



# **PAPA Regional Technical Meeting**

## State College

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District 9-0

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# 2018 Bituminous Testing

## Testing:

- 163 Lots- Mixture Acceptance by box sample
- 125 Lots – Density Acceptance by pavement core

## Failures:

- 2 AC failures (70% Pay)
- 0 Gradation failures
- 1 Density failures (70% Pay)

## 2018 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary		
Year	2016	2017	2018
Lots Tested	0	0	8
% Density Range			87.2-96.7
% Average Density			91.8 %
Incentive Lots			6
Zero Lots			1
Disincentive Lots			1
Total \$ for Incentive Lots			\$26,000
Total \$ for Disincentive Lots			-\$400
Delta (Incentive - Disincentive)			\$25,600

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-
    - Primarily Vertical/Butt Joint
    - Some Tapered/Notched Wedge
  - Which joint type is producing better density
    - Varies by contractor/mix; but, appears Notched Wedge trends higher historically
  - Longitudinal joint issues?
    - Performing very well overall.

## 2018 Percent Within Tolerance (PWT)

	District 9 - PWT SUMMARY		
Year	2016	2017	2018
Number of PWT Projects Let	27	38	44
Number HOLA	13	22	21
Number LTS	14	16	23
Average Pay Factors (%)			
Asphalt Content	101.29	100.82	101.45
Primary Control Sieve	98.88	99.65	101.07
#200 Sieve	102.56	101.70	98.86
Density (Cores)	103.20	101.69	103.00
Average Density	94.3	94.3	94.6
Average Overall Lot Pay Factor (%)	1.01	1.01	1.02
Incentive (\$)	\$159,038.61	\$144,658.62	\$334,314.41
Disincentive (\$)	-\$45,848.47	-\$88,688.77	-\$84,783.69

## 2019 Planned Construction Projects

- BLAIR – 30,510 Tons
  - Bedford – 9,700 Tons
  - Cambria – 34,760 Tons
  - Huntingdon – 1,519 Tons
  - Fulton – 1,425 Tons
  - Somerset – 100,766 Tons
  - MC Contracts (Dist. Wide)- 24,837 Tons
- Total= 203,517 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
9-1 Bedford	0	0	0	32,500	0	0
9-2 Blair	5,200	0	0	17,000	0	0
9-3 Cambria	0	0	0	24,000	500	0
9-4 Fulton	0	0	0	13,500	0	0
9-5 Hunt.	0	0	0	13,900	0	0
9-7 Somerset	3,600	0	0	21,400	7,100	0
TOTAL TONS	8,800	0	0	122,300	7,600	0

LVR = High RAP / Low Volume Roads

## District Innovations & Best Practices

- One 6.33 mm Thin Lift project in 2018
  - Interstate preservation project planned for late 2019 let
  - funding dependent.
- District utilizes SMA on all Interstate Highways and 4-lanes.
  - Feel it's a very good performing mix, extra AC for durability and Polymer Modified.
- Tack issues have been negligible. Specify NTT for Mill/Fills and Urban areas.



## District Innovations & Best Practices

- Maintenance forces completed a 19.0 mm for Low Volume Roads.
  - Placed on an FDR project. No issues with production. Maintenance was pleased with the mix.
- No LLAP Projects
- Performed crack & seat on a portion of I-99
  - Worked well, utilized “Crack and Seat” special provision, not the Rubblizing spec. in 408, resulting in thinner overlay (9 ½”).

## District Innovations & Best Practices

- Utilize Mobile lab-
  - Verify aggregate gravities
  - Verify mix designs, Max. gravities, voids, gradation/AC
- Other-
  - PME works with DME, review pavement designs
    - Utilize Pub. 242 to bump down gyrations where applicable to get more AC in paving courses.
    - Routinely “Bump” binder grades in rut prone areas.
  - Have been using CL. 4A Geotextile separator between subgrade/subbase layers +/- 14 years.

## 2018 District Changes - Direction

- Utilize District Special Provision for Local Acceptance of SMA
- Increased amount of HOLA testing
- Increase use of preservation techniques- 6.3 Thin Lift
- Increased use of FDR with bituminous overlay
- Utilizing 100% Non-Tracking Tack starting 2019

# Questions/Comments???



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