TranStar uses Roadworks application to coordinate work, reduce congestion

Web-based GIS solution allows multiple agencies in the Houston area to access each other's construction plans and coordinate their activities. Public can also access a simplified version. Applied Technological Services employs an Intergraph GIS tool to deliver the application.

Applied Technological Services (ATS) in Dallas and Intergraph Mapping and GIS Solutions in Huntsville, Ala., have delivered a Web-based geographic information system (GIS) solution for Houston TranStar to coordinate construction project information. The system, called Roadworks, facilitates intelligent scheduling of construction projects by TranStar member agencies, thus easing the impact on traffic flow.

TranStar is the advanced traffic management system (ATMS) for more than 15,000 miles of roadways in the greater Houston area. Harris County, the City of Houston, Texas Department of Transportation and Metropolitan Transit Authority are partners in the ATMS.

Maria Cristela Vera, GIS coordinator at TranStar, says there are a lot of road construction projects in Houston and there was "some confusion about who was responsible for the work that is going on in different areas." The Roadworks system has resulted in "a lot more people communicating who weren't previously," she says, and improved project coordination lowers traffic congestion.

The system integrates multiple GIS data formats and projections from member agencies into a single application. Staff from the different agencies can view current and planned construction projects of other member agencies by clicking on an area map. A database provides construction start and impacted traffic routes, and contact information.

Roadworks has an internal engineering site for agency personnel and a public interface, which can be accessed under "Regional Construction Info" on the TranStar website at www.houstontranstar.org.

> *Multiple agencies now "utilize this one central solution to help manage their infrastructures."*

TranStar contracted with ATS, a GIS consulting firm and Intergraph business partner, to design, develop and implement the Roadworks system. ATS used Intergraph's GeoMedia WebMap visualization tool to construct the product. It cost about $75,000 to develop the system, Vera says. Some of the development funding was used to explore installing the software on individual computers. The Web-based solution was more cost effective, she says.

Duane Guidry, director of sales and marketing at ATS, says the project was challenging because so many entities came to the table with dissimilar data sets. They now "utilize this one central solution to help manage their infrastructures," he says.

The Applied Technological Services website is www.ats-us.com; Intergraph's site is at www.inter-