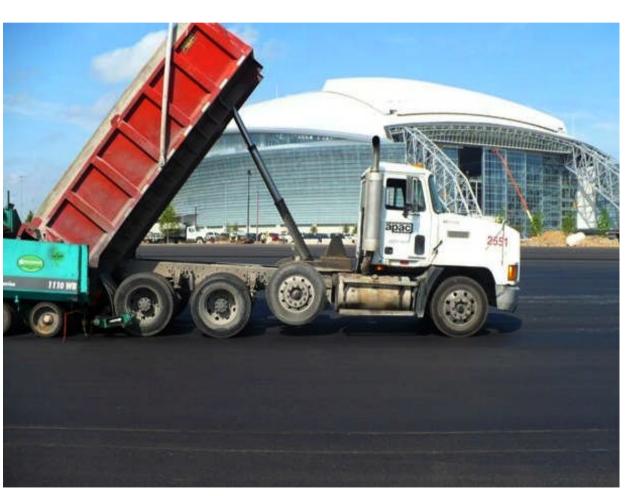






How 'Bout Them Cowboys...Parking Lot



Recycled Asphalt Pavement (RAP)

Recycled Asphalt Shingles (RAS)

Warm Mix Asphalt (WMA)

Combining Technologies

■ WMA with 15% RAP and 5% RAS

83 lbs. of carbon emissions per ton of mix as compared to 109 lbs. with HMA and no recycled materials

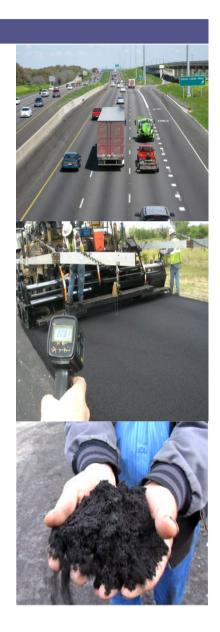
That's over a 23% reduction in carbon emissions





WE HAVE A GREAT STORY TO TELL

- Perpetual Pavements to Thin Overlays
- Any traffic or load condition
- Speed of construction
- Ease of maintenance
- Environmental benefits
- Economic value
- Emerging technology



Honda and Harley Riders Prefer Smooth Asphalt Pavements



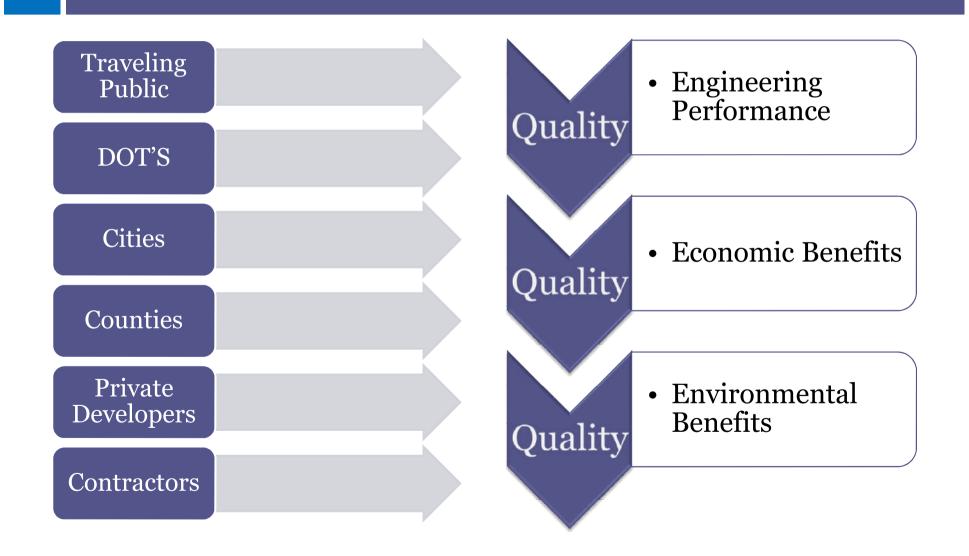
We see our industry and customers changing and evolving Today

- Agencies doing more with less
- QC/QA specification affecting field expertise
- More environmental demands
- Need more durable, longer lasting pavements
- Economics

Industry Response

- Partner to assist agencies
- Train and equip and do our homework
- Adapt and accept environmental demands
- Focus on quality through partnering
- More homework: economical materials, emerging technology
- Find solutions to challenges

More Tons Through Value





How we approach the issues!



Dedicated to Quality
Partners In Quality







QUALITY

Partners in Quality **Got Committed** started Communicating and we wanted to Cooperate

Embracing a Quality Culture COMMITMENT

Strategic Planning Session

- Partnering, Awards Program
- Education, Training, Certification
- Committee Activities
- External and Internal Communications
- We looked at every aspect of our association with a focus on quality
- Changed our logo to remind us of our dedication to quality

 TEXAS ASPHALT

Partnering (Partners In Quality)

- Quality starts with partnering
 - Partners In Quality Meetings
 - Held in each of TxDOT's 25 districts, some quarterly, twice a year or annually
 - Contractors, TxDOT DE, CE, AE's, Lab, Maint. are invited
 - Meet over lunch with an agreed to agenda set by TxAPA members and TxDOT

Partners in Quality Meetings

- Meetings cover asphalt industry issues and topics submitted by both TxDOT and TxAPA members
 - Discussion on RAP, RAS, WMA, etc.
 - Discussion on quality construction, best practices, costs reduction
 - How can we achieve more HMA or WMA award winning quality projects

Partnering (Partners In Quality)

- Meet regularly with TxDOT management
- TxDOT invited to our Strategic Planning Session
- Joint committees on test procedures, specifications, and QC/QA certification program
- TxDOT/TxAPA Quality Pavement Awards Program

TxDOT/TxAPA Quality Paving Awards Program





Education and Training

- Joint Programs with TxDOT and Cities and Counties
 - Paving and Compaction Seminars
 - Superpave and Mix Design Seminars
 - Specification Seminars
 - Associate Member Technology Showcases
 - NAPA Seminars





QC/QA Certification

Hot Mix Asphalt Center (HMAC)

- Continuously updating our Certification Program as a partner with TxDOT
 - Level 1 A Plant Production Specialists
 - Level 1B Roadway Specialists
 - Level 2 Mix Design Specialists
 - More than 1000 students annually

HMAC, We stress

- Their technician job is important
- Accurate test results are essential for quality asphalt projects
- Be Partners in Quality and work together
- Productive pre-paving and planning meetings bring quality and value to the project
- Success is not final, failure is not fatal, it is the courage to continue that counts. Winston Churchill

- Implemented Soils and Base Certification Program
 - Five Levels of Certification
- Seal Coat training and education is held through the HMAC
- Developed New Web Site for Technicians
 - HMAC, www,txhmac.org







About Us

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Password:

log in

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Class Schedule / Seminars

Certification Levels

TxDOT Forms, Test Procedures etc.

Videos of TxDOT Tests

QC/QA Technician Awards

News

Equipment / Suppliers Links

Industry Partners

TEXASASPHALT

you may recertify up to 6 months prior to the date that your certification expires.



Class Schedule / Seminars

TxDOT Forms, Test Procedures ETC.



Videos Of TxDOT Tests

Instructions for submitting your annu

proficiency results. Click here!



Click here to view videos

QC/QA Technician Of The Year

Level 1A JULIA! 193 Qualit

Certification Levels

Click here for more details

Name: William Gill

Click here for more details

Level 1B MUJUUUMIIUIT

Name: David Till

Click here for more details

Level 2



Name: Dallas Kreps

Click here for more details

- About Program
- To Nominate Click Here



Internet | Protected



Embracing a Quality Culture COMMUNICATION

- Communication for industry and awarding agencies
 - Texas Asphalt Magazine
 - eTxAPA newsletter
 - Webinars
 - TxAPA Web Page
 - HMAC Web Page

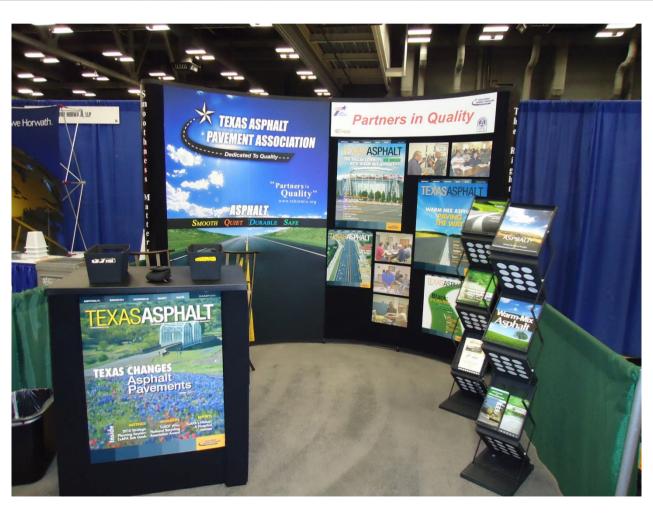


Embracing a Quality Culture COMMUNICATION

- Communication for industry and awarding agencies
 - Technology Update Seminars
 - Annual Meeting
 - Technical Presentations at other Association
 - Brown Bag/Lunch and Learn Seminars
 - Outreach External Customers



Embracing a Quality Culture COMMUNICATION





Embracing a Quality Culture COOPERATION





- Hamburg Wheel Test
- Material Transfer Device
- Substitute Binder (RAP) (RAS)
- WMA
- IR Pave System
- Roline Laser tougher ride specification
- Overlay Tester (Cracking)

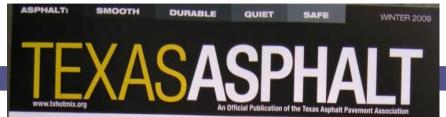
Embracing a Quality Culture COOPERATION





- Custody of Cores
- Proficiency Testing
- Lab Equipment
- Test Procedures
- Specifications





HIGH PRICE HMA GOING THE WAY OF THE CAVE MAN?



By Dale A. Rand, P.E.

you a ton of car insurance. can find the real action. The following arti- in Texas. cle describes the staggering savings that can be realized by making a few changes to the way we think about HMA.

learn how millions of dollars can be saved by paving industry. using substitute binders as well as recycled

supply of both asphalt and polymers became very tight, or in some cases nearly non-existent. Combining these three options will produce a As a result, the price of liquid asphalt and poly- mixture that is more affordable and anguably mers skyrocketed along with the price of HMA more flexible than using RAP or RAS alone. and highway construction in general. All of this combined with serious funding shortages caused be going too far in allowing the use of these. us to re-examine how we do business.

have dropped considerably. However, TxDOT is made the commitment to allow the use of RAP. still experiencing serious funding shortages, on almost all HMA projects, and the Department causing the Department to look for various ways is already benefitting from the cost savings to stretch the available funding. From bulldoz- associated with its use. EICO may be ers to paper clips, the Department is cutting able to save costs elsewhere to preserve funds for pavement much asphalt as RAP, it is logical that if the construction, rehabilitation, and maintenance, while at the same time implementing ways to RAS. Note that RAS is currently used successreduce the cost associated with these three but saving activities. The Construction Division of TxDDT has worked with TxAPA, The Associated General ton of hot mix Contractors of Texas, and other industry partners and RAS is that these materials contain asphalt. asphalt (HMA) to develop specifications that emphasize both binder that is highly oxidized, which if not used is where you cost reduction and quality improvements to HMA properly, can adversely stiffen HMA. There is

Special Provision 341-024 was recently approved and will be required for use on all projects beginning with the January 2010 construc- 5 percent RAS will have about the same effect While it might not be "so easy even a cave tion letting. This special provision contains at on the HMA as raising the binder grade (as an man can do it." you might be surprised to least five significant changes that will affect the example) from a PG 64-22 to a PG 70-22.

The proper use of substitute binders as well as In 2008, for reasons beyond our control, the RAP and RAS enable suppliers to reduce the cost of HMA by more than \$15 per ton in some cases.

Some would argue that the Department may materials to proliferate. It should be pointed In 2009, material and construction prices out that TxDOT's administration previously

Since RAS contains roughly four times as Department allows RAP, it should also allow fully in HMA in a number of other states and has been used on a limited basis in Texas.

A valid concern about the use of both RAP no doubt that a mixture with PG 76-22 virgin binder plus RAP and/or RAS will be very stiff.

Results from the Hamburg Wheel Test (HWT) Here, we will focus on the three issues that confirm this stiffening effect. As a result, it is asphalt pavement (RAP) and recycled asphalt have potential to significantly reduce the cost often recommended that the binder be dropped of hot mix: substitute binders, RAP, and RAS. one grade (e.g., from PG 70-22 to PG 64-22)





SMOOTH

DURABLE

SUSTAINABLE

RECYCLABLE

ECONOMICAL



Partners In Quality

- > Our industry is changing
- > Customer needs changing
- We need to have solutions to challenges and changes
- Work as Partners in Quality
- > Be dedicated to quality



Quality... Sells Hot Mix

- Give us the quality materials we specify
- Accurately run and pass quality control and assurance test
- Build projects with quality to our specifications
- It will perform with quality to our design life



Texas Favorites













