



# **MATERIALS INFORMATION TRACKING SYSTEM / PRODUCER LAB ANALYSIS AND INFORMATION DETAILS (MITS/PLAID)**

**|** Angela Beyke, Assistant Asphalt Program  
Manager

# What is MITS/PLAID

## MITS & PLAID is...

- A centralized online database where Hot Mix Asphalt (HMA) & Central Mix Aggregate (CMA) job mixes and sample results are submitted and approved and
- Can be viewed by the Department and the Producer.

## MITS: Materials Information Tracking System

- Department Side

## PLAID: Producer Lab Analysis and Information Details

- Producer Side

# Updates to the System:

- **Original Design year has been added as field on TL127 form**
- **Job Mix Formula will now have year, status (Approved/Rejected) in upper right hand corner when printed.**
- **F/A Ratio will now trigger volumetric sample to pass/fail depending on if meeting Specification limits.**


# Design Year

## HMA TL127 Job-Mix Formula

Submit to the District Administrator, Virginia Department of Transportation. Approval must be received by the contractor from the Materials Division before work is begun. This job-mix design is approved for all projects of the Department for the type of mix and the calendar year shown below.

District:	<input type="text" value="CULPEPER"/>	Producer Name:	<input type="text" value="Select"/>
Design Lab:	<input type="text"/>	TSR Test Number:	<input type="text"/>
Plant Name:	<input type="text"/>	Plant Phone:	<input type="text"/>
Job Mix Number:	<input type="text"/>	Contractor Design Mix Number:	<input type="text"/>
Design Type:	<input type="text" value="Select"/>	Type Mix:	<input type="text" value="Select"/>
Default Tests per Lot:	<input type="text" value="8"/>	Design Year:	<input type="text"/>

Job-Mix Formula Materials (0 found)							
		Job Mix Phase		Kind		Source	
Edit	Materials	A %	B %	Type	Size	Producer	Plant
<a href="#">Add</a> <a href="#">Clear</a>	<input type="text" value="Select"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>





# Areas of Interest for 2018

- **Accuracy of TL 102's being submitted**
  - Many incorrect TL102's were submitted in 2017 and had to be opened up and corrected.
  - Biggest areas to be corrected: Project number, route & mix type
  - Use remarks box when making corrections to track what was changed– Easier to make sure it's corrected out in the field.
- **Accuracy of sample data entered.**
  - Samples were entered showing they were sampled, tested and entered within 5 minutes of each other.

# Specification Compliance

**“The Contractor shall input such test results within 24 hours of sampling to the Department through PLAID, unless otherwise approved by the Materials Engineer.”**

District	Negative %	Within 24 %	Within 36 %	Within 48 %	Within 60 %	Within 72 %	Within 84 %	Within 96 %	Over 96 %
BRISTOL	0	90.8	93.7	95.7	96.7	98.4	98.4	98.7	99.7
CULPEPER	0	86.5	92.7	94.3	95.4	97.2	97.8	98.3	99.9
FREDERICKSBURG	0	93.8	95.5	96.7	97.2	99.1	99.1	99.1	99.7
HAMPTON ROADS	0	83.5	93.6	95.1	96.3	96.7	97.3	97.3	100.0
LYNCHBURG	0	91.8	94.4	95.8	96.1	97.5	97.8	98.1	99.6
NORTHERN VIRGINIA	0	89.5	91.9	93.7	94.5	95.3	95.9	96.3	100.0
RICHMOND	0	92.3	94.5	95.5	96.2	97.7	98.0	98.1	99.9
SALEM	0	86.5	90.6	91.7	92.4	95.4	96.7	96.9	100.0
STAUNTON	0	72.8	80.7	82.8	84.5	88.6	90.3	91.5	99.7
State	0	88.2	92.1	93.6	94.5	96.2	96.7	97.1	99.9



# 2017 Gradation Flags

1"	202
3/4"	693
1/2"	683
3/8"	974
No. 4	1515
No. 8	1947
16	17
30	477
50	0
100	0
200	934
AC	1740

**11,543 total samples**

**#8, #4, AC most flagged sieves/property**

# 2017 Volumetric Failures

Property	Number of Flags
VTM	219
VMA	155
VFA	318
VCA	9
F/A Ratio	563

**7,751**  
**volumetric**  
**samples**

**F/A ratio is**  
**most flagged,**  
**followed by**  
**VFA**

# 2017 Adjustment Points

District	District Name	Total Lots	Closed out Lots	Lots with Adjustment	TOTAL Adjustment Points
1	BRISTOL	249	248	1	0.6
2	SALEM	178	173	34	41.5
3	LYNCHBURG	121	121	18	37.4
4	RICHMOND	361	360	6	1.7
5	HAMPTON ROADS	171	77	2	1
6	FREDERICKSBURG	99	97	3	1.1
7	CULPEPER	186	186	24	44.5
8	STAUNTON	217	215	15	40.7
9	NORTHERN VIRGINIA	450	450	23	33.8
	Statewide	2032	1927	126	202.3

## Statewide by Sieve

TOTAL Adjustment Points	202.3
3/4" adjustments	42.5
1/2" adjustments	33.4
3/8" adjustments	17.6
#4 adjustments	20.7
#8 adjustments	38.1
#30 adjustments	22.6
#200 adjustments	6.9
AC adjustments	19

# How you can use this data

**“I used that information for two things: 1.) to gauge where we are lab-specifically in comparison to the rest of the state, and 2.) to establish a baseline for my technicians to improve upon. ”**

**“In fact, just knowing their data is tracked and seeing where they stack-up makes them want to improve from a competitive standpoint. Both of my QC Managers are highly motivated personnel already, but now there is an added motivation to “move up the list” and better their laboratory...which is GREAT!”**