## **ROSANA AGUILAR ZAPATA**

## Intelligent Transportation Systems Advanced Management Systems

Traffic congestion in the United States has an estimated cost of \$100 billion dollars yearly in the form of productivity loss. Traffic accidents result in the loss of thousands of lives and injuries each year. It also contributes to air pollution due to the emissions of the These are some of the serious problems associated with transportation vehicles. infrastructure now-a-days. For years all agencies related to transportation have tried to solve these problems by constructing more highways but this solution is no longer The 1991 ISTEA—Intermodal Surface Transportation Efficiency Act acceptable. promotes the creation of a transportation system that is economically efficient and environmental safe, to move people and products. The Intelligent Transportation System (ITS) offers a new way to solve the transportation problems. It employs telecommunications, information processing and electronic technology to obtain and provide information on the performance of the transportation facilities, travel demands, information about the types of vehicles on the road, weather conditions and imminent incidents.

ITS is divided into different areas. One of these areas is the "Advanced Traffic Management Systems" (ATMS). ATMS is designed to provide control, monitoring and information to the traveler in an effort to reduce vehicle congestion, traveling time and incidents.