers could offer discounts for smart card users. This has the effect of increasing your retailers’ and restaurateurs’ business at the same time increase the use of local transit. Transit operators in Washington DC, Ventura County (California), Atlanta, and Minneapolis/St. Paul have begun using smart cards over cash payment.

### **Traveler Information Systems**

Traveler information systems help travelers find the most efficient modes and routes of travel for their desired trips. This information can be accessed from home, work, shopping centers, libraries, and other locations where a computer can be set up. Like dynamic rideshare matching, a World Wide Web site can be established to provide information to travelers. This information can be either static, such as bus routes and scheduling,

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or dynamic. Static information can be effective in encouraging the use of alternative modes.

For example, Honolulu, Hawaii, promotes a program called "Visiting-on-TheBUS". Visiting-on-TheBUS provides information on transit service to many places of interest in Oahu and Honolulu and receives, on average, over 700 calls daily. This information is advertised in tourist brochures, hotel rooms, and senior citizen centers. Dynamic information, which can include real-time bus service or traffic information, requires additional technology than simply a Web site. Global Positioning Satellite transponders, embedded loop detectors, and other networking devices are necessary to offer dynamic information.

Many commuters will alter their modes, time of travel, and routes as a result of this information. For example, almost 3 percent of commuters in Bellevue, Washington, do not drive alone to work as a result of real-time traffic information received through the Internet and radio. The San Francisco Bay Area has recently implemented a World Wide Web site called [transitinfo.org](http://transitinfo.org) that

contains route, schedule, and fare information for all regional transit operators, thus being able to provide trip itineraries for short, local trips as well as for cross-regional trips.

Traveler Information Systems can have application in your community. For example, let us assume your community is a tourist destination in south-central Colorado. A visitor arriving at Colorado Springs airport would normally rent a car and proceed to occupy roadway and parking space in your town. However, a static Web site could be offered that provides trip itineraries between Colorado Springs airport and destinations within your town. This Web site would not only provide contact numbers (as many already do), but provide the specific information necessary such that the traveler would not need to bother calling anyone to use alternative modes.

Intelligent Transportation Systems provide a valuable and cost-effective complement to all of your TDM programs. ITS can not only help you reach a larger audience, but it can also help you ensure the long-term longevity of TDM in your community.

