

Test and Evaluation Project Summary

At the request of the Leadership Team of the Houston TranStar Consortium (consisting of Texas Department of Transportation, the Metropolitan Transit Authority, Harris County and the City of Houston), the SWTC Testbed Division (SWTC) was asked to study the possibilities associated with joint-use of the region's Intelligent Transportation System (ITS) communications network. This study included an inventory of technology infrastructure in the greater Houston metropolitan area. The outputs of the study provided a high-level route inventory of the region's fiber optic-oriented ITS network in addition to other government networks existent within the region.

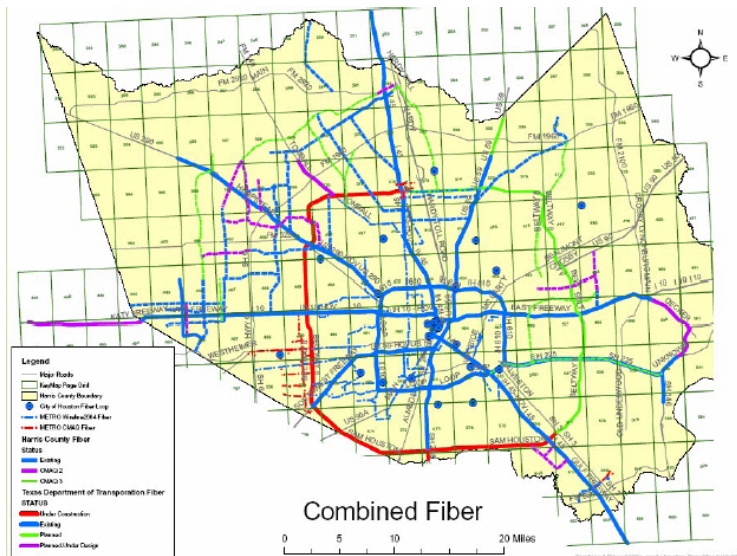
The study concluded that there are strong possibilities for joint-use of the ITS network within the region. The possibilities for joint use relate to greater sharing of the region's ITS network by consortium partners as well as joint-use by government entities outside the consortium. Examples of these entities include the Port of Houston Authority, Federal Government entities, Homeland Security entities and others. The study also showed that significant cost-savings could result from this type of joint-use. In addition, the study pointed out that if planned correctly these cost-savings could pay for the significant upgrades in equipment and facilities required to enhance existing networks.

As a result of this effort, SWTC was requested to provide inputs to the Joint-Use Agreement used within the Houston TranStar Consortium (Consortium). The consortium consists of Texas Department of Transportation, Harris County, the Metropolitan Transit Authority of Harris County and the City of Houston. As a result of this request, SWTC Advisors created verbiage associated with joint-use that are typically inherent in private enterprise agreements along these lines. These inputs helped the Consortium to understand the types of benefits gained within such agreements. The inputs also assisted the Consortium in the creation of a final document for internal joint-use of the ITS network.

Similarly, SWTC is providing ongoing assistance with prototypes associated with the joint-use of the ITS network. Although a variety of prototypes are being considered, the initial prototype is planned to be the Houston Port Authority (HPA). Within this prototype, the HPA will interconnect visual surveillance capabilities along the Houston Ship Channel with their offices at Houston TranStar. Houston TranStar will provide traffic-related camera outputs to the command and control center at HPA.

Other prototypes under consideration include providing interconnectivity between Houston TranStar and the:

- Houston Emergency Center.
- Texas Department of Public Safety.
- Houston Police Department.
- Port Coordination Center



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