

# Customer Case Study: TxDOT and Williams Brothers Construction

Intelligent Transportation Systems improve traffic flow through I-610 work zones

Over the next decade, the Texas Department of Transportation (TxDOT) plans to complete and start nearly 16,000 highway construction projects. To keep crews and communities safe during major highway construction, AWP Safety leverages both human experts and intelligent technology.



## Challenge

### Multi-year project on one of Houston's busiest roadways

In south-central Houston, TxDOT is investing \$116 million along Interstate 610 to reduce traffic congestion and improve access to local hospitals, universities, museums and NRG Stadium – home of the NFL's Houston Texans. Williams Brother Construction was selected to reconstruct portions of the highway and build a complex new freeway overpass with eight tie-ins. Major projects like this can cause traffic delays and create a higher risk of traffic accidents.



## Solution

### Advanced technology and data prepares drivers for road ahead

AWP Safety supplies portable Intelligent Transportation Systems (ITS) that improve safety for work crews and motorists. These integrated systems use nano sensors, radar and wireless technology to manage traffic flow throughout the entire work zone.

- **Dynamic Lane Merge Systems** that advise motorists where and when to merge based on current traffic conditions. These systems improve road safety, reduce driver confusion and limit potential delays.
- **Trucks Entering Roadway Systems** warn motorists in real time that a slow-moving construction truck is leaving the work zone and entering the highway. The system is triggered by a sensor. Then, signage alerts motorists to slow down or change lanes so trucks have enough room to accelerate and safely merge into traffic.
- **Que Warning Systems** are digital display systems that warn motorists about slow and stopped traffic, accidents and delays. They can reduce traffic accidents by more than 50% and significantly lower accident severity.
- **Portable Cameras** send traffic video and photos to TxDOT, the building contractor and AWP Safety. Imagery is used to monitor traffic conditions, verify accidents and check construction progress.
- **Work Zone ITS Pins** digitally mark the boundaries of a work zone and communicate it to Google, WAZE and the Federal Highway Administration's Work Zone Data Exchange.

ITS is supported by a dedicated AWP Safety crew fully trained in deploying and maintaining system equipment.



## Results

### Greater Safety



ROAD  
WORK  
AHEAD

Real-time updates throughout the entire work zone leads to better motorist response time and safer traffic conditions.

### Better Traffic Flow



ITS technology orchestrates the best possible traffic flow to limit delay.

### Effective Communication



Keeping motorists informed improves their compliance and participation in work zone safety. Motorists using digital mapping services may avoid the work zone altogether if they know it's there.

### Data Driven Decisions



Information collected by ITS provides performance metrics that TxDOT uses to improve future work zone design throughout the state.

You can learn more about ITS and AWP Safety's other traffic technology solutions on our equipment page. AWP Safety currently offers ITS solutions in Texas. Contact your nearest AWP Safety [facility in Texas](#) for more information.

To discuss your next project with a dedicated AWP Safety sales representative, [request a quote](#).