



PAPA Regional Technical Meeting

(State College)

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District 2

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2019 Bituminous Testing

Testing:

- 153 Lots- Mixture Acceptance by box sample
- 115 Lots – Density Acceptance by pavement core

Failure:

- 1 AC failures
- 2 Gradation failure
- 2 Density failures
- 43 Multiple Sieve Deviation (MSD)

2019 Bituminous Testing

- Multiple Sieve Deviation (MSD)
 - Deviation on Multiple Sieves (3 or more) for any Single Sample Increment
 - Deviation on Same Sieve Size for Multiple (3 or more) Sample Increments
- MSD –Project Office Manual B.9.4-2
 - Requires “cause for Review by District Materials” on Federal Oversight Projects
 - Written Documentation to Central Office
 - Documentation includes
 - Review of quality control plans, construction procedures, material handling, companion samples QA test and DQA test.

▶ 2019 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary			
Year	2016	2017	2018	2019
Lots Tested	79	81	95	26
% Density Range	87.8-95.5	88.7-94.4	82.9-97.3	87-98
% Average Density	92.8	92.3	92.5	92.1
Total \$ for Incentive Lots	\$331,000	\$282,450	\$394,100	\$81,800
Total \$ for Disincentive Lots	(31,800)	(17,400)	(15,640)	0
Delta (Incentive - Disincentive)	\$299,200	\$265,050	\$377,260	\$81,800

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
 - Tapered
 - Which joint type is producing better density?
 - Not sure- We haven't captured this data
 - Are you having any longitudinal joint issues?
 - Pavements failing at longitudinal joint
 - Repair with mill and fill-(19mm and micro surface)
 - Better since Longitudinal Joint Density Spec.
 - Paid out \$1.08 million incentive in last 4 years
 - Still seems to be the weakest link in our pavements

2019 Percent Within Tolerance (PWL)

	PWT SUMMARY			
Year	2016	2017	2018	2019
Number of PWL Projects	4	15	13	8
Number HOLA	1	0	3	2
Number LTS	3	15	10	6
Average Pay Factors (%)				
Asphalt	101.24	100.19	101.21	101.47
PCS	97.36	95.01	99.94	99.77
#200 Screen	101.48	100.58	102.38	100.04
Density	102.36	102.11	101.45	101.77
Average Density	93.8	94.2	94.0	94.3
Average Overall Lot Pay Factor (%)	1.01	1.00	1.01	1.01
Bonus (\$)	\$46,908	\$303,775	\$404,198	\$262,883
Penalty (\$)	-18,866	-207,672	-178,675	-402,577

2020 Planned Construction Projects

- List Projects With > 1000 tons of WMA Paving

➤ 2020 Planned Construction Projects

➤ 2020 Planned Construction Projects

2020 Maintenance Asphalt Tons (Estimated)

County	9.5 mm	9.5 mm LVR	12.5 mm	19.0 mm	19.0 mm LVR	25.0 mm	25.0 mm LVR	37.5 mm
2-1								
2-2								
2-3								
2-4								
2-5								
2-6								
2-7								
2-8								
2-9								
TOTAL TONS								

LVR = Low Volume Roads

District Innovations & Best Practices

- Have you tried a 6.33 mm Thin Lift project yet?
 - Yes
 - SR 453 Clearfield County-523 Tons
 - Failed density 1 increment and multiple sieve deviation
- Do you utilize SMA on all Interstate Highways?
 - Yes
 - All interstate and interstate look a likes

▶ District Innovations & Best Practices

- Are you still having tack coat issues? What tack coat type do you predominantly specify? Why?
 - Mostly TACK
 - Specify NTT in urban areas
- Tack Issues
 - Still some pick up- Usually milled surfaces
 - Surfaces not clean
 - Uniform Even Coat

▶ District Innovations & Best Practices

- Have your maintenance forces completed a 19.0 mm for Low Volume Roads mix project yet?
 - No-County Forces do not pave
- Contracts using 19 mm High RAP-Low Volume
 - Four Projects- 93,000 tons
 - 25% RAP mostly and 1 project 30% Rap
 - Same as previous 19mm binder mixes except no acceptance testing

District Innovations & Best Practices

- Will your maintenance forces be piloting 9.5 mm for Low Volume Roads mix project?
 - Maybe, Mifflin Group Project E108370
 - 4000 Tons.
- Have you bid and/or completed any crack and seal projects/rubblization/asphalt structural overlay in the past few years?
 - Planned for 2020 SR 0099-163 Centre County-E2738

District Innovations & Best Practices

- Please discuss any Innovations/Best Practices that you have piloted or recommend.
 - Cold Recycle Central Plant Mix 19mm Binder

2020 District Changes - Direction

- Please discuss any changes to policy, specifications, special provisions, staff, etc. that are relevant to the asphalt paving industry.
 - Tom Zurat- District Engineer
 - Leeanne Davis – ACE Southern
 - Brian Brosius – ACE Northern
 - Beth Forcey – Finals Unit Manager
 - District Materials Staff- Same as previous year

Questions/Comments???



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