

## Advance Speed Information System (ASIS)

Portable, Automated, Real-Time

**ASIS** is a portable, automated, real-time smart work zone system that calculates vehicular speeds at downstream locations on a freeway and displays the most appropriate speed information on portable changeable message signs at upstream locations. By providing accurate and real-time speed information in advance of their arrivals, this system assists motorists to adjust their speeds according to the most current traffic conditions and reduce the element of “surprise” that often leads to rear-end crashes. ASIS can be used on any freeway that experience congestion – with or without work zones. The real-time speed information can be displayed on large, permanent overhead variable message signs, if necessary.

### Major Components of ASIS:

- Microwave radar sensors
- Radios/modems (or cellular routers, if necessary)
- Software with intelligent traffic algorithm and model
- Mobile solar-powered trailers
- Changeable message signs

**A base station can be used but not necessary for the operation of ASIS.**

*Each changeable message sign or solar-powered trailer is integrated with a sensor and radio/modem or cellular router mounted on it and acts as a single “device” for the purpose of communicating with similarly integrated “devices” and displaying real-time traffic condition information. Each device is capable of directly communicating with other device(s) at upstream or downstream locations.*



### Options:

- ◆ Remote control of the system from anywhere
- ◆ Manual override of the messages displayed on the signs
- ◆ Real-time information on the internet



- ◆ Integration with cameras and live pictures of the highway on the internet
- ◆ Data archive with date and time stamp

Signs are placed in series at previously determined locations along the freeway. At least one sign and one solar-powered trailer are needed for the operation of ASIS. However, any number of signs can be added as necessary.

For more information, contact:  
Prahlad D. Pant, Ph.D., P.O.Box 888264, Atlanta, GA 30356.  
Phone: 770-352-0880. Cell: 513-226-6009. Fax: 770-352-0881. E-mail: Pant@PDPassociates.com