2019 PAPA Regional Technical Meetings

9.5mm WMA HIGH RAP MIX for Low Volume Roads
OBJECTIVE

1. Reasonable cost savings

2. Product that will perform on low volume routes
CHALLENGES

- Skid Resistance Level (SRL)
- Colder Regions
- Dust / Binder Ratio
- Max RAP%
  - 50%???
<table>
<thead>
<tr>
<th>ADT</th>
<th>SRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000 and above</td>
<td>E</td>
</tr>
<tr>
<td>5,000 to 20,000</td>
<td>E, H, Blend of E &amp; M, or Blend of E &amp; G.</td>
</tr>
<tr>
<td>3,000 to 5,000</td>
<td>E, H, G, Blend of H &amp; M, or Blend of E &amp; L</td>
</tr>
<tr>
<td>1,000 to 3,000</td>
<td>E, H, M, G, Blend of H &amp; L, or Blend of G &amp; L OR Blend of E &amp; L</td>
</tr>
<tr>
<td>1,000 and below</td>
<td>ANY</td>
</tr>
</tbody>
</table>
AADT AND ADTT

AADT < 2000

ADTT < 250
MAX RAP %

50%?
MAX RAP %

50% → 40%
VIRGIN BINDER REQUIREMENT

25% ≥ RAP% > 15%

- PG 64-22
- PG 58-28*

- Either binder can be used (*Exception)
- No blending evaluation necessary
COLDER REGIONS
COLDER REGIONS

[Map of Pennsylvania highlighting colder regions]
VIRGIN BINDER REQUIREMENT

25% ≥ RAP% > 15%

PG 58-28

For roadways that cross or span I-80
25% ≥ RAP% > 15% RANGE

- $N_{\text{design}} = 50$
- % Air Voids @ $N_{\text{design}}$ (Min 3.5%, Max 4.0%)
- PCS (#8) → Min 42%, Max 67%
- F/A Ratio → Min 0.6, Max 1.2%
- VFA → Min 73%, Max 80%
40\% \geq \text{RAP}\% > 25\% \\ 

PG 58-28**

** A different grade of virgin asphalt may be approved if the contractor chooses to have the asphalt binder in the RAP evaluated by LTS, and that evaluation shows that blending will achieve a PG 64-22 grade at the proportions in the JMF.
40% ≥ RAP% > 25% RANGE

- $N_{\text{design}} = 50$
- % Air Voids @ $N_{\text{design}}$ (Min 3.0%, Max 3.5%)
- PCS (#8) → Min 42%, Max 67%
- F/A Ratio → Min 0.6, Max 1.3%
- VFA → Min 77%, Max 83%
NEXT STEPS

• DRAFT SOL
• REVIEW SOL
• FINALIZE THE SSP
QUESTIONS?

Jay Sengoz
717-346-1548

csengoz@pa.gov