# PAPA Regional Technical Meeting

Cranberry Twp.

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## 2018 Bituminous Testing

## Testing:

- 145 Lots- Mixture Acceptance by box sample
- 119 Lots Density Acceptance by pavement core

#### Failure:

- 19 AC failures\*
- 53 Gradation failures\*
- 5 Density failures



# 2018 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary				
Year	2016	2017	2018		
Lots Tested	40	41	48		
% Density Range	87.3 – 97.4	90.1 - 98.5	84.4 - 97.2		
% Average Density	93.2%	94.3%	93.3%		
Incentive Lots					
Zero Lots					
Disincentive Lots					
Total \$ for Incentive Lots	\$176,500	\$244,250	\$184,000		
Total \$ for Disincentive Lots	-\$8,800	-\$1,440	-\$8,200		
Delta (Incentive - Disincentive)	\$167,700	\$242,810	\$175,800		

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
  - One project used a vertical joint. We suspect we may get better or at least equal density with this method, however leaving the edge in place over night can potentially cause issues and with a 94.1% density average with the tapered joint...if it ain't broke, don't fix it.
  - Any longitudinal joint issues?
     No issues are being experienced. Average Joint Density for the last 25 samples is 94.1%



# 2018 Percent Within Tolerance (PWT)

	PV	RY	
Year	2016	2017	2018
Number of PWT Projects	11	15	8
Number HOLA	1	2	1
Number LTS	10	13	7
Average Pay Factor			
Asphalt	100.11	100.64	101.02
PCS	99.46	98.53	97.71
#200 Screen	103.13	102.43	101.34
Density	103.50	103.90	103.97
Average Density	94.6	95.0	94.7
Average Overall Lot Pay Factor (%)	1.02	1.02	1.02
Bonus (\$)	\$121,392	\$209,443	\$334,119
Penalty (\$)	-\$28,014	-\$43,618	-\$75,428

- Projects With > 1000 tons of WMA Paving
  - ECMS#108309, Let Date 2/28/19, SR 21-0, Fayette
     County, 3,700 Tons
  - ECMS#111235, Let Date 3/14/19, SR 19-SIP, Greene County, 21,000 Tons
  - ECMS#108354, Let Date 3/28/19, SR 819-0,
     Westmoreland County, 6,900 Tons
  - ECMS#108277, Let Date 3/28/19, SR 980-0,
     Washington County, 75,000 Tons
  - ECMS#110064, Let Date 3/28/19, SR 31-04R,
     Westmoreland County, 5,800 Tons



- Projects With > 1000 tons of WMA Paving
  - ECMS#107346, Let Date 10/4/18, SR 381-OMG, Fayette
     County, 6,240 Tons
  - ECMS#57201, Let Date 3/28/19, SR 519-K10,
     Washington County, 30,165 Tons
  - ECMS#70100, Let Date 11/1/18, SR 356-J10,
     Westmoreland County, 39,335 Tons
  - ECMS#91581, Let Date 5/23/19, SR 70-22R,
     Washington County, 41,680 Tons



- Projects With > 1000 tons of WMA Paving
  - ECMS#76073, Let Date 12/13/18, SR 4007-C10,
     Washington County, 4,313 Tons
  - ECMS#81650, Let Date 11/1/18, SR 8042-01M,
     Washington County, 1,048 Tons
  - ECMS#106881, Let Date 2/14/19, SR 119-F10, Fayette
     County, 1,230 Tons
  - ECMS#75996, Let Date 9/13/18, SR 201-J10, Fayette
     County, 1,185 Tons
  - ECMS#79406, Let Date 10/4/18, SR 711-03M,
     Westmoreland County, 1,080 Tons



- Projects With > 1000 tons of WMA Paving
  - ECMS#109780, Let Date 12/13/19, SR 2023-01M,
     Fayette County, 3,596 Tons
  - ECMS#109781, Let Date 12/13/18, SR 4021-01M,
     Greene County, 1,164 Tons
  - ECMS#106883, Let Date 12/6/18, SR 3041-A10,
     Washington County, 1,274 Tons



# 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
12-1	3,000		2,500		500	
12-2	3,000		250		150	
12-4	30,000		5,000		1,000	
12-5	20,000		5,000		1,000	
TOTAL TONS	56,000		12,750		2,150	



#### District Innovations & Best Practices

- Have you tried a 6.33 mm Thin Lift project yet?
  - We have not done a 6.33 mm project to date. Our DE wants to on SR119 however as of now the funding is not there.
- Do you utilize SMA on all Interstate Highways?
  - We do and believe for interstate work it is a better product.
     Stone on stone contact, better for rutting, more oil.
- Are you still having tack coat issues? What tack coat type do you predominantly specify? Why?
  - We switched to Non-Tracking Tack (0460-0003). We have had no issues and have been using it for over a year.



#### District Innovations & Best Practices

- Have your maintenance forces completed a 19.0 mm for Low Volume Roads mix project yet?
  - None to date. We have some scheduled for 2019 but possibly funding issues may halt the projects.
- Have you bid or completed a LLAP Project?
  - No pilot currently in D-12. Primarily focused on bridges.
- Have you bid and/or completed any crack and seat projects/asphalt structural overlay in the past few years?
  - We have not bid any crack and seat projects in D-12.



#### District Innovations & Best Practices

- Please discuss any Innovations/Best Practices that you have piloted or recommend.
  - We completed a 100% RAP cold recycling project in Washington County in 2018 (ECMS#31180).
     Department owned pugmill was brought in. Lane milled from SR70, crushed, screened and stockpiled the material and placed it on a four digit SR (Old Brick Rd).



## 2018 District Changes - Direction

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

 We aligned our RAP SSP with the proposed spec by making the base and binder a .30 before requiring performance testing.



# Questions/Comments???



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