

**VOLUME 2**

**July  
2011**



**South Texas Section**  
Institute of Transportation Engineers

## Section News...

### **STITE Second Annual Regional Conference in Corpus Christi - September 30!**

The deadline to sign up for the regional conference in Corpus Christi is **Today, September 26!** The conference will be held Friday, September 30, at the TxDOT Corpus Christi District Office. Speakers include:

Troy D. Walden Ph.D.; Ismael C. Soto, P.E.; Project Managers from the HNTB Corporation; Gary Schatz, PE, PTOE; and George P. Hartman, P.E.

Following the conference, join us for dinner at Snoopy's Pier and a fishing tournament the following day. The cost of the conference is \$35 and includes lunch, dinner, and entry into the fishing tournament. Please RSVP for the event by emailing America Garza at [america.garza@txdot.gov](mailto:america.garza@txdot.gov).

Hope to see you there!



**SAVE THE DATE!**

### **STITE HOLIDAY BANKQUET**

The South Texas Section Holiday Banquet will be held this year on Friday, December 2 at the Club at Sonterra.



**South Texas Section**  
Institute of Transportation Engineers

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## 2011 STITE Officers:

### **President**

Mike Garza, P.E.  
Pate Engineers  
[OMGarza@PateEng.Com](mailto:OMGarza@PateEng.Com)

### **Vice President**

Amy Lewis, P.E.  
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[Amy.Lewis@kimley-horn.com](mailto:Amy.Lewis@kimley-horn.com)

### **Section Representative**

Kerri Collins, P.E., PTOE  
Pape-Dawson Engineers, Inc.  
[kcollins@pape-dawson.com](mailto:kcollins@pape-dawson.com)

### **Immediate Past President**

Garry Ford, P.E., PTOE  
City of San Antonio  
[garry.ford@sanantonio.gov](mailto:garry.ford@sanantonio.gov)

## Committee Chairs:

**Membership:** Mike Garza,  
Pate Engineers.

**Website:** Bo Zhou,  
Pape-Dawson Engineers, Inc.

**Nominations:** Miguel Sanchez,  
Arcadis

**Newsletter:** Derek Mueller,  
Pape-Dawson Engineers, Inc.

**Student Liaison & Scholarship:**  
Mike Garza, Pate Engineers

[www.texite.org/southtexas](http://www.texite.org/southtexas)

# STITE JUNE MEETING

June 29, 2011

FEATURED

SPEAKERS:



Brett Altman, P.E.  
Jacobs Engineering

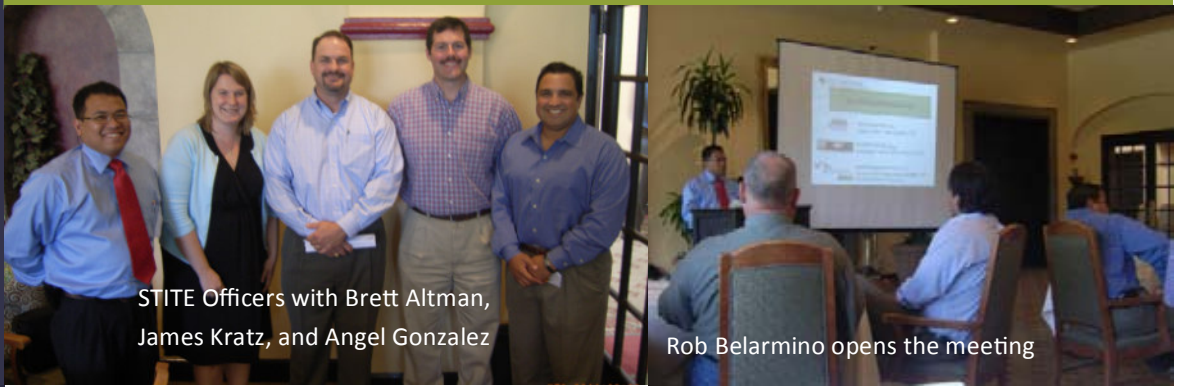


James Kratz, P.E.  
Jacobs Engineering



Angel Gonzalez  
GKW

## US 281 & Lp 1604 Interchange Design/Build



STITE Officers with Brett Altman, James Kratz, and Angel Gonzalez

Rob Belarmino opens the meeting

The June 2011 lunch meeting was held June 29, 2011 at the Club at Sonterra.

President **Rob Belarmino** opened the meeting and encouraged everyone to attend the upcoming ADA workshop and TexITE meeting in Garland. Vice President **Mike Garza** gave an update on Section news and Secretary/Treasurer **Amy Lewis** presented the current account balance for the Section. Rob then introduced the first speaker, **Brett Altman** of Jacobs Engineering.

Mr. Altman gave an overview of the US 281 and Loop 1604 interchange project, which is currently under construction. The interchange is managed by the Alamo RMA and is a design/ build project with William Brothers Construction and Jacobs Engineering. Mr. Altman gave details about the project and shared some of his experiences working on the project. The total cost of the project is \$190 million and will construct the four direct connectors south of Loop 1604. The project is expected to be completed in the summer of 2013.

The next speaker, James Kratz of Jacobs Engineering spoke in more detail about the

traffic engineering aspects of the project. One aspect of the design is the left exit on northbound US 281 for the direct connects to Loop 1604. Mr. Kratz discussed the analysis and design of this exit to minimize operational problems. He also discussed how the design process for design/build projects differed from conventional projects. Because the construction contractor had input in all stages of the design process, they were able to be more actively involved in the traffic control plan design. This allowed them to develop a more efficient construction sequence.

**Angel Gonzales** of GKW then gave further insight into the traffic engineering and analysis for the project. He showed animations from the VISSIM traffic simulation model of the proposed interchange. The modeling of the left exit was used to determine the placement of the advanced warning signs for the exit. In addition to the direct connects, Mr. Gonzalez also said pedestrian bridges would be constructed across US 281 on both sides of Loop 1604 to provide better pedestrian access to the businesses on either side of US 281.



Interchange Schematic

Source: Alamo RMA

## STITE JULY MEETING, July 27, 2011

### FEATURED SPEAKERS:



Michael Trueblood,  
P.E., PTOE,  
Trafficware

## What's New at Trafficware



Michael Trueblood with STITE Officers

The July STITE lunch meeting was held July 27 at the Club at Sonterra. STITE President **Rob Belarmino**, Vice President **Mike Garza**, and Secretary/Treasurer **Amy Lewis** opened the meeting with section news. Rob Belarmino then introduced the first speaker, Michael Trueblood, Senior Traffic Engineer at Trafficware.

Mr. Trueblood discussed new software and programs offered by Trafficware. He first discussed *Synchro 8*, the newest version of the Synchro Traffic analysis software. Mr. Trueblood discussed how *Synchro 8* incorporates the *Highway Capacity 2010* methodologies into its analysis. This includes the ability to analyze multi-lane roundabouts as well as multi-modal analysis at signalized intersections to analyze the operation of bicycles and pedestrians.

Additionally, Mr. Trueblood gave an overview of other aspects of the new version such as an updated user interface and the ability to record video files of the *SimTraffic* simulations. Additional simulation parameters were also added to aid in the modeling of certain features such as ramp meters or rail crossings. The new version also incorporates a more streamlined method of importing aerial backgrounds into the model.

Mr. Trueblood also discussed Trafficware University, which is a collection of traffic engineering courses and technical papers offered by Trafficware. Trafficware University

offers a wide variety of topics, ranging from general overviews of traffic engineering concepts to instruction courses on Trafficware software such as *Synchro*.

Mr. Trueblood gave an overview of SynchroGreen, which is a new adaptive traffic signal control package. The adaptive control uses real-time traffic data to adjust the traffic signals in real-time. Mr. Trueblood said one advantage of SynchroGreen is that it has the ability to be modeled in Trafficware's microscopic simulation software *SimTraffic*, so its operation can be analyzed prior to implementation of the system in the field.



Michael Trueblood shows updates to Synchro.

# ADA ACCESSIBILITY AND PUBLIC RIGHTS-OF-WAY

August 12, 2011

## Joint Workshop with WTS - San Antonio

### FEATURED SPEAKERS:



Janet Barlow  
Certified Orientation and  
Mobility Specialist



Scott Lewendon  
FHWA Certified  
Instructor for Designing  
Pedestrian Facilities for

The ADA and Public Rights-of-Way Workshop was held August 12 at Morgan's Wonderland. The workshop was jointly held by STITE and WTS - San Antonio Region. The workshop featured sessions by **Janet Barlow** and **Scott Lewendon**.

**Janet Barlow**, a Certified Orientation and Mobility Specialist, discussed accessible design for the blind. Ms. Barlow specializes in the needs of the visually impaired and has served as a representative on the US Access Board Public Rights-of-Way Advisory Committee from 1999-2007.

Ms. Barlow gave an overview of types of visual impairments and various techniques used by people with visual impairments such as guide dogs and canes. She also described cues visually impaired pedestrians use such as changes in surface texture and the sounds of traffic. Ms. Barlow stressed the importance of clearly defined walkways to provide a path that is easy to follow.

A variety of tasks are involved in safely crossing a street. Visually impaired pedestrians must identify the edge of the street, determine the direction and alignment to cross, and decide when to begin crossing the street. To assist with this, it is important to provide a tactile warning at the street edge and design the pedestrian ramps to properly align the pedestrians to crosswalk.

Ms. Barlow also discussed the location of pedestrian pushbuttons and the importance of Accessible Pedestrian Signals (APS) for the visually impaired. For midblock locations, pedestrian beacons such as the HAWK can

be used to provide protected crossings for pedestrians

Ms. Barlow described the proper treatments for pedestrian crossings at roundabouts to provide a more clear path for the visually impaired.

**Scott Lewendon** is a FHWA Certified Instructor for designing Pedestrian Facilities for Accessibility. He was also a Contributor to the US Access 1999 Design Guide for Accessible Rights-of-Way. Mr. Lewendon discussed pedestrian design and legal requirements for complying with the ADA.

Mr. Lewendon discussed some of the requirements of the ADA, such as transition plans, which are required of public agencies to specify the steps for fixing inaccessible facilities. He also touched on the design guidance manuals for design in public rights-of-way such as the PROWAG, ADAAG, and MUTCD.

Mr. Lewendon then discussed the design of pedestrian facilities. He broke down the various aspects of pedestrian facilities within the right-of-way such as furniture zone, pedestrian zone, frontage zone, driveways, curb ramps, and crosswalks and described the aspects which can affect disabled pedestrians such as steep grades or pavement texture. At intersections, he described crosswalk placement and how it is affected by intersection design elements such as curb radius, median islands and channelized right turn lanes.



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