

TARGETING QUALITY THROUGH PARTNERSHIP

**VIRGINIA ASPHALT ASSOCIATION
2017 FALL CONFERENCE RICHMOND, VA**

**HAROLD MULLEN
TEXAS ASPHALT PAVEMENT ASSOCIATION**



SKYLINE DRIVE BLUE RIDGE PARKWAY



SKYLINE DRIVE BLUE RIDGE PARKWAY



SKYLINE DRIVE BLUE RIDGE PARKWAY





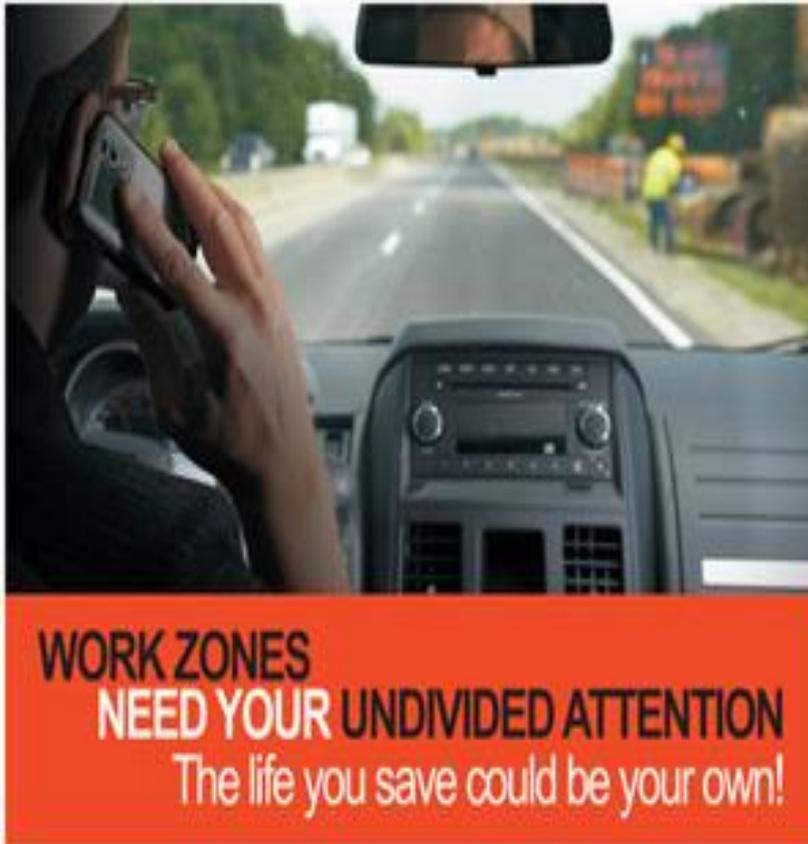
SAFETY SHARE

WHO IS RESPONSIBLE FOR SAFETY?

- ▶ HOME
- ▶ BEHIND THE WHEEL
- ▶ WORK

Awareness * Communication * Responsibility * Accountability

BUILDING A SAFETY CULTURE



2016

- ▶ 2,500 Active Work Zones
- ▶ 25,814 Work Zone Crashes
- ▶ 181 Work Zone Fatalities
- ▶ 4 out of 5 Fatalities were Pedestrians, Bicyclists and Motorists

EVERYTHING IS BIGGER IN HARRIS COUNTY, TEXAS

- ▶ Harris County's population is an estimated 4.5 million residents. It has a larger population than 24 states.
- ▶ NASA is located in Harris County.
- ▶ Harris County is recognized as the Energy Capital of the world, with more than 3,000 energy related firms located here.
- ▶ The world's largest medical center, the Texas Medical Center, is located in Harris County and employs 93,500.
- ▶ Harris County also is home to the Port of Houston, which is ranked first in the nation in volume of foreign tonnage and second in total tonnage.



Harvey Rainfall Overview

Harvey – 7 Day Precipitation through 9/1/17

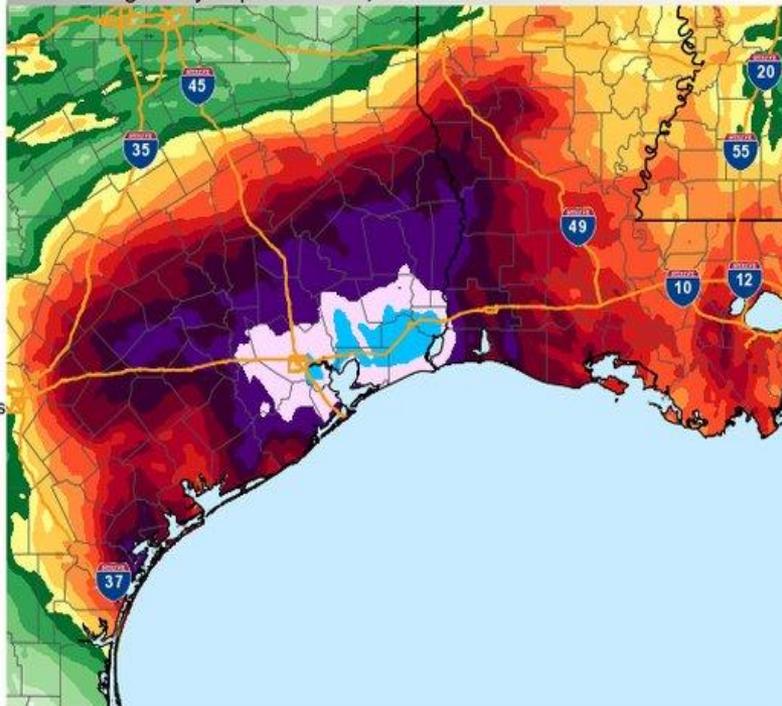


West Gulf
River Forecast Center

Observed Precipitation

National Weather Service

Valid Ending Friday September 1st, 2017 at 3 PM CDT



Graphic Created
September 1st, 2017
3:59 PM CDT

- Estimates for Texas alone...Harvey dumped an estimated 53.4 million acre-feet of water on Texas
- Gage reports in excess of 50 inches in the Houston area
- Heavy rainfall from just east of the Austin/San Antonio area to the Texas/Louisiana border
- Numerous new flood records on area rivers

9/1/2017 4:05 PM

www.weather.gov/wgrfc



EVERYTHING IS BIGGER IN TEXAS

TxDOT maintains 80,268 centerline miles (miles traveled in a one-way direction regardless of the number of lanes in a roadway).

State-maintained centerline miles:

- ▶ Interstate Highways 3,274
- ▶ U.S. Highways 12,062
- ▶ State Highways 16,411
- ▶ Farm to Market Roads 40,932
- ▶ Park Roads 345
- ▶ Frontage Roads 7,245

- ▶ The total number of lane miles (miles per lane of roadway) in Texas is 195,022



EVERYTHING IS BIGGER IN TEXAS

- 52,600 bridges – 76% more than any other state in the nation – 30 international bridges between Texas and Mexico
- More interstate mileage than any other state with 17 different interstates
- Largest airport system in the country with more than 300 eligible TxDOT airports
- Texas has more road signs than any other state. There are over 500,000 signs on state maintained highways.
- TxDOT averages letting eight to twelve million tons of asphalt pavement annually. Most ever 15 million tons.
- Statewide average for all asphalt pavement is approximately 20 to 35 million tons annually.

EVERYTHING IS BIGGER IN TEXAS

- ▶ Growing by 1200 people a day, Since 1990 population has grown 55% and the roadway miles have grown only 7%
- ▶ Funding \$4 - 5 billion annually
- ▶ Need \$11.0 – \$12.0 billion annually
- ▶ Prop 1 \$1.0 billion – oil and gas taxes
- ▶ Prop 7 Starting in FY 2019 \$2.5 billion general sales tax and percentage of vehicle sales and rental tax from vehicles
- ▶ Stopped diversions \$800 mil
- ▶ Estimate \$7 billion a year in lettings for the next 10 years



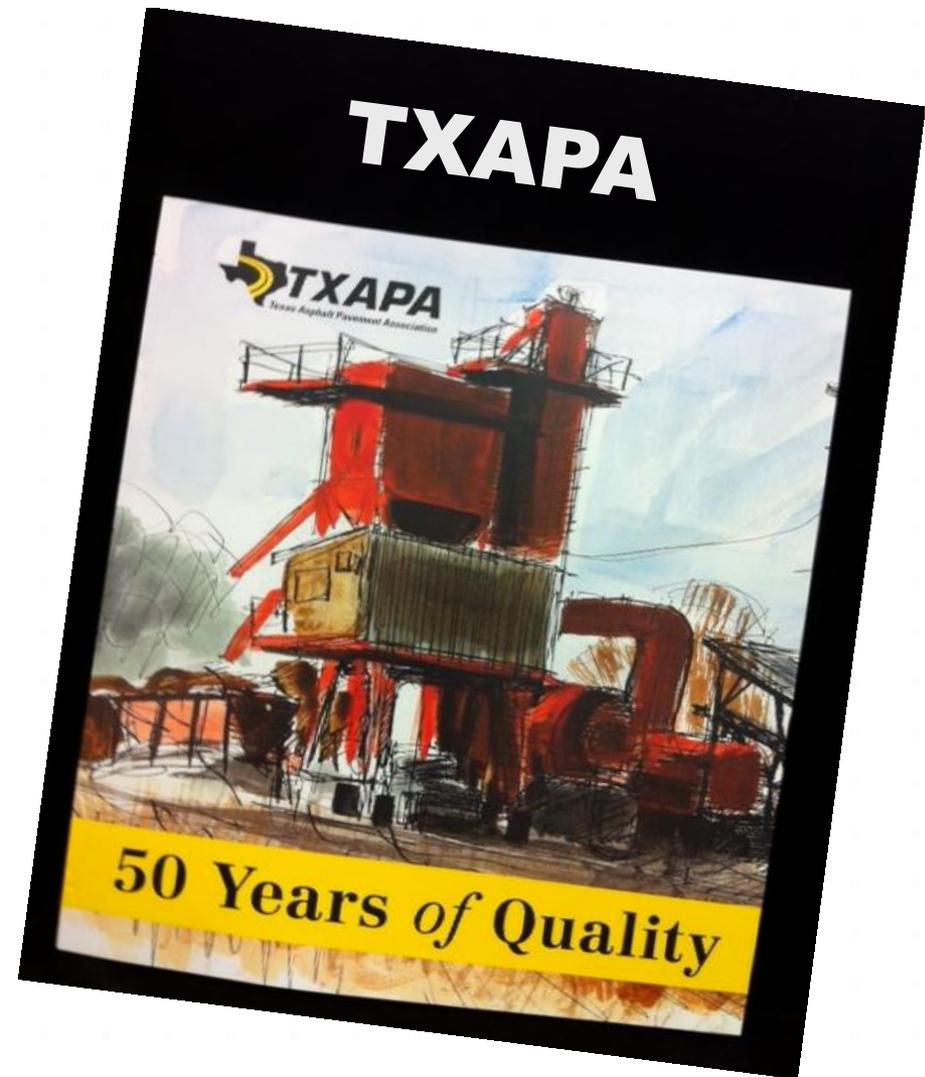
200+ Members

- Contractors/Producers
- Liquid Asphalt Suppliers
- Associated Supplier and Service Firms

Services

- TECHNICAL
- EDUCATIONAL
- TRAINING
- PROMOTIONAL

TexasAsphalt.org





MEMBER DRIVEN ASSOCIATION !

★ ***Dedicated to Quality***

★ ***Partners In Quality***

***Commitment ★ Communication
Cooperation***

**TEXAS ASPHALT
PAVEMENT ASSOCIATION**

TXAPA
Texas Asphalt Pavement Association

149





Hot Mix Asphalt Center
CERTIFICATION AND TRAINING

1993



PARTNERSHIP



Hot Mix Asphalt Center

- 24 year program – QC/QA Certification
- 5,000+ Current Certified Technicians In Texas
- Administer Proficiency Program For TxDOT For
 - HMA And Soils And Base Technicians
- Conduct Off-Site Training And Certification Classes
 - TxDOT Soils and Base
 - Industry HMA and Soils and Base
 - HMA Level 1 B

TXHMAC.ORG



Buda, Texas

Quality Control/Quality Assurance Training & Certification

Level 1A

HMA Plant Production Specialist

Level 1B

HMA Roadway Specialist

Level 2

HMA Mix Design Specialist

SB 101

Properties Specialist

SB 102

Field Specialist

SB 103

Materials Analyst Specialist

SB 201

Strength Specialist

SB 202

Compressive Strength Specialist





TXAPA
Technician Award Winners



Hot Mix Asphalt Center

HMAC Certification Steering Committee

TxDOT

Tommy Smith –
Co-Chair
Robert Lee
Cathey Galbreath
Richard Izzo
Brett Haggerty

HMAC

Corey Schwarz –
Co-Chair
Mike Brown
Harry Bush
Brad Bradford
Jerry Lee

QUALITY MOTIVATION



- ▶ IF YA'LL CANNOT BUILD QUALITY ASPHALT PAVEMENTS ,TEXAS WILL GO WHITE.”

Wes Heald & Kirby Pickett, TxDOT

- ▶ “QUALITY SELLS HOT MIX.”

Mike Behrens, TxDOT



STRATEGIC PLANNING SESSION

- ▶ Strategic Planning Session
 - Board Members, Committee Chairs, Past Presidents' Committee, Major Associate Chair, Associate Member Chair
- ▶ Held every year – short term & long term goals
- ▶ Meet goals and objectives through committees
- ▶ 2017...54 short term objectives
- ▶ TxDOT Flexible Pavements Director attends Strategic Planning Session

STRATEGIC PLANNING SESSION

18

COMMITTEES

- Aggregates, Soils and Base
- Associate Member Advisory
- Environmental, Health and Safety
- Finance
- Level 2 Mix Design
- Major Associate Member
- Marketing and Membership Services
- Nominating
- Presidents Advisory
- Quality Paving and New Technology
- TXAPA Scholarship Program Auction Committee
- Seal Coat Committee
- Specification and Test Procedure Committee
- Testing Laboratories Sub-Committee
- Training and Education Committee
- TXAPA/TxDOT Quality Asphalt Pavement Awards Committee
- TXAPA/TxDOT Technician Awards Comm.
- HMAC Certification Steering Committee





PARTNERS IN QUALITY MEETINGS

- ▶ Number one priority to meet with all TxDOT districts
- ▶ Meet to discuss how to achieve award winning asphalt pavements.
- ▶ Meeting agenda is jointly developed by TxDOT and TXAPA members.
- ▶ Chuck Fuller is our Ambassador of Quality

PARTNERS IN QUALITY MEETINGS

- ▶ Meet with all TxDOT districts, 25 statewide
- ▶ Conduct 30 PIQ meetings and have multiple meetings with urban districts.
- ▶ Meet with Construction Division, Maintenance Division and Materials and Pavements Section
- ▶ Conduct pavement evaluations and follow-up meetings as requested
- ▶ Meet with cities and counties as requested

PARTNERS IN QUALITY

- ▶ Different Mix Types, challenges/opportunities
- ▶ Move to Superpave
- ▶ Use of Thermal Camera
- ▶ Aggregate Availability, *get a plan*
- ▶ Recycled Materials
- ▶ Importance of pre-paving meetings
- ▶ Communication

PARTNERS IN QUALITY

A Few Take Aways:

- ▶ New People in TxDOT District Positions
- ▶ More Third Party Testing and Inspection
- ▶ Districts Can Make Independent Decisions
- ▶ We Need to Take Time to Communicate
- ▶ Need More Education and Training
- ▶ Change our 2008 Thought Process

PARTNERS IN QUALITY

Follow-Up Meetings:

- ▶ Hamburg Wheel Test
- ▶ Liquid Asphalt Binders and Modifiers
- ▶ Quality Construction – Pavement Evaluation
- ▶ Specifying Equipment
- ▶ Testing Frequency
- ▶ Superpave



QUALITY RECOGNITION

Recognize Quality - People and Projects

- ▶ TxDOT/TXAPA Quality Asphalt Pavement Awards
- ▶ TxDOT/TXAPA Quality Asphalt Pavement Technicians Awards
- ▶ City, County, Specialty Quality Asphalt Pavement Awards
 - ▶ Airports, parking lots, city streets, etc.

Management Awards given at TXAPA Annual Meeting

Crew Awards are given to the people on the project responsible for the quality work

QUALITY AWARD – PHARR DISTRICT



QUALITY THROUGH PARTNERSHIP

▶ External Customers

Consulting Engineers, TxDOT, Cities and Counties

▶ Specifications

- ▶ Low volume roadway specification
- ▶ Medium volume roadway specification

▶ Education

- ▶ Asphalt pavement users guide
- ▶ Seminars and Webinars
- ▶ Trade Shows

▶ ASCE – TSCE

▶ TPWA

▶ TCERA

▶ TCJCA

▶ TxDOT Aviation Conference

▶ TxDOT Maintenance Conference

▶ TxDOT Short Course

▶ Earth Day

EDUCATION / TRAINING

- ▶ Training and Education Opportunities
 - ▶ Asphalt Pavement User Guide
 - ▶ Fundamentals of Asphalt
 - ▶ Asphalt Pavement Mix Types
 - ▶ Principles of Paving and Compaction
 - ▶ Inspection Principles
 - ▶ New Technology Seminar
 - ▶ Superpave and Mix Design Courses
 - ▶ PaveXpress
 - ▶ Monthly Webinars

EDUCATION / TRAINING

MONTHLY WEBINARS

- ▶ July Successful Pre-Paving Meetings
- ▶ August Safety - Responsibility
- ▶ September Best Practices for Compaction/Rolling Patterns
- ▶ October Best Practices for Milling and Profiling
- ▶ November The Importance of Testing and Accurate Results
- ▶ December Best Practices for Joint Construction

EDUCATION / TRAINING

Quality Paving and New Technology Committee

- ▶ New Technology Seminar:
 - ▶ Thermal Cameras
 - ▶ Pave IR Bar (Scanner)
 - ▶ Safety Equipment
 - ▶ Non-Tracking Tack
 - ▶ Warm Mix Asphalt
 - ▶ Rejuvenators
 - ▶ Use of Drones

FUNDAMENTALS OF ASPHALT

- Quality Asphalt Materials and the Mix Design Process
- Asphalt Pavement Mix Types
- Planning and Communication
- Surface Preparation and Hauling of Asphalt Pavement
- HMA Plant and Production Process
- Proper Methods of Placing and Compacting Asphalt
- Importance of Testing Asphalt Pavement
- Inspection Principles
- TXAPA's Partnership

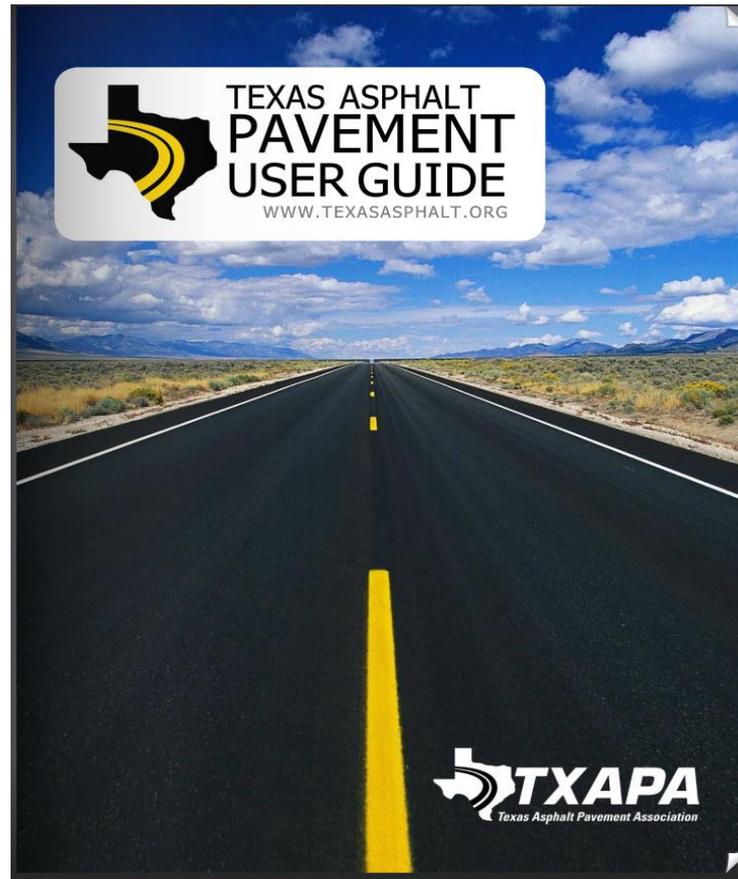
EXTERNAL CUSTOMER COMMUNICATION

The screenshot shows the TXAPA website homepage. At the top left is the logo for the Hot Mix Asphalt Center, featuring a star and the text "HOT MIX ASPHALT CENTER" and "CERTIFIED AND TRAINED". To its right is the TXAPA logo, which includes a map of Texas and the text "TXAPA Texas Asphalt Pavement Association". Navigation links for "HOME | CONTACT | BLOG" and a search bar are located in the top right. A main menu bar contains links for "ABOUT", "ASPHALT", "MEMBERS", "EDUCATION", "AWARDS", "PUBLICATIONS", "SCHOLARSHIPS", and "ASSOCIATE MEMBERS". The main content area features a large image of a modern building at night with a text overlay: "Register Now for the TXAPA 43rd Annual Meeting September 19-22, 2017 | La Torretta Lake Resort and Spa, Montgomery, Texas". Below this are links to "DOWNLOAD the 43rd Annual Meeting Brochure" and "DOWNLOAD Registration Forms for Industry" and "DOWNLOAD Registration Forms for TxDOT". Three circular icons represent "Membership", "TXAPA Webinars", and "Quick Links", each with a brief description and a "Learn More" link. At the bottom, there is a section for "TXAPA Videos" with a "Click here to view our available educational videos" link and a "TXAPA Video Library" link.

The cover of the Texas Asphalt magazine features a dynamic image of several race cars on a track. The title "TEXAS ASPHALT" is prominently displayed in large, bold letters. Below the title, the website "texasasphalt.org" and the text "Official publication of the Texas Asphalt Pavement Association" are visible. The cover highlights "TEXAS MOTOR SPEEDWAY'S NEW LOOK" in large yellow and white text. A red banner at the bottom right says "ALSO: Looking Back: IH 635 & SMA Environmental Regulatory Updates Aggregate Quality Associate Member Spotlights And more!". The TXAPA logo is in the bottom right corner.



EXTERNAL CUSTOMER COMMUNICATION



MEMBER COMMUNICATION


Friday, July 31, 2015




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TECHNICALLY SPEAKING

TxDOT August 2015 Projects
 The TxDOT highway letting is scheduled for August 4-5, 2015. The total tonnage for August is 1,507,557.
[Read More...](#)

Environmental, Health and Safety Brief
 FYI... Do you know what your North American Classification Code (NAICS) is and why it is important?
 • There are three main code numbers that are assigned by the Federal Government for the asphalt industry
[Read More...](#)

WHAT'S GOING ON

TXAPA 41st Annual Meeting - La Cantera Resort - San Antonio, Texas Sept. 22-25
 Make sure you have your hotel room reserved for the 41st TXAPA Annual Meeting scheduled for the La Cantera Resort in San Antonio, Texas, September 22-25, 2015. Rooms are filling up fast and the room block ends on August 15.
[Read More...](#)

TXAPA Scholarship, Education and Research Live and Silent Auction
 The TXAPA Ron Flanagan Scholarship, Education and Research Auction is held each year at the annual meeting. This event will take place on Thursday night, September 24, 2015 at the La Cantera Resort in San Antonio, Texas.
[Read More...](#)

2015 Annual Meeting Sponsorship Opportunities
 The TXAPA 41st Annual Meeting is around the corner, September 22-25, 2015. TXAPA is currently accepting event and regular sponsorships. The following events are still available to be sponsored:
[Read More...](#)

IN THE WORKS

NAPA In the News - Funding Information
 On July 30, the Senate passed a six-year surface transportation reauthorization bill by a vote of 65-34, sending the legislation to the House for further consideration. Visit <http://goaspha.tx/1n8oTq8> to see how your Senators voted.
[Read More...](#)

NAPA In the News - Web-Based Design Program
 PaveXpress (www.paveexpressdesign.com), the free web-based pavement design tool, has been upgraded to version 2.0 with a new module for asphalt overlay designs. The majority of road projects managed by public works and road agencies today involve...
[Read More...](#)



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SAFETY SHARE

June 16, 2015

Avoiding Collisions

Nearly half of the deaths that occur for roadway construction workers occur when workers are run over or struck by moving vehicles, trucks, or equipment. Construction vehicles and equipment operating in the work area cause over half of the fatalities. How can you avoid a "collision" in your work area?

Be Seen: Always wear your safety vest as clean as possible & at all times.



Technical Talk

August 1, 2015

Things to think about

Additional Resources – Videos

The Hot Mix Asphalt Center has recently developed video supplements for the HMAC training courses. The video clips are used in the PowerPoint presentations and are designed to supplement the existing material with live videos that the instructors use to clearly show the proper way to run TxDOT Test Procedures. These videos are accessible for you to use as teaching and training resources for your employees.

www.txdot.gov/user33086364/test-procedure-



MEMBER CONNECT

JUNE 11, 2015

GUIDE SCHEDULE UPDATED

The Guide Schedule of Sampling and Testing has been updated for use with the 2014 Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges and can be found at the following link:

<http://www.txdot.gov/business/resources/materials/guide-schedule>

QUALITY THROUGH PARTNERSHIPS

TXAPA SCHOLARSHIP PROGRAM

- ▶ Any Major
- ▶ Scholarship is good for up to three years
- ▶ Full-time & Part-time students
- ▶ Vocational students
- ▶ Awarded 18 scholarships totaling \$85,000

2017 Auction
Raised \$201,000

EVERYTHING IS BIGGER AND FASTER IN TEXAS



Thank You VAA
and VDOT
Partners