INTELLIGENT TRANSPORTATION SYSTEMS

WHAT IS ITS?

Intelligent Transportation Systems (ITS) are the application of electronics, updated communications, and data processing to improve the efficiency and safety of the surface transportation system. Examples of ITS technologies include vehicle detection systems, traffic cameras, dynamic message signs, advanced signal control systems, and traveler information systems for freeways, arterials, and transit. A regional ITS architecture plan, which is required by the US Department of Transportation in order to receive federal funding for ITS projects, provides a long-range plan for the deployment, integration, and operation of ITS. Regional ITS architectures should be updated on a regular basis to reflect the changing needs of the region and the development of new ITS technologies and strategies.









BENEFITS OF ITS

ITS technologies and strategies have proven to be a cost effective means to improve transportation operations, increase safety, and save money. Some benefits of ITS deployments include:

- Improved efficiency for roadway and transit users, who can make decisions informed by real-time conditions
- Increased safety by communicating incidents, road and lane closures, congestion, and severe weather conditions
- Enhanced incident and special event management by providing accurate traffic and event updates to travelers
- Increased cost savings as agencies share information and increase operational efficiency







ELEMENTS OF A REGIONAL ITS ARCHITECTURE PLAN

- ITS Inventory and Needs
 Existing and planned ITS components
 ITS and other transportation needs
- ♦ ITS Service Packages
 Services that ITS can provide the Region
- ◆ ITS Deployment Plan Short-term, mid-term, and long-term projects

ITS APPLICATION AREAS

- Traffic Management
- Traveler Information
- Emergency Management
- Maintenance and Construction Management
- Public Transportation
- Commercial Vehicle Operations
- Archived Data Management
- Vehicle Safety (Connected/Autonomous Vehicles)

