PAPA Regional Technical Meeting
(Cranberry Twp)

March 17, 2020
District 10

Mark Kmetz
Acting District Material Engineer
(724) 840-1904
makmetz@pa.gov

Marc Gardner
Assistant Materials Manager
(724) 357-2076
marcgardne@pa.gov
Testing:
- #202 Lots - Mixture Acceptance by box sample
- #127 Lots - Density Acceptance by pavement core

Failure:
- #2 AC failures
- #0 Gradation failure
- #1 Density failures
### 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
2019 Longitudinal Joint Density Performance

- **Longitudinal Joint Type**
  - Which joint type is being utilized most?
    - Vertical – used mostly on low volume, narrow routes.
    - Notched – used mostly on high volume, wide routes.
  - Which joint type is producing better density?
    - Both joint types seem to be achieving expected density and performing as required.
  - Are you having any longitudinal joint issues?
    - No issues in 2019.
<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>16</td>
<td>20</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>Number HOLA</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Number LTS</td>
<td>15</td>
<td>19</td>
<td>26</td>
<td>28</td>
</tr>
</tbody>
</table>

Average Pay Factors (%)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Content</td>
<td>101.77</td>
<td>100.66</td>
<td>101.59</td>
<td>100.42</td>
</tr>
<tr>
<td>Primary Control Sieve</td>
<td>102.83</td>
<td>100.22</td>
<td>102.25</td>
<td>100.69</td>
</tr>
<tr>
<td>#200 Sieve</td>
<td>103.89</td>
<td>103.35</td>
<td>102.11</td>
<td>101.03</td>
</tr>
<tr>
<td>Density (Cores)</td>
<td>103.96</td>
<td>103.79</td>
<td>103.77</td>
<td>103.16</td>
</tr>
<tr>
<td>Average Density</td>
<td>94.5</td>
<td>94.5</td>
<td>94.4</td>
<td>94.5</td>
</tr>
<tr>
<td>Average Overall Lot Pay Factor (%)</td>
<td>1.03</td>
<td>1.02</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>Incentive ($)</td>
<td>$156,313.92</td>
<td>$150,976.14</td>
<td>$386,246.90</td>
<td>$325,501.48</td>
</tr>
<tr>
<td>Disincentive ($)</td>
<td>-$4,871.88</td>
<td>-$3,021.52</td>
<td>-$37,555.09</td>
<td>-$79,359.72</td>
</tr>
</tbody>
</table>
• Have you tried a 6.33 mm Thin Lift project yet?
  – SR 2012, placed over binder course, performing well.
  – SR 8, placed as a mill and fill, some distresses showing.
  – No projects planned for 2020.

• Do you utilize SMA on all Interstate Highways?
  – Butler County SR 79 and Clarion County SR 80.

• Are you still having tack coat issues? What tack coat type do you predominantly specify? Why?
  – No issues in 2019. CNTT is used predominantly.
District Innovations & Best Practices

- Have your maintenance forces completed a 19.0 mm for Low Volume Roads mix project yet?
  - Jefferson County paving crew with WR19BM in 2018 and 2019.

- Will your maintenance forces being piloting 9.5 mm for Low Volume Roads mix project?
  - No.

- Have you bid and/or completed any crack and seat projects/rublization/asphalt structural overlay in the past few years?
  - No.
• Please discuss any Innovations/Best Practices that you have piloted or recommend.

✓ We continue to emphasize focused participation and commitment to our asphalt pre-placement meetings.

✓ Contractor, material supplier and inspection staff collectively understand acceptance approach to achieve a positive outcome.
2020 District Changes - Direction

- Please discuss any changes to policy, specifications, special provisions, staff, etc. that are relevant to the asphalt paving industry.

✔ Mark Kmetz – Acting DME for the summer!
✔ Continued training of new employees regarding asphalt placement and specifications.
✔ Continue field staff entering samples identification forms (TR-447’s) into the Sample ID App and eCAMMS system.
Mark Kmetz  
Acting District Material Engineer  
(724) 840-1904  
makmetz@pa.gov

Marc Gardner  
Assistant Materials Manager  
(724) 357-2076  
marcgardne@pa.gov