

Asphalt Pavements & Mixtures: National Issues

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Arizona Pavements/Materials Conference

November 20, 2019

The Elephant in the Room




Plastics



- Social media buzz
- Traditional media
 - CNN
 - BBC
 - Washington Post
 - The Economist

**How We Got
Here?**

- 
- Conducted “literature review”
 - Reached out to NAPA
 - Conducted basic binder testing
 - Pelletized recycled plastic
 - Stiffened binder
 - Witnessed separation
 - Needed additional testing

Plastics Industry Association

- November 28, 2018 - Hearing
- *Addressing America's Surface Transportation Infrastructure Needs*
- Senator John Barrasso (R-WY)

**In the
meantime...**

• <https://www.epw.senate.gov/public/index.cfm/hearings?ID=F73722BC-05D7-4>

- Topic of Congressional Interest
- Two meetings with Senate staff
- EPW Committee request

Congressional Interest

- Began working with NCAT
 - 2nd phase work – separation
 - Most of products separated
- March 26, 2019 meeting in DC
 - Major players attending
 - Discussed path forward
 - American Chemistry Council

Plastics Industry Association

- Working with Asphalt Institute
- What do we know?
- What do we need to know?

**Continued
Work**

Pavement Design



PAVEMENT DESIGN

Simplified

Web-Based Pavement Design Tool

Designing the right pavement for the job just got easier thanks to PaveXpress, a free web-based pavement design tool for roadway and parking lot pavements.

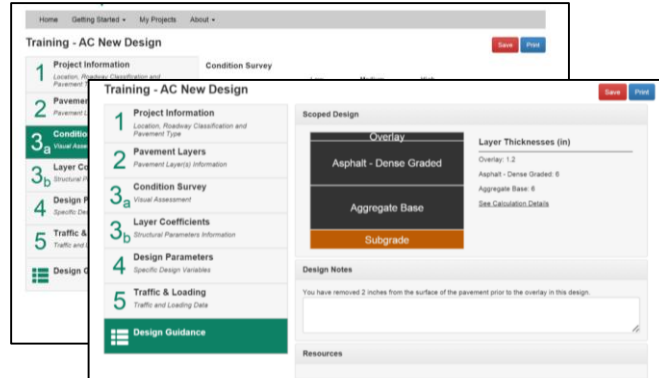
Projects created in PaveXpress can be printed, shared, and saved, and design options can easily be evaluated in a side-by-side comparison. As a browser-based tool, PaveXpress is always up to date and can be accessed from any computer or mobile device, regardless of screen size or operating system.

PaveXpressDesign.com



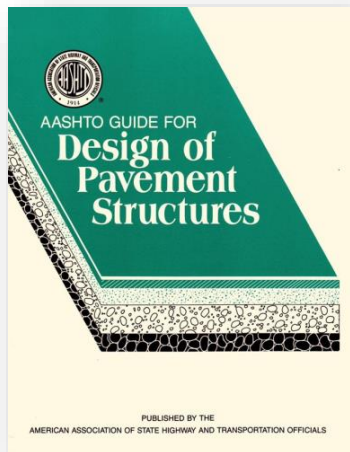
The evolution of PaveXpress....

- New Flexible
- New Rigid
- Parking Lots

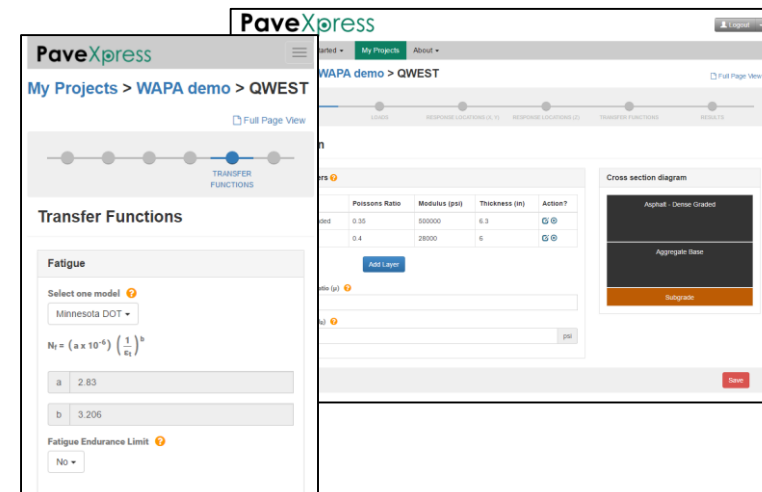


- Cost Module
- LEA Module
- UI/UX Update

Newest modules:
Integration with PerRoad
LCCA framework (ie: RealCost)
Porous Asphalt
Pavement Design
Simplified LCCA



- Overlay design
- Condition Survey
- NDT



- Recent study by Gary Sharpe of Palmer engineering
- Compares PaveXpress to AASHTO
- Program replicates AASHTO design with 95% accuracy
 - Deviations due to rounding and computations versus reading nomographs

Perpetual Pavements

“an asphalt pavement designed and built to last longer than 50 years without requiring major structural rehabilitation or reconstruction, and needing only periodic surface renewal in response to distresses confined to the top of the pavement”

- APA, 2002

The Misconception

- More = better
- Just keep adding thickness
- Truth vs. Practicality
- 1993 AASHTO Design Guide

**MORE
MORE
MORE**





Workforce Development

• 3 Focus Areas

- Communication
- Partnerships
- Delivering promise to employees



Communications Task Group

• Goal

- Stage-Setting Research
- Message Testing
- Widescale Research
- Web Presence



Partnership Task Group

• Goals

- Identify strategic partnerships
- Initiate contact with organization
- Develop blueprint for national, state, and local partnerships

COMMITTED
TO
Excellence



Promise Task Group

• Goals

- Identify the promises that matter using market research
- Highlight best practices



THANK YOU!

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