

Flexible Pavement Committee

How Does Pavement Age Affect Bond Strength Between Layers

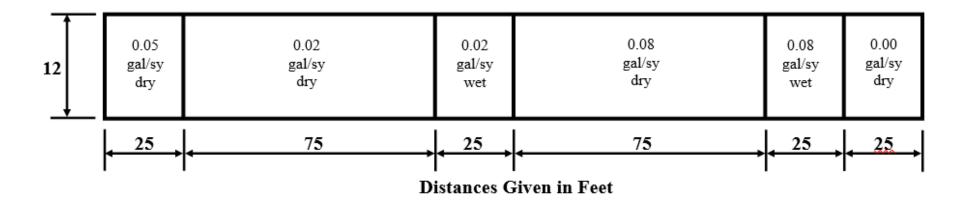
Greg Sholar March 21, 2018

Background

- Two projects:
 - US-90, Madison
 - SR-222, Gainesville
- Testing dates:
 - US-90, 2002 and 2018
 - SR-222, 2004 and 2018

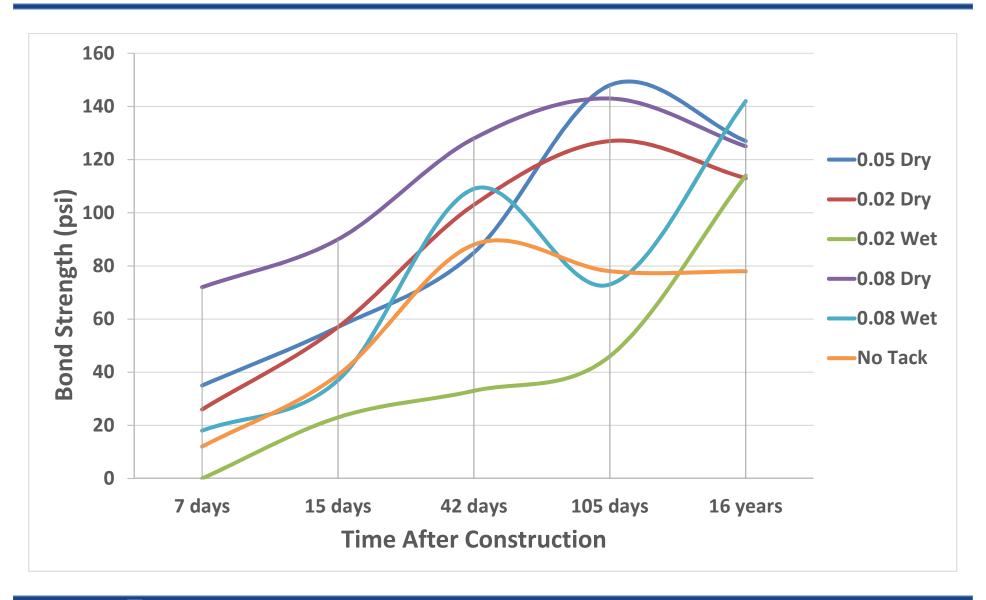
US-90, Madison

Evaluated dry vs. wet and different tack rates.



- Tested shear cores at the following days, post construction:
 - 7, 15, 42, 105 days; 16 years

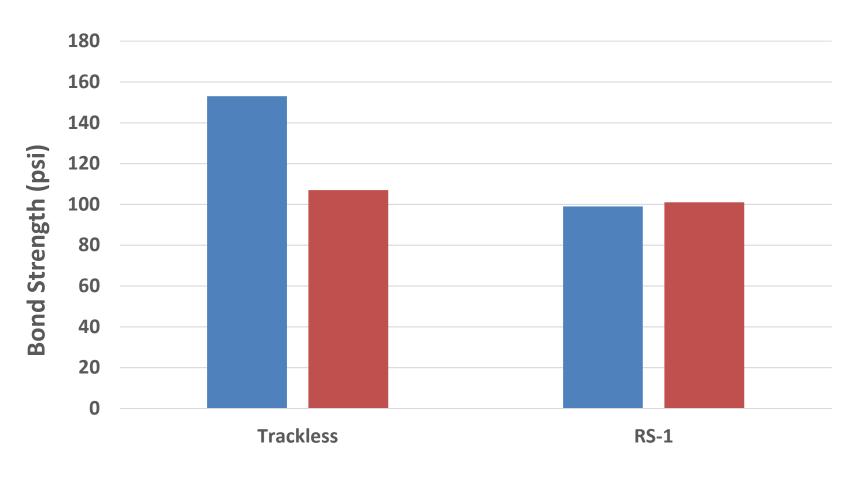
US-90, Madison



SR-222, Gainesville

- Trackless tack vs. regular tack (RS-1).
- Trackless; 0.039 gal/sy
- RS-1; 0.032 gal/sy
- Tested only at two time periods:
 - 16 days after construction
 - 13.5 years after construction

SR-222, Gainesville



Time After Construction
■ 16 days ■ 13.5 years



Thank You!