

PennDOT District 11

Best Practices and Innovations



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2018 Bituminous Testing

Testing:

- 365 Lots (50% HOLA)- Mixture Acceptance by box sample
- 227 Lots – Density Acceptance by pavement core

Failure:

- 0 AC failures; 24 Reduced Payment
- 0 Gradation failures; 42 Reduced Payment
- 0 Density failures; 1 IF

2018 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary		
Year	2016	2017	2018
Lots Tested	15	34	28
% Density Range	87.9 – 96.6	85.9 – 96.8	86.0 – 98.0
% Average Density	93.4	93.6	93.9
Incentive Lots			
Zero Lots			
Disincentive Lots			
Total \$ for Incentive Lots	65,500	94,000	283,000
Total \$ for Disincentive Lots	0	0	0
Delta (Incentive – Disincentive)	65,500	94,000	283,000

REF: Section 405 Evaluation of Bituminous Pavement Longitudinal Joint Density and Payment of Incentive/Disincentive

➤ 2018 Longitudinal Joint Density Performance

- Longitudinal Joint Type
 - Which joint type is being utilized most?
 - Tapered
 - Which joint type is producing better density?
 - Tapered somewhat slightly
 - Are you having any longitudinal joint issues?
 - Some water bleeding out of longitudinal joints

2018 Percent Within Tolerance (PWT)

	District 11 - PWT SUMMARY		
Year	2016	2017	2018
Number of PWT Projects Let	9	24	20
Number HOLA	1	1	0
Number LTS	8	23	20
Average Pay Factors (%)			
Asphalt Content	102.61	102.57	101.43
Primary Control Sieve	100.40	100.24	101.22
#200 Sieve	100.82	103.27	101.50
Density (Cores)	103.59	103.30	103.79
Average Density	94.5	94.5	94.8
Average Overall Lot Pay Factor (%)	1.03	1.03	1.02
Incentive (\$)	\$148,884.75	\$349,712.36	\$399,348.28
Disincentive (\$)	-\$20,736.51	-\$30,260.94	-\$107,151.32

2019 Planned Construction Projects

ECMS	Let Date	SR	County	Tons
105449	2019	22	Allegheny	20,000
91790	2/28/2019	885	Allegheny	13,000
81856	2/28/2019	19	Allegheny	20,000
98105	3/14/2019	837	Allegheny	12,000
109374	1/31/2019	51	Allegheny	3,000
29094	2019	18	Beaver	10,000
100934	1/31/2019	4012	Lawrence	9,000
110593	2019	376	Allegheny	5,000
105239	2019	3034	Allegheny	8,000
105240	4/25/2019	885	Allegheny	6,000
105243	2019	4028	Beaver	9,000
105244	1/17/2019	1005	Lawrence	15,000
98085	1/31/2019	837	Allegheny	6,000

2019 Maintenance WMA Tons (Estimated)

County	9.5 mm	12.5 mm	19.0 mm	19.0 mm LVR	25.0 mm	37.5 mm
Allegheny	16,000	0	800	38,000	500	0
Beaver	2,500	0	5,000	15,000	1,500	0
Lawrence	0	0	0	12,166	0	0
TOTAL TONS	18,500	0	5,800	65,166	2,000	0

LVR = Low Volume Roads

District Innovations & Best Practices

- Have you tried a 6.33 mm Thin Lift project yet?

2013

SR 376 Beaver County

20.8 Lane Miles

Milled 1/2", placed 3/4" 6.33mm

2014:

SR 79 Allegheny County

25.7 Lane Miles

Milled 1/2", placed 3/4" 6.33mm

2016:

SR 4009 Allegheny County

3.8 Lane Miles

Milled 3", placed 2" binder and 1" 6.33mm to maintain curb reveal

District Innovations & Best Practices

- Do you utilize SMA on all Interstate Highways?
 - YES
 - Automated distress survey results have suggested less cracking and less rutting in first 3 years when compared to Superpave mixes.
- Are you still having tack coat issues? What tack coat type do you predominantly specify? Why?
 - NTT/CNTT predominantly on projects with considerable quantities

District Innovations & Best Practices

- Have your maintenance forces completed a 19.0 mm for Low Volume Roads mix project yet?
 - Yes
- Have you bid or completed a LLAP Project?
 - 279 A83
 - 376 B09
 - 28 A55
- Have you bid and/or completed any crack and seat projects/asphalt structural overlay in the past few years?
 - If so, please briefly discuss project and any take-aways?

District Innovations & Best Practices

- E-ticketing
- 10% RAP SMA
- Regular milling for 6.3mm mix thin-lifts (3/4" or greater)
- Elimination of scratch course when not needed to correct cross slope or traffic speed does not require lowest possible IRI.

2018 District Changes - Direction

- Randy McCormish – Retirement 3/22/19
- High RBR Spec has been revised to take effect for mixes containing more than 25% RAP or any mix containing RAS

Questions/Comments???



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