

ETF – TOPICS FOR FUTURE CONSIDERATION

1) Emulsion Surface Treatments -Surface Functional Characteristics:

Take a Look at the surface Characteristic (positive and Negative) of all Emulsion Treatments and how they can be utilized and/or improved . Characteristics such as:

- a) Friction – this directly affects safety- improving friction numbers and slowing friction loss
- b) Ride Quality- Smoothness which includes mitigating wash boarding , delamination's , and shelling
- c) Noise- Internal to the vehicle
- d) Sealing of Pavements – especially smaller cracks < 1/8 inch
- e) Visual – Improve overall pavement visibility especially nighttime /wet condition visibility
- f) Spray/ splash reduction under wet conditions.
- g) Pavement marking affinity.
- h) Aging protection/ mitigation for HMA pavements

2) Progressing the state of the Science.

- a) Good Adhesion with substrate (Asphalt or concrete)
- b) Additives to enhance properties that effect performance and durability
- c) improved adhesion for aggregate in emulsion mixes -Agg Pretreatment?
- d) Reliable predictability/ control for Emulsion breaks/set
- e) Performance tests for a Emulsion Treatments
- f) Modernize Construction equipment(Sensors) to better control and apply the treatments

3) Special Non-Traditional Uses for Asphalt Emulsions.

- a) Surfacing of Concrete roads to reduce noise and joint rideability
- b) Surfacing for concrete bridge decks to "flex" seal cracks , stop corrosion.
- c) Light Weight solution for Bridge deck overlays/Suspension Bridges
- d) Bike paths preservation treatments.

The growth of emulsion use is still in the early stages though it is encouraging to see that more agencies are beginning to use these treatments. To expand the use of Emulsions there must be a concerted and Asphalt Emulsion Use

continuing effort by all stake holders to work together and Partner to achieve this end .

Partnering between FHWA , AASHTO,AWPA , Industry (FP2) and Academia will be critical. The message to be shouted out is that Emulsions treatments have progressed to the point that they – do the job; construction applications are expeditious ; are cost effective , and environmentally friendly.

Quality Assurance plays a huge part in building credibility and confidence in getting owners to use these treatments , with training and certification being the cornerstones.

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