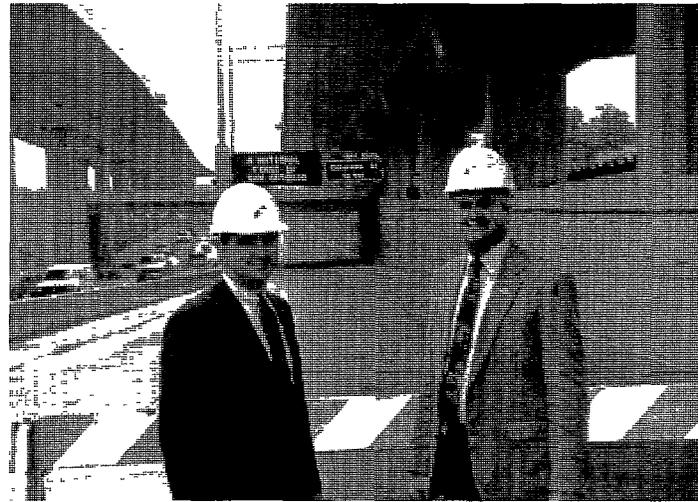
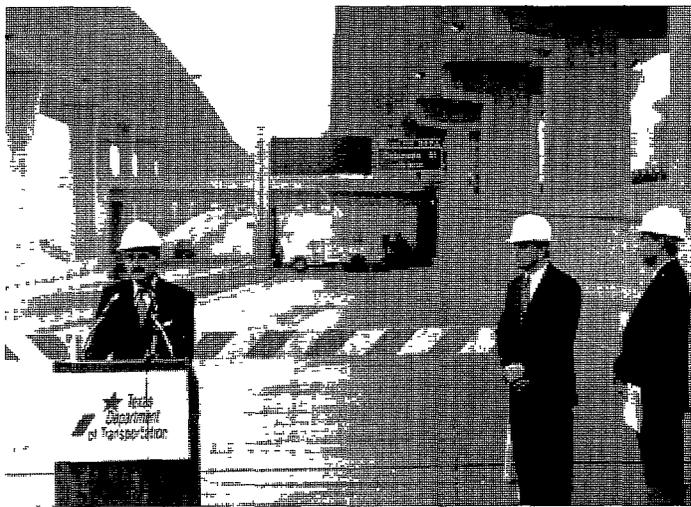


6.0 The TransGuide Experience



TxDOT also, always with an eye toward the future, continually pushed the decision processes during development to take advantage of new technologies or components in order to provide as much performance, reliability, and excess capacity for future growth as possible.

For several years, many talented and hardworking professionals have toiled to make TransGuide a reality in the surface transportation picture for San Antonio and southern Texas. The TransGuide idea was conceived within TxDOT during the early 1990s as ITS was in the formative stages as a national initiative. TxDOT has been a hard-charging spearhead of ITS and the TransGuide idea since these very early days.

Literally millions of design details spanning building construction, electronic equipment selection, communications architectures, traffic management technology, video surveillance issues, and user friendly yet secure functionality were addressed by the TxDOT design team while bringing the TransGuide idea from conception to operation. The FHWA was involved in the early stages of the TransGuide experience to provide funding and guidance in the goals adopted for the system and has maintained a supportive posture throughout the project. TxDOT worked to document the requirements for the nature and scope of TransGuide capabilities and operations in a detailed design specification and a construction contractor was selected to implement the system as described therein. TxDOT maintained its role of project leadership during the TransGuide development and facilitated many improvements in the

design and implementation of the system as the many issues requiring decisions, choices, and trade-offs that inevitably surface during development and construction came up. TxDOT also, always with an eye toward the future, continually pushed the decision processes during development to take advantage of new technologies or components in order to provide as much performance, reliability, and excess capacity for future growth as possible.

TransGuide began operations during the summer of 1995 with full functionality applied to the 26 miles of freeway planned for phase one of the project. The balance of San Antonio's 191 mile freeway system will be instrumented and managed within TransGuide's scope of operations. The City of San Antonio and other organizations have recognized the benefits and information resources that are provided by the operation of the TransGuide system and have established offices or other facilities within the TOC. The San Antonio Police Department, Traffic Division and the VIA Metropolitan Transit Authority, Heavy Bus Dispatch have both established dispatch functions at dedicated workstations within the TOC control room. An upper floor of the TransGuide TOC houses the San Antonio Police, Fire and EMS 911 Emergency Dispatch Backup System, The City of San Antonio Traffic Operations Department, and the VIA Metropolitan Transit Authority Paratrans Dispatch function. Additionally two independent research organizations maintain offices and laboratories on the upper floor of the TOC.

Even before the TransGuide system began operations in the limited region of the phase one implementation, the forethought and planning provided by TxDOT was catching the attention of city and county transportation officials in the southern Texas region and officials at the state and national levels. Regional agencies were looking for ways to improve safety and operations in their city's traffic systems and rural road and freeway

systems. Productivity and safety enhancements of operations for international borders and commerce corridors is of additional interest at the state and national levels. The regional scope of TransGuide's influence in improving the mobility, productivity, and safety of ground transportation for residents and visitors in southern Texas and supporting ever increasing and important international trade with Mexico will provide compounded benefit for the region, the state, and the nation.

But the role of TransGuide's influence on the region's surface transportation infrastructure doesn't stop there. On the technical side, TransGuide is actually a broad, sophisticated platform with tremendous flexibility and adaptability for future operations. The platform will support future launches of new and, in some cases, experimental technologies and developments that will serve to enhance the traveling public's safety and mobility. Above all, better ways to enhance the safety of regional residents and visitors on our highways while providing quicker and more helpful responses when trouble does occur remains a sharp focus of current operations and future planning at TransGuide. Higher levels of automation in traffic incident detection and handling, better coverage on rural freeway systems for driver safety, better accessibility to useful and timely traffic and routing information by the driving public are among the initiatives already under study within the TransGuide community. Better ways to support commercial and public transit operations and deeper integration and resource sharing technologies to improve the yield of benefits from ITS investments are some of the many initiatives that are already forming as ideas within TransGuide's operations team and the long and growing list of associates that are looking forward to the benefits that TransGuide offers now and in the future.