PAPA Regional Technical Meeting
(Cranberry Twp.)

March 17, 2020
District 11

Mark Gallardo
District Materials Manager
(412) 429-4817
mgallardo@pa.gov
2019 Bituminous Testing

Testing:
• 106 Lots (25% HOLA) - Mixture Acceptance by box sample
• 99 Lots - Density Acceptance by pavement core

Failure:
• 0 AC failures; 12 Reduced Payment
• 0 Gradation failure; 24 Reduced Payment
• 0 Density failures; 5 Reduced Payment

**Reduced payment doesn’t necessarily mean reduced payment for the OLPF**
## 2019 Longitudinal Joint Density Performance

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lots Tested</td>
<td>329</td>
<td>354</td>
<td>394</td>
<td>371</td>
</tr>
<tr>
<td>% Density Range</td>
<td>77.9-98.4</td>
<td>85.7-98.5</td>
<td>82.9-98</td>
<td>81.9-99</td>
</tr>
<tr>
<td>% Average Density</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
</tr>
<tr>
<td>Total $ for Incentive Lots</td>
<td>1,342,870</td>
<td>1,229,450</td>
<td>1,698,808</td>
<td>969,434</td>
</tr>
<tr>
<td>Total $ for Disincentive Lots</td>
<td>(27,474)</td>
<td>(59,060)</td>
<td>(49,120)</td>
<td>(29,461)</td>
</tr>
<tr>
<td>Delta (Incentive – Disincentive)</td>
<td>1,315,396</td>
<td>1,170,390</td>
<td>1,649,688</td>
<td>939,973</td>
</tr>
</tbody>
</table>

REF: Section 405 Evaluation of Bituminous Pavement Longitudinal Joint Density and Payment of Incentive/Disincentive
• Longitudinal Joint Type
  - Which joint type is being utilized most?
    • Tapered

  - Which joint type is producing better density?
    • Tapered

  - Are you having any longitudinal joint issues?
    • We had some water bleeding issues.
### 2019 Percent Within Limits (PWL)

#### District 11 - PWL SUMMARY

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PWL Projects Let</td>
<td>9</td>
<td>24</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Number HOLA</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number LTS</td>
<td>8</td>
<td>23</td>
<td>20</td>
<td>24</td>
</tr>
</tbody>
</table>

#### Average Pay Factors (%)

<table>
<thead>
<tr>
<th>Test Type</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Content</td>
<td>102.61</td>
<td>102.57</td>
<td>101.43</td>
<td>102.21</td>
</tr>
<tr>
<td>Primary Control Sieve</td>
<td>100.40</td>
<td>100.24</td>
<td>101.22</td>
<td>96.08</td>
</tr>
<tr>
<td>#200 Sieve</td>
<td>100.82</td>
<td>103.27</td>
<td>101.50</td>
<td>102.92</td>
</tr>
<tr>
<td>Density (Cores)</td>
<td>103.59</td>
<td>103.30</td>
<td>103.79</td>
<td>101.66</td>
</tr>
<tr>
<td>Average Density</td>
<td>94.5</td>
<td>94.5</td>
<td>94.8</td>
<td>94.8</td>
</tr>
<tr>
<td>Average Overall Lot Pay Factor (%)</td>
<td>1.03</td>
<td>1.03</td>
<td>1.02</td>
<td>1.02</td>
</tr>
<tr>
<td>Incentive ($)</td>
<td>$148,884.75</td>
<td>$349,712.36</td>
<td>$399,348.28</td>
<td>$168,211.04</td>
</tr>
<tr>
<td>Disincentive ($)</td>
<td>-$20,736.51</td>
<td>-$30,260.94</td>
<td>-$107,151.32</td>
<td>-$55,620.54</td>
</tr>
</tbody>
</table>
District Innovations & Best Practices

• Have you tried a 6.33 mm Thin Lift project yet?
  – Yes, we’ve had a couple over the past few years.
  – The District liked our past projects.
  – Too expensive

• Do you utilize SMA on all Interstate Highways?
  – Yes, we’ve had good experience with SMA over the years.
  – We’ve also used SMA on non-interstate, high volume roadways. (SR 51 in the South Hills and SR 19 in the North Hills)
District Innovations & Best Practices

• Are you still having tack coat issues? What tack coat type do you predominantly specify? Why?
  – We use NTT/CNTT and have not had any issues with tracking.

• Have your maintenance forces completed a 19.0 mm for Low Volume Roads mix project yet?
  – Yes, we experienced some segregation issues.
District Innovations & Best Practices

• Will your maintenance forces be piloting 9.5 mm for Low Volume Roads mix project?
  – Yes, but currently don’t have any other information.

• Have you bid and/or completed any crack and seat projects/rubblization/asphalt structural overlay in the past few years?
  – Yes, we had crack and seat on SR 28.
  – District modified the Pavement Policy and saved over $5 million on the project.
  – Crack and seat is preferred over rubblization.
• Please discuss any Innovations/Best Practices that you have piloted or recommend.
  - We piloted a 10% RAP SMA Project (ECMS 91790)
  - PennDOT’s first use of 10% RAP SMA
  - Eastbound lanes of SR 885 A45 (Boulevard of the Allies)
  - Approximately 1100 tons of WRSMA95
  - Paving Contractor – Lindy Paving
• Dawn Durst – Promoted to Materials Supervisor effective 2/8/2020
• Adam Krehnovi – Promoted to Materials Manager 1 effective 3/21/20
• We notified our producers that we will not be approving HMA designs starting this year to align with the new 408 changes.
• We also asked our producers to use the new PGAB designations on all 2020 mix designs.
• Construction field staff will be using SampleID app to enter sample information.
Questions/Comments???

Mark Gallardo
District Materials Manager
412-429-4817
mgallardo@pa.gov