

Bituminous PWT (Percent Within Tolerance)

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Quality

Continuation of the Goal of Increased Quality

- Target: Drive product consistency focused on job mix formula (JMF) (50% lot pay factor)
- Tighter adherence to field density spec. requirements (50% lot pay factor)



Current Status

- Two (2) methods in use:

1. PWT-LTS (Laboratory Testing Section)

- Acceptance at LTS
- Gmm Verification included on Federally Funded and NHS Projects

2. PWT-HOLA (Hands On Local Acceptance)

- Department Acceptance, Contractor Lab
- Department Option to Witness Only
- Gmm Verification included on Federally Funded and NHS Projects. (Conducted at Local Lab)

Where can PWT be applied?

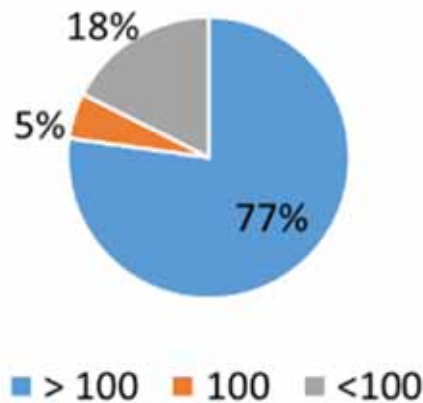
- Applicable to all bituminous paving items of Sections 309, 311, 316, 409, 410, and 411
- NOT applicable to:
 - Shoulders falling under Section 650 Items
 - Stone Matrix Asphalt (SMA)
 - Crumb Rubber Modified Asphalt Binder
 - Gap-Graded Asphalt Rubber Mixtures,
 - 6.3mm Thin Asphalt Overlay Courses
 - 4.75mm Asphalt Mixtures
 - Asphalt Warranty Pavements

Industry Summary

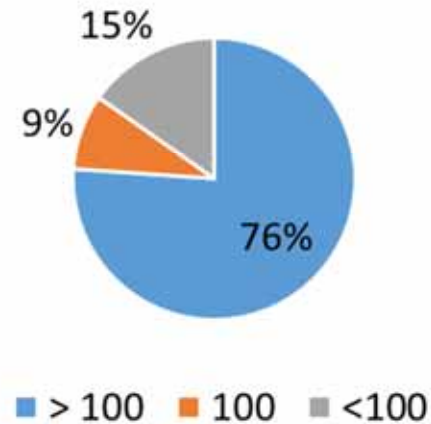
➤ 94 Different Asphalt Plants

➤ 56 Different Prime Contractors

**2016 Lot Pay Factor
(57 Different Asphalt Plants)**



**2017 Lot Pay Factor
(92 Different Asphalt Plants)**



2017 Summary of PWT Results

(As of January 9, 2018)

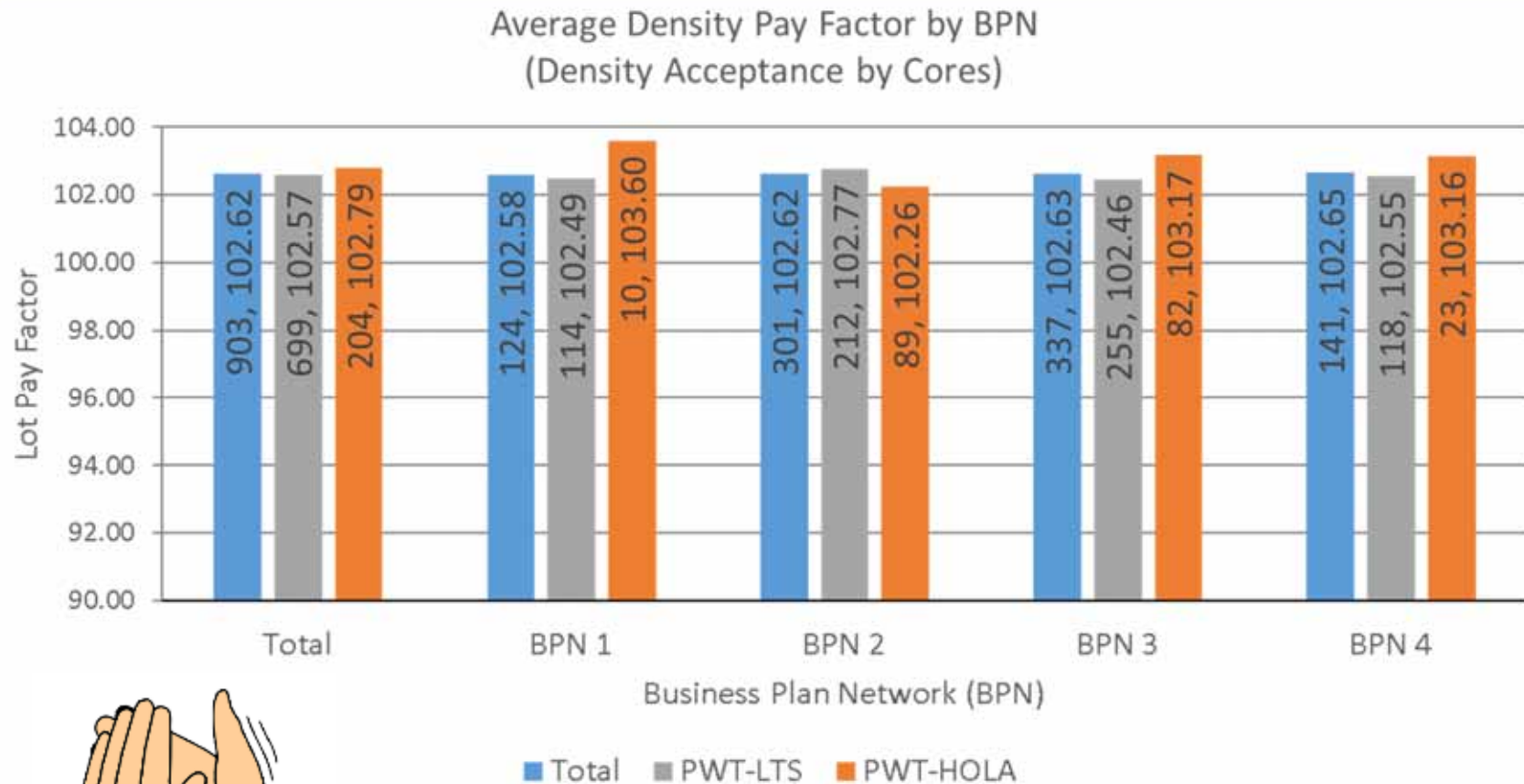
		Overall Lot Payment Averages			Pay Factor Averages		
	Lots	Average Lot Payment	Average Lot Payment (Cores)	Average Lot Payment (Other)	Asphalt Content	#200 Sieve	Primary Control Sieve
Total	1125	1.01	1.02	1.01	100.80	100.97	99.71
PWT-HOLA	237	1.03	1.03	1.02	103.11	102.14	101.68
PWT-LTS	888	1.01	1.01	1.00	100.19	100.67	99.19

Primary Control Sieve

	#8 Sieve	# of Lots	#4 Sieve	# of Lots
Total	99.47	770	100.23	345
PWT-HOLA	101.06	164	103.12	69
PWT-LTS	99.05	606	99.50	276

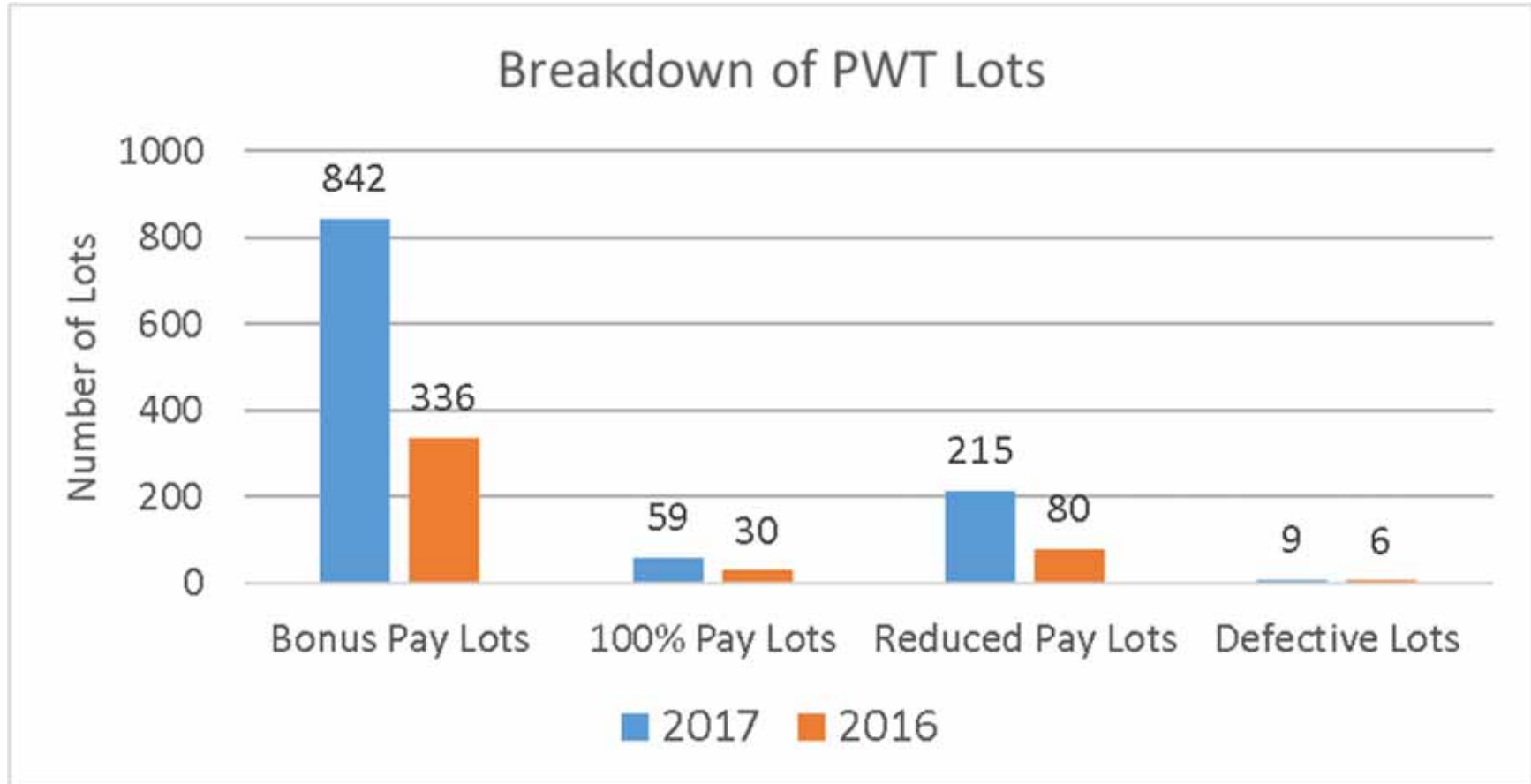
2017 Average Density Pay Factor by BPN

(As of January 9, 2018)



Comparison of Lot Payments

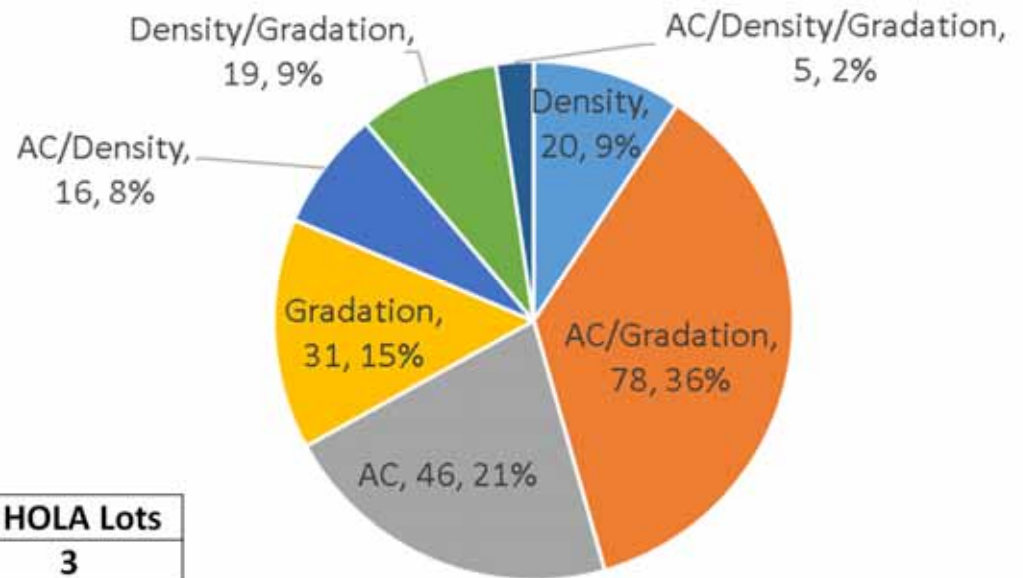
(As of January 9, 2018)



2017 Reduced Pay Lots

(As of January 9, 2018)

215 Reduced Pay Lots

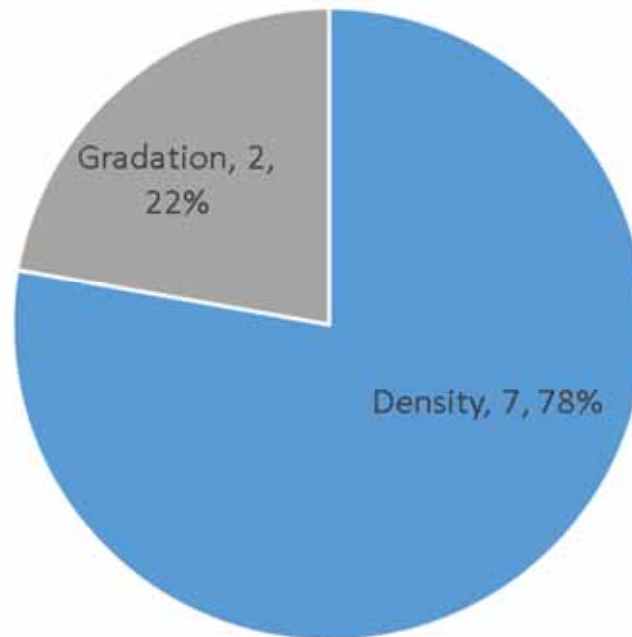


Reason for Reduction	# LTS Lots	# HOLA Lots
Density	17	3
AC/Gradation	78	0
AC	44	2
Gradation	28	3
AC/Density	15	1
Density/Gradation	16	3
AC/Density/Gradation	3	2
Total Lots	888	237

2017 Defective Lots

(As of January 9, 2018)

9 Defective Lots



7 LTS Lots / 2 HOLA Lots

Impact of Bonus Structure

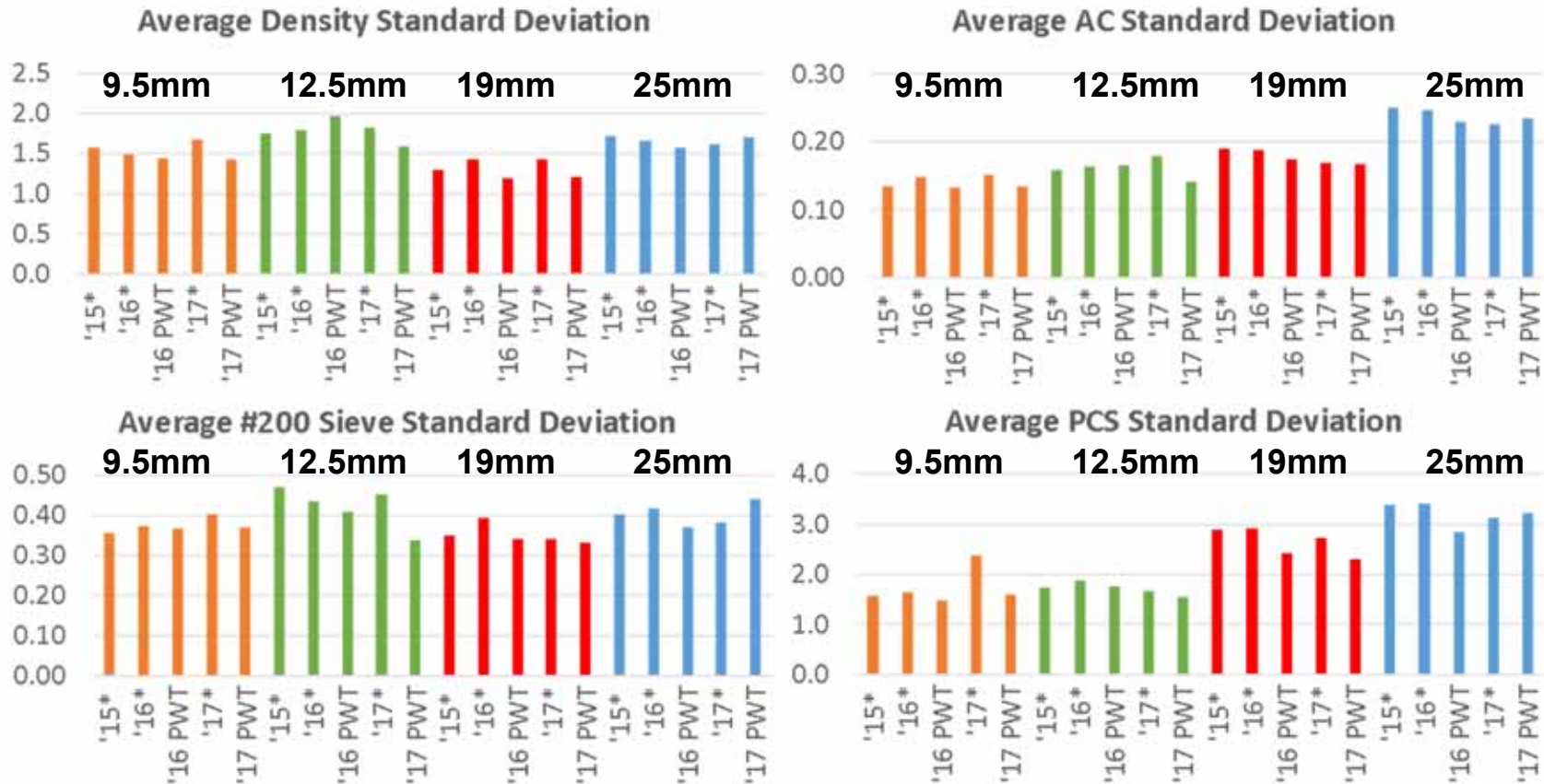
(As of January 12, 2017)

District	Incentives	Reductions	Δ
1	\$237,946.69	-\$48,122.74	\$189,823.95
2	\$275,177.97	-\$206,260.77	\$68,917.20
3	\$128,165.58	-\$27,814.16	\$100,351.42
4	\$214,561.39	-\$106,113.06	\$108,448.33
5	\$241,358.58	-\$92,249.71	\$149,108.87
6	\$602,822.42	-\$61,377.04	\$541,445.38
8	\$267,633.51	-\$399,527.62	-\$131,894.11
9	\$144,658.62	-\$88,688.77	\$55,969.85
10	\$105,707.65	-\$1,231.72	\$104,475.93
11	\$258,382.24	-\$26,937.89	\$231,444.35
12	\$196,925.55	-\$43,617.90	\$153,307.65
Total	\$2,673,340.20	-\$1,101,941.38	\$1,571,398.82

2017 PWT Summary

(Data from January 1, 2015 – October 17, 2017)

(Lot Acceptance Test Results for 9.5mm, 12.5mm, 19mm & 25mm Mixes, excludes SMA)

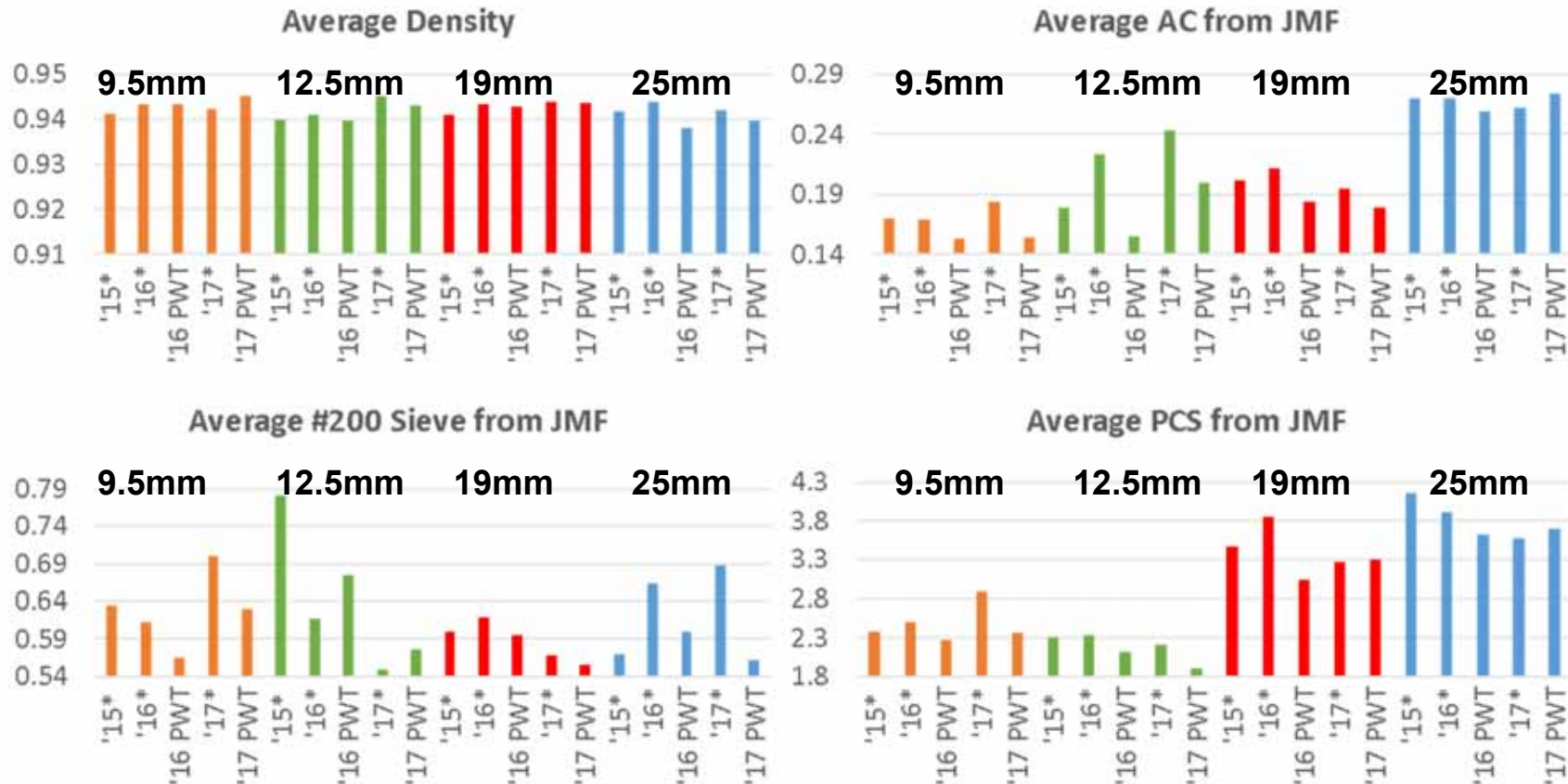


* Non-PWT

2017 PWT Summary

(Data from January 1, 2015 – October 17, 2017)

(Sublot Acceptance Test Results for 9.5mm, 12.5mm, 19mm & 25mm Mixes, excludes SMA)



* Non-PWT

2017 After Action Review Changes to PWT

- Standard Special Provisions
 - Updating AMRL to AASHTO re:source (HOLA)
 - Contract Item for Bonus/Reductions (PDA) (LTS & HOLA)
- Use Guidelines
 - Appropriate use of PWT
 - Updating AMRL to AASHTO re:source
 - Contract Item for Bonus/Reductions (PDA)
 - Remove Contractor Option to Request Re-evaluation of Non-RPS Items under Section 409 ($PF_D < 100$)
- eCAMMS
 - Multiple Ignition Oven Calibration Factors (PWT-HOLA) Guide
- NEW Field Users Guide

2018 Construction Season

- PWT on All Applicable Paving Projects
- Clearance Transmittal (CT)
 - Sent on January 5, 2018
 - Comments Due by February 2, 2018
- Revised SSPs
- Revised Use Guidelines
- NEW Field Users Guide
- Plan to Continue Monitoring of all PWT Projects
- Plan to Conduct 2018 AAR

A Group Effort



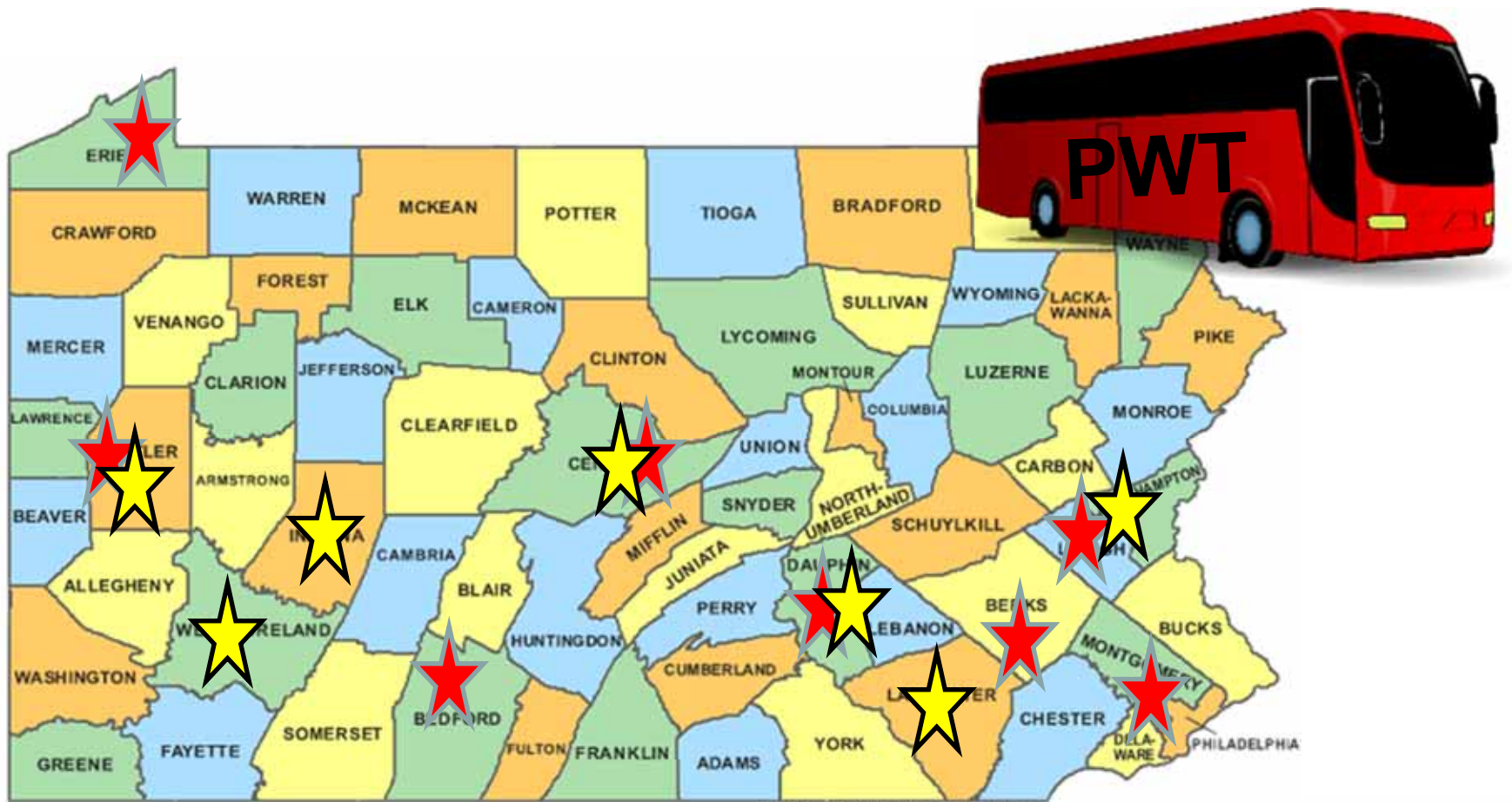
U.S. Department of Transportation
Federal Highway Administration



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FOR PAVEMENT TECHNOLOGY**



A Group Effort



★ We were Here

★ We Plan to go Here

Be a Part of the TEAM

- Please feel free to email your comments, questions and experiences.

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Questions?

