



Securing Today. Shaping Tomorrow.™

Asset Services Sigma- Agent Performance Report

August 2017 Data

September 4, 2017



Executive Summary

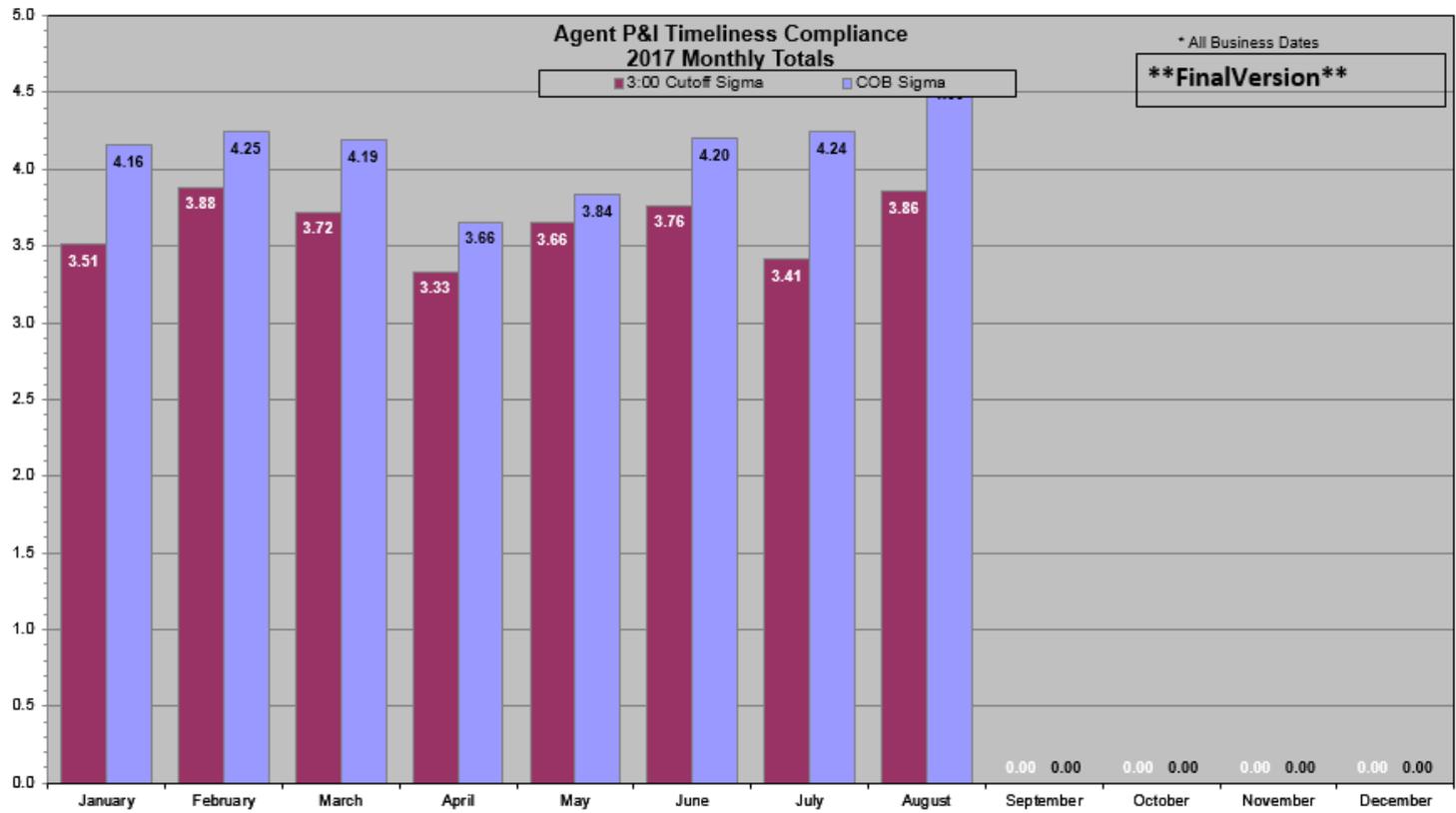
This report highlights the April 2017 performance of the top agents vs. industry targets. This report focuses on the following metrics:

Principal and Interest payment timeliness compliance - percentage of funds received from agents at cut-off (3:00pm ET) and at close of business (6:00pm ET), relative to the total dollars paid for the month. The Agent sigma performance for August 2017 was 3.86σ (99.07%). This month's performance is above the target of 3.67σ (98.50%).

Principal and Interest allocations on payable date - percentage of allocated dollars and CUSIPS, relative to the total expected dollars and CUSIPs allocated. The Agent sigma performance for April 2017 was 4.60σ (99.90%). This month's performance is above the target of 3.83σ (99.00%).

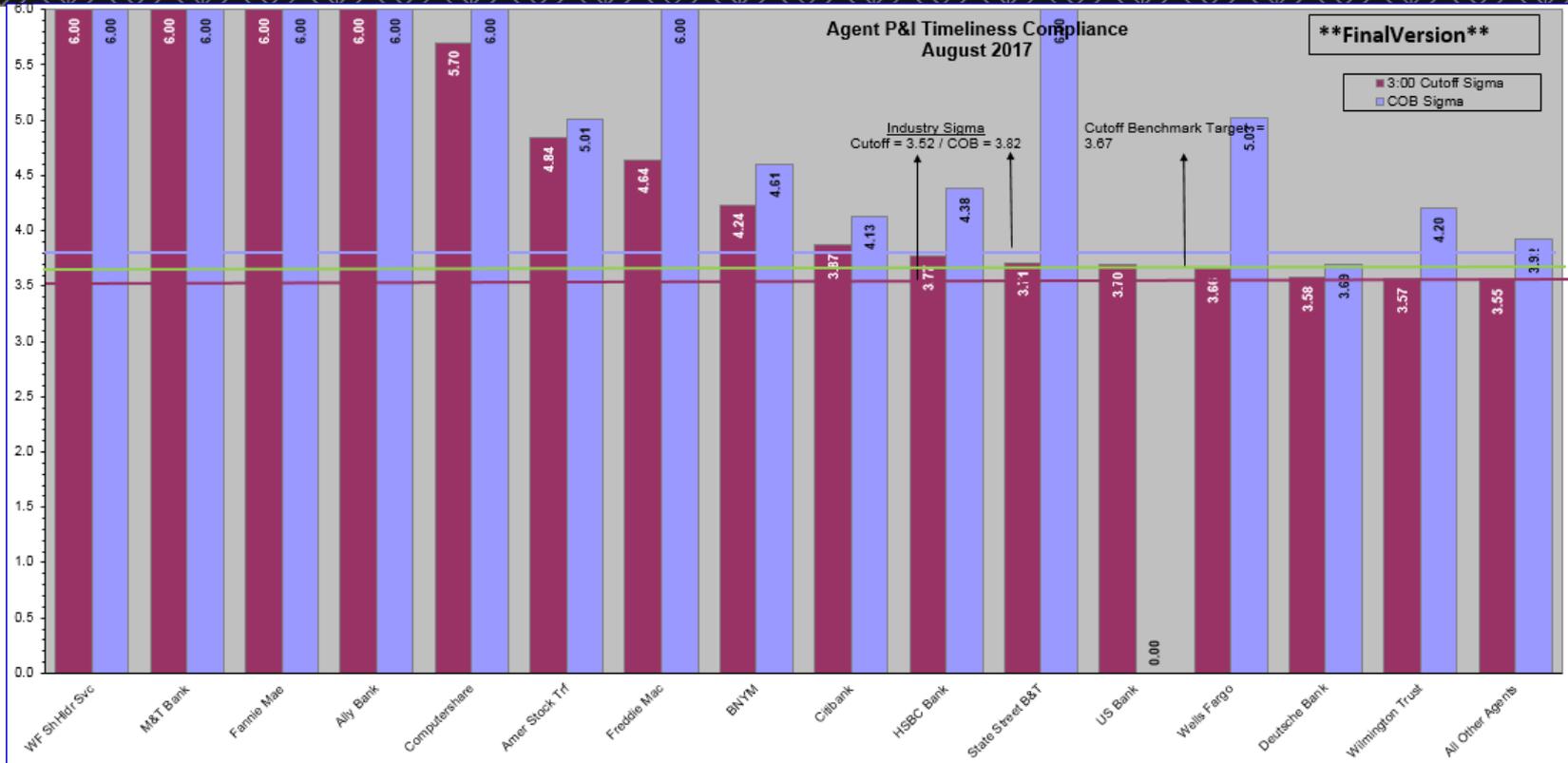
Please visit DTCC's web-site <http://dtcc.com/asset-services/asset-services-performance-metrics.aspx> for more detailed metric definitions and agent trend charts.

P&I Timeliness Compliance Monthly Trend



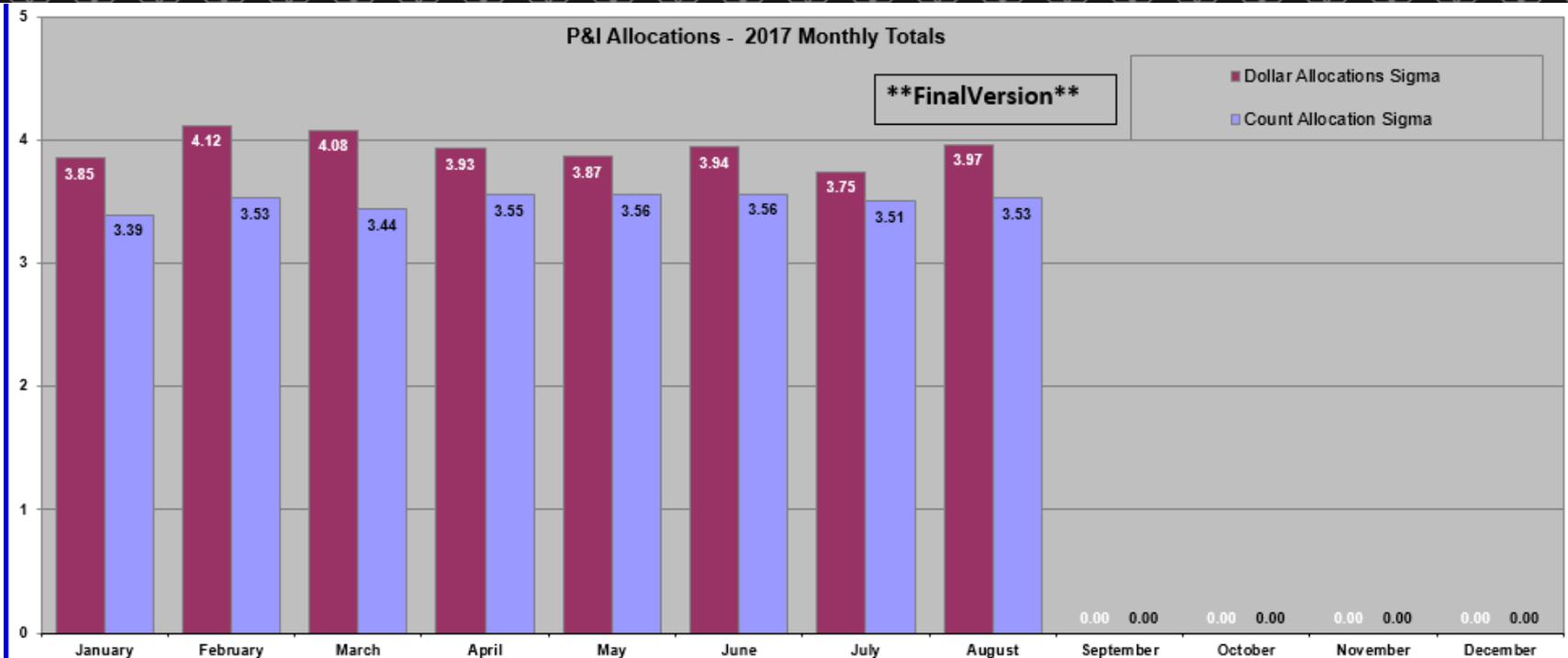
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	97.78%	99.15%	98.69%	96.67%	98.44%	98.82%	97.22%	99.07%					98.22%
Cutoff Sigma	3.51	3.88	3.72	3.33	3.66	3.76	3.41	3.86					3.60
Percent by COB	99.61%	99.70%	99.64%	98.45%	99.03%	99.66%	99.70%	99.90%					99.46%
COB Sigma	4.16	4.25	4.19	3.66	3.84	4.20	4.24	4.60					4.05

P&I Timeliness Compliance – Agent Performance



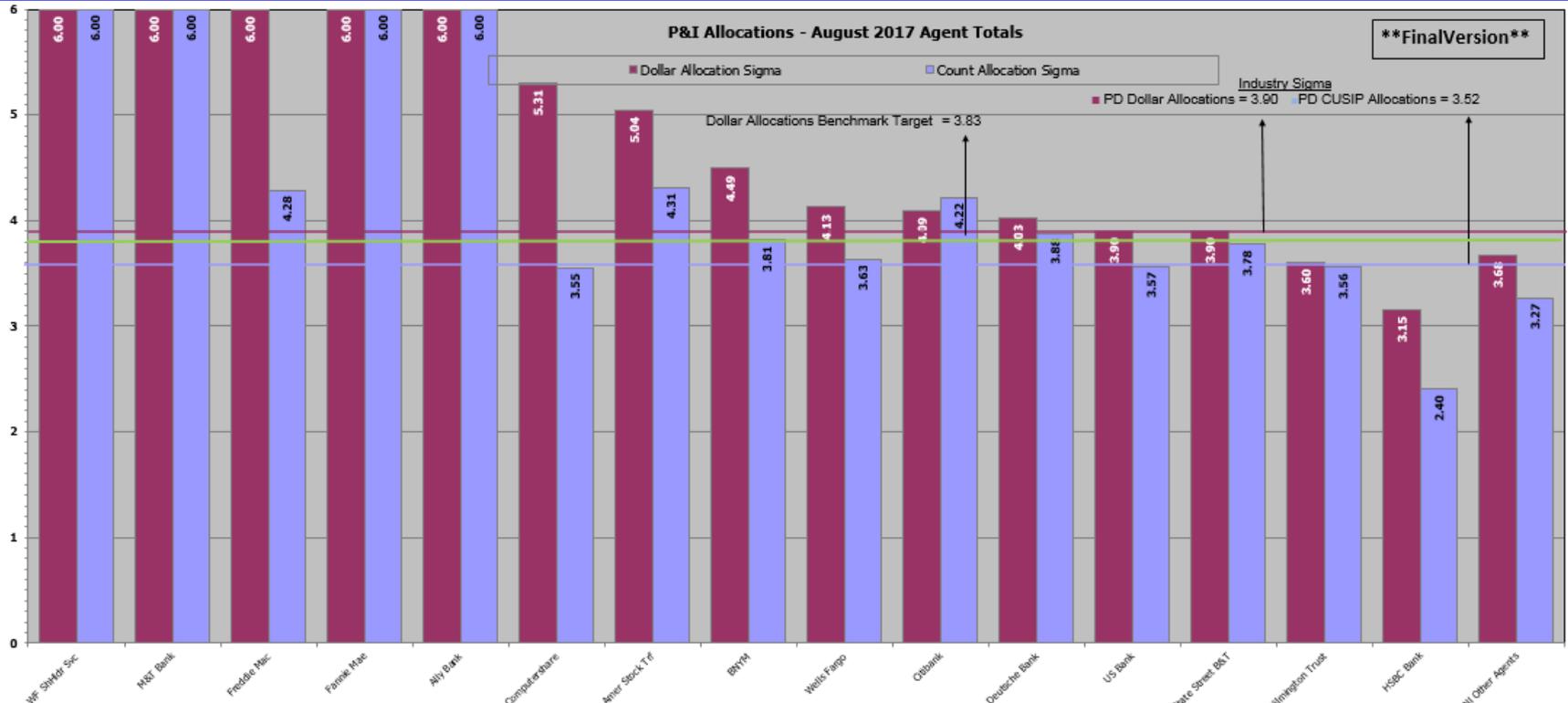
	WF ShHldr Svc	M&T Bank	Fannie Mae	Ally Bank	Computer share	Amer Stock Trf	Freddie Mac	BNYM	Citibank	HSBC Bank	State Street B&T	US Bank	Wells Fargo	Deutsche Bank	Wilmington Trust	All Other Agents
% of Total Allocations	2.29%	0.00%	0.15%	0.18%	9.05%	2.26%	0.74%	32.45%	6.10%	0.66%	0.60%	16.50%	10.61%	5.75%	1.78%	10.89%
Percent by 3:00 Cutoff	100.00%	100.00%	100.00%	100.00%	100.00%	99.96%	99.92%	99.69%	99.11%	98.84%	98.66%	98.62%	98.45%	98.13%	98.08%	97.99%
Cutoff Sigma	6.00	6.00	6.00	6.00	5.70	4.84	4.64	4.24	3.87	3.77	3.71	3.70	3.66	3.58	3.57	3.55
Variance from Industry Cutoff	2.14	2.14	2.14	2.14	1.85	0.98	0.79	0.38	0.02	-0.09	-0.14	-0.15	-0.20	-0.27	-0.29	-0.30
Percent by COB	100.00%	100.00%	100.00%	100.00%	100.00%	99.98%	100.00%	99.91%	99.58%	99.80%	100.00%	100.83%	99.98%	98.57%	99.66%	99.23%
COB Sigma	6.00	6.00	6.00	6.00	6.00	5.01	6.00	4.61	4.13	4.38	6.00	#NUM!	5.03	3.69	4.20	3.92

P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Total Expected Allocations (Billions)	\$270.299	\$256.272	\$336.389	\$294.175	\$284.020	\$338.995	\$289.729	\$268.399					\$2338.279
Allocation \$ Percent	99.07%	99.56%	99.51%	99.25%	99.10%	99.28%	98.77%	99.32%					99.23%
Allocation \$ Sigma	3.85	4.12	4.08	3.93	3.87	3.94	3.75	3.97					3.92
Unallocated Impact (Billions \$)	\$2.513	\$1.118	\$1.656	\$2.213	\$2.554	\$2.456	\$3.569	\$1.830					\$17.911
Total CUSIP Expected	295,717	371,199	310,589	267,655	276,563	371,101	284,940	369,729					2,537,493
CUSIP Allocations %	97.09%	97.89%	97.41%	98.00%	98.03%	98.05%	97.77%	97.91%					97.78%
CUSIP Allocations Sigma	3.39	3.53	3.44	3.55	3.56	3.56	3.51	3.53					3.51
Unallocated Impact (Count)	8,302	7,842	8,053	5,351	5,446	7,231	6,361	7,741					56,327

P&I Allocations – Agent Performance



AGENT	WF ShHldr Suc	M&T Bank	Freddie Mac	Fannie Mae	Ally Bank	Computer share	Amer Stock Trf	BNYM	Wells Fargo	Citibank	Deutsche Bank	US Bank	State Street B&T	Wilmington Trust	HSBC Bank	All Other Agents
Total Expected / % of Industry	\$6.248	\$0.006	\$2.015	\$0.406	\$0.481	\$24.680	\$6.180	\$87.550	\$28.044	\$15.989	\$15.316	\$42.869	\$1.609	\$4.613	\$0.329	\$32.065
Allocation %	100.00%	100.00%	100.00%	100.00%	100.00%	99.99%	99.98%	99.86%	99.57%	99.52%	99.42%	99.18%	99.17%	98.23%	95.09%	98.53%
Allocation \$ Sigma	6.00	6.00	6.00	6.00	6.00	5.31	5.04	4.49	4.13	4.09	4.03	3.90	3.90	3.60	3.15	3.68
Variance from Industry \$ Sigma	1.92	1.92	1.92	1.92	1.92	1.23	0.97	0.42	0.05	0.02	-0.05	-0.18	-0.18	-0.47	-0.92	-0.40
CUSIP Allocations %	100.00%	100.00%	99.73%	100.00%	100.00%	98.00%	99.75%	98.97%	98.36%	99.67%	99.13%	98.08%	98.86%	98.03%	81.71%	96.14%
CUSIP Allocations Sigma	6.00	6.00	4.28	6.00	6.00	3.55	4.31	3.81	3.63	4.22	3.88	3.57	3.78	3.56	2.40	3.27
Variance from Industry CUSIP Sigma	2.46	2.46	0.74	2.46	2.46	0.01	0.77	0.28	0.10	0.68	0.34	0.03	0.24	0.02	-1.13	-0.27