Our Weak Link

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Warning!

• Problem
• Actions
• Quiz
Maintenance disruptive and dangerous

• Throw and Go
Expensive
What is good here?
Density Across the Mat

Permeability

* Project 1
* Project 4
* Project 8
* Project 9
* Project 10

y = 0.0481x^{0.7758}

R² = 0.7952

FIGURE 6  Field permeability-density relationship for 12.5-mm NMAS mixtures.
• Damp Joint
Actions

1. Seal
2. Notched Wedge
3. Mill and Fill
4. Density measurement
5. Financial incentives
6. Mix
7. Continued attention
2. Notched Wedge
3. Mill and Fill to Confine Edge
4. Test Where It Counts
5. PFP and QCP
Financial Incentives

• Confined edge – PFP and QCP subject to random samples

• Unconfined edge
  – PFP subject to one density test per half mile with pay adjustment
  – QCP subject to random samples with 2% add

6. Mix Modifications
19 mm Binders Must Go-
Almost Gone
Surface Mixtures

Increase passing #8 from 28% to 36%

- No Significant Cost
- Improves Workability
- Improves density
- Lower permeability
- Reduces segregation
- Improves Appearance
- Improved Longitudinal Joint

7. Continued Emphasis

- Progress in Illinois
  - Lots of best practices

- Still work to be done

- Emphasize
Joint Workshop

- Continues emphasis
- Background for new personnel
- Understand future changes
Quiz T or F

• A bad area between lanes will not hurt performance because cars don’t drive there.

• Density measurement 2 feet from the joint improves density test results.

• Mixtures: If we don’t stay with coarse graded, we won’t get what we have always got.

• Training on joints is unnecessary when global warming will reduce freeze-thaw cycles in Illinois.

The End