

## **5-9049-05: Completion of Construction and Installation of Travel Time Signs on I-35 in Austin**

### **Background**

Drivers desire real-time information when traveling in order to make route choice decisions. One type of information that can be provided is current (dynamic) travel times on two possible routes that serve a common destination. In this way, drivers can make a more informed decision about the best route to use.

I-35 through Austin, Texas, often experiences periods of significant congestion. SH 130 and SH 45 are toll facilities that provide alternative routes around the city. They are typically less congested but longer and require a toll payment. It is difficult for motorists to know whether to remain on I-35 through Austin or to use the toll facility to have the best travel time to their destination. The availability of current travel times on those routes would be extremely beneficial to motorists.

### **What the Researchers Did**

Researchers designed dynamic travel time signs for three locations along I-35:

- I-35 southbound north of Georgetown, Texas (prior to the I-35/SH 130 interchange).
- I-35 southbound in Round Rock, Texas (prior to the I-35/SH 45 interchange).
- I-35 northbound near Kyle, Texas (prior to the I-35/SH 45 interchange).

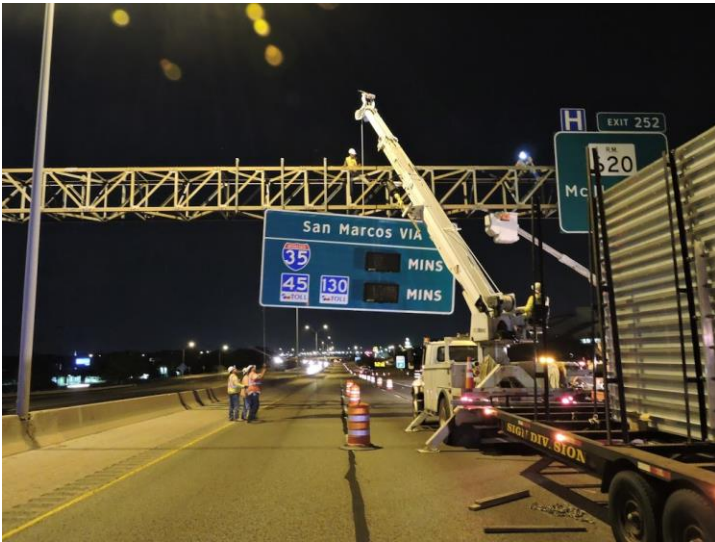
The dynamic travel time signs were fabricated as hybrid guide signs with dynamic message sign (DMS) insets mounted on them to convey current travel times on each route. Overhead sign bridges at each location were analyzed and deemed suitable for supporting the sign. Researchers initiated purchase orders with various vendors to fabricate the various sign components, perform necessary field work to prepare each site for each sign, and install the signs. Figure 1 illustrates the installation of one of the signs (I-35 southbound in Round Rock). DMS insets are operated through the Texas Department of Transportation Lonestar traffic management software, which monitors, computes, and automatically posts the current travel times on each route. Communications from Lonestar to the signs is accomplished via wireless modems.

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**Figure 1. Dynamic Travel Time Sign Installation on I-35 in Round Rock.**

### **What This Means**

Drivers approaching and traveling through Austin now have current information about the travel times to expect if they remain on I-35 or if they decide to use the SH 130 and SH 45 toll facilities around the city. This information allows drivers to make better, more informed decisions about their route. In addition, the information also provides a more accurate expectation of conditions they will likely encounter if they choose to remain on I-35.

#### **For More Information**

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