

TRAVELER INFORMATION SYSTEMS

Description

Traveler information systems update drivers on current roadway conditions—including delays, incidents, weather-related messages, travel times, emergency alerts, and alternate routes. Providing this information to drivers before and during trips allows them to make more effective travel decisions about changing routes, modes, departure times, or even destinations. More informed drivers result in more efficiently utilized roadway capacity. This means less gridlock and better traffic flow.



Travel information is generated by sensors reporting to a traffic management center or through private entities using data from in-vehicle location devices, or from smart phones communicating location and speed. This information is then disseminated via traditional broadcast media, internet, mobile devices, or roadside messaging. Personalized travel messages and alerts enable individuals to get trip-specific information on demand, or have it pushed to them via email or text message subscription services. Once familiar with these services, nearly 80% of drivers use traveler information to make daily decisions about route or departure time.

Target Market

- Highway networks, including freeways and toll way
- Major city streets

How Will This Help?

- Maximize efficiency and capacity by providing current transportation system information to drivers.
- Reduce the impacts of congestion.
- Increase safety by alerting drivers of upcoming hazards.

Cost:	●●○○○
Time:	Short
Impact:	Region
Who:	State/Local
Hurdles:	None

Success Stories

Houston TranStar's sensor network collects data and disseminates traveler information to the public, the media, and third-party providers. TranStar reaches more than 500,000 unique users every month via its website. Each year, nearly 2 million incident and travel time messages are sent to more than 200 roadside message signs in the region.

Benefit to cost ratio is estimated to be more than 11 to 1.

Implementation Issues

Though relatively inexpensive, these critical systems face budgeting and funding challenges. However, the same infrastructure that provides traveler information also enables more effective incident management and performance measurement—which can mean a greater return on the investment. Maintaining and upgrading these systems to reflect the most up-to-date technology requires implementation and maintenance funding. The good news is that technology and communication advances are driving costs downward each year.