Uniform Paving Platform
A Contractor’s Perspective

J. Brent Moore
Regional Manager
Branscome, Inc. - Richmond.
Concerns for the Paving Contractor

- Safety – Plant and Field – Safety is the #1 Priority
- Mix Production – Consistent and Within Spec
- Mix Placement
- Compaction
- Density
- Ride Quality
- Profitability
Which Concerns Are Tied to the Paving Platform?

- Safety – Plant and Field
- Mix Production – Consistent and Within Spec
- Mix Placement
- Compaction
- Density
- Ride Quality
- Profitability
Mix Placement

- Distressed Pavement
Mix Placement

- Distressed Pavement

- Distortions
Mix Placement

- Distressed Pavement
- Distortions
- **Peeling Surfaces**
Mix Placement

- Distressed Pavement
- Distortions
- Peeling Surfaces
- Rutting
Mix Placement

- Distressed Pavement
- Distortions
- Peeling Surfaces
- Rutting
- **Scabbing**
Compaction

- Non-Uniformity Impacts
  - Roller Patterns
Compaction

- Non-Uniformity Impacts
  - Roller Patterns
  - Compression by Drum with Rutting

Steel Drum Roller

1.5” OL

Thicker AC Due to Rutting
Compaction

- Non-Uniformity Impacts
  - Roller Patterns
  - Compression by Drum with **Scabbing**

**Steel Drum Roller**

1.5” OL

Thinner AC Due to Scab
Density

- **Target density established in control strip with uniform section**
  - Weak areas with same roller pattern will have lower density
  - Thick or thinner sections due to rutting/scabbing will impact density
  - Scabs make break loose under rolling and impact density
Ride Quality

- Initial ride quality may be acceptable
- Over time, rubber tired rollers (vehicle’s tires) will complete compaction and distort the surface and lead to a poor ride
Pay factors based on:
- In-place density testing
- Final ride quality/improvement – Rideability Test
Achieving a Uniform Platform

- Leveling courses for roads not milled
  - Variable depth lift
  - Fills ruts
  - Assists in returning cross section to pavements
Achieving a Uniform Platform

- Leveling courses for roads not milled
- Milled roads with scabbing
  - Re-mill to remove scabs
Achieving a Uniform Platform

- Leveling courses for roads not milled

- Milled roads with scabbing
  - Re-mill to remove scabs (best approach)
  - Scratch course over scabs (alternate approach)
Win-Win-Win Solutions

- **Wins for VDOT**
  - Longer service life for surfaces
  - Lower life cycle costs

- **Wins for Contractor**
  - Increased profit potential
  - Optimized paving operations

- **Wins for the Traveling Public**
  - Smoother pavements
  - Longer lasting pavements
  - Lower vehicle operating costs
  - Fewer traffic disruptions (i.e., MOT)