

# PAPA Regional Technical Meeting

March 16, 2023

8:00 AM to 3:00 PM

District 5

Len Walutes

District Materials Manager

(610) 871-4424

[lwalutes@pa.gov](mailto:lwalutes@pa.gov)



# 2022 Asphalt Mix Testing

## Testing:

- 164 Lots- Mixture Acceptance by box sample
- 154 Lots – Density Acceptance by pavement core

## Failure:

- 2 Lots - AC Content failures
- 5 - Gradation failures
  - 5 #200 Sieve -
  - 0 Primary Control Sieve -
- 8 - Density failures

## Retests Requested:

- 7 Requested –
- Retest Results -
  - # passed 5
  - # failed 2

# 2022 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary					
Year	2022	2021	2020	2019	2018	2017
Lots Tested	12	13	1	34	27	16
% Density Range	86.7-94.6	84.0-96.4	85.4-90.4	88.3-98.6	87.0-96.8	87.2-96.5
% Average Density	89.8	90.6	87.8	91.9	91.9	92.1
Total \$ for Incentive Lots	1,575	19,000	38,746	75,584	91,350	26,950
Total \$ for Disincentive Lots	0	0	0	0	0	-22,000
Delta (Incentive – Disincentive)	1,575	19,000	38,746	75,584	91,350	4,950



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



# 2022 Longitudinal Joint Density Performance

- Longitudinal Joint Type
  - Which joint type is being utilized most?
    - Vertical
    - Tapered is used most.
  - Are you having any longitudinal joint issues?
    - If so, please explain. Better Density (Discuss Later) and straighter lines.
  - Did you or are you planning to pilot J-Band (Void Reduction Asphalt Membrane VRAM)? If you piloted, what are your observations?
    - SR 22 in Lehigh County 9 miles started 2021 into 2022.
    - SR 22 in Northampton County 9 miles started in 2022 into 2023.

# 2022 Longitudinal Joint Density Performance

VRAM Continued:

SR 924 in Schuylkill County used J-Band in 2021.  
Approximately 2.4 miles in the center line joint.

SR 380/81 J Band projects were completed about 5 years ago, approximately 3 miles of center line joint combined and are showing no wear or unraveling to this point and are being evaluated annual.

Projects on SR 33 & SR 611 in Monroe County scheduled to be placed in 2023.

SR 309 in Lehigh County in 2023.

# 2023 Planned Construction Projects

- List Projects With > 1000 tons of Asphalt Paving
  - ECMS #101560, Let Date 2/02/23, SR 191, Northampton County, 10,300 Tons
  - ECMS #72812, Let Date 4/04/23, SR 78, Lehigh County, 18,400 Tons
  - ECMS #85911, Let Date 4/27/23 SR 81, Schuylkill County, 89,335 Tons
  - ECMS #112685, Let Date 5/11/23 SR 4028, Berks County, 2,340 Tons
  - ECMS #101663, Let Date 5/25/23 SR 611, Monroe County, 8,400 Tons
  - ECMS #112657, Let Date 5/25/23 SR 33, Monroe County, 2,900 Tons

# 2023 Planned Construction Projects

- List Projects With > 1000 tons of Asphalt Paving
  - ECMS #101869, Let Date 5/25/23, SR 1015, Lehigh County, 4,000 Tons
  - ECMS #101584, Let Date 5/25/23, SR 183, Schuylkill County, 20,750. Tons



# 2023 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
5-1	1500			10100		4400	4250
5-2				18532			
5-3					2125		
5-4	2500	5880		1500	3000		
5-5				10137	2363		
5-6	1511			13250	125		
<b>TOTAL TONS</b>	<b>5511</b>	<b>5880</b>		<b>53519</b>	<b>7613</b>	<b>4400</b>	<b>4250</b>

LVR = Low Volume Roads





# District eTicketing Status

- Please discuss your experience with Asphalt eTicketing Projects.
  - Pluses: 2 projects using aggregate e-tickets.
  - Minuses: No asphalt suppliers are ready.
  - Recommendations

- Are contractors in your District ready to implement in 2024?

I have no definite answer. They are working on it.

# District 6.3 & SMA Projects

- List of 2023 6.3 mm Thin Lift projects
  1. ECMS 96385 SR 22-08M, Lehigh County, 2,000 tons. placed in 2021.
- List of 2023 SMA Projects
  1. ECMS 87649 SR 80-23M, Monroe County, 30,000 tons.
  2. ECMS 72822 SR 78-13M, Multi Counties, 38,000 tons.
  3. ECMS 72812 SR 78-22M, Lehigh County 9,600 tons.
  4. ECMS 85911 SR 81-25M, Schuylkill County 18,400 tons.

# District RAP Mix Percentages

- Please provide average RAP % for the following mixes:
  - Wearing - 17% and total 240,550 tons
  - Binder - 18% and tons 94,280
  - Base – 18 % and tons 101,857
  - Over RAP % of all mixes – 17% and total tons 436,690
- What are the impediments to increasing RAP% in the mixes?
  - Producers lack of RAP.
  - The plant ability to introduce larger quantity.

## District BMD HWTT/IDEAL-CT Implementation

- Please discuss District opinion of owner – contractor readiness to implement BMD in 2026.
- The District has suppliers who have purchased their own testing equipment and some who are in the process. They will be ready.
- Please discuss any issues, problems, opportunities, successes, etc. you would care to share?

Some suppliers will use third party testing until they are sure that BMD will be implemented before making the investment.

# Mix Design

- Have you had any issues with reducing the mix design gyration numbers to 50 & 75?
  - None.
  - If yes, please explain.
- Would you be in favor of reducing nDesign gyrations to one level? Yes, no or no opinion?

It would be less designs to review but BMD has already been started on <.3??

## District 9.5 mm & 19.0 mm High RAP Mixes for LVR Mixes

- Have your maintenance forces completed a 19.0 mm or 9.5 mm for Low Volume Roads mix project yet?
  - If so, please discuss your observations & performance to date.

Yes, in 2021, 3 different SRs in Berks County totaling 9,322 tons of 19mm.

Also, had an ECMS project. Contractor placed the 19mm and Maintenance completed sealcoat.

Pave wearing well on roads with and without sealcoat.

Minimal tonnage of 9.5mm and 19mm scheduled in 2023.

# District Rehabilitation Projects

- Have you bid and/or completed any crack and seat projects/rubblization/asphalt structural overlay in the past few years?
  - SR 33/209 Monroe County completed in 2011, SR 80 in Carbon County completed in 2019. SR 443 project in Carbon County is in construction.
  - SR 33 visibly is holding up much better than any other section of SR 33 paved around the same time.
  - SR 80 was able to pave 156,00 tons in one paving season and received a \$106,000 IRI bonus
- Do you have any projects programmed for 2023 or 2024? No.

# District Innovations & Best Practices

- Please discuss any Innovations/Best Practices that you have piloted or recommend.
  - Review PTM 746 on loose box sampling.
  - Extract a correlation core for nuke gauge.
  - Review Bulletin 27 Appendix J for design submittals.



## 2022 District Issues - Problems

- Please discuss any issues, problems, etc. that you had with asphalt paving producers or contractors. How did you resolve them?
  - Many bituminous Acceptance Lot failures last year.
  - Loose box sampling issues-segregation.
  - Density gauge accuracy and rolling patterns.
  - Be more diligent with design submittal accuracy and attaching supporting documents.
  - Started to resolve issues by talking at Winter School, PAPA, Suppliers/Contractors and PAPA Regional.

## 2023 District Changes - Direction

- Please list - discuss any District changes to policy, specifications, special provisions, staff, etc. that are relevant to the asphalt paving industry.
  - Jonathan Hoffman was promoted to Materials Manager 1.
  - Frank Lorah was promoted to a TCIS.
  - 4 new TCIs started over this winter.

# Questions/Comments???



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