



# ASSET SERVICES SIGMA- AGENT PERFORMANCE REPORT

October 2022

# Executive Summary

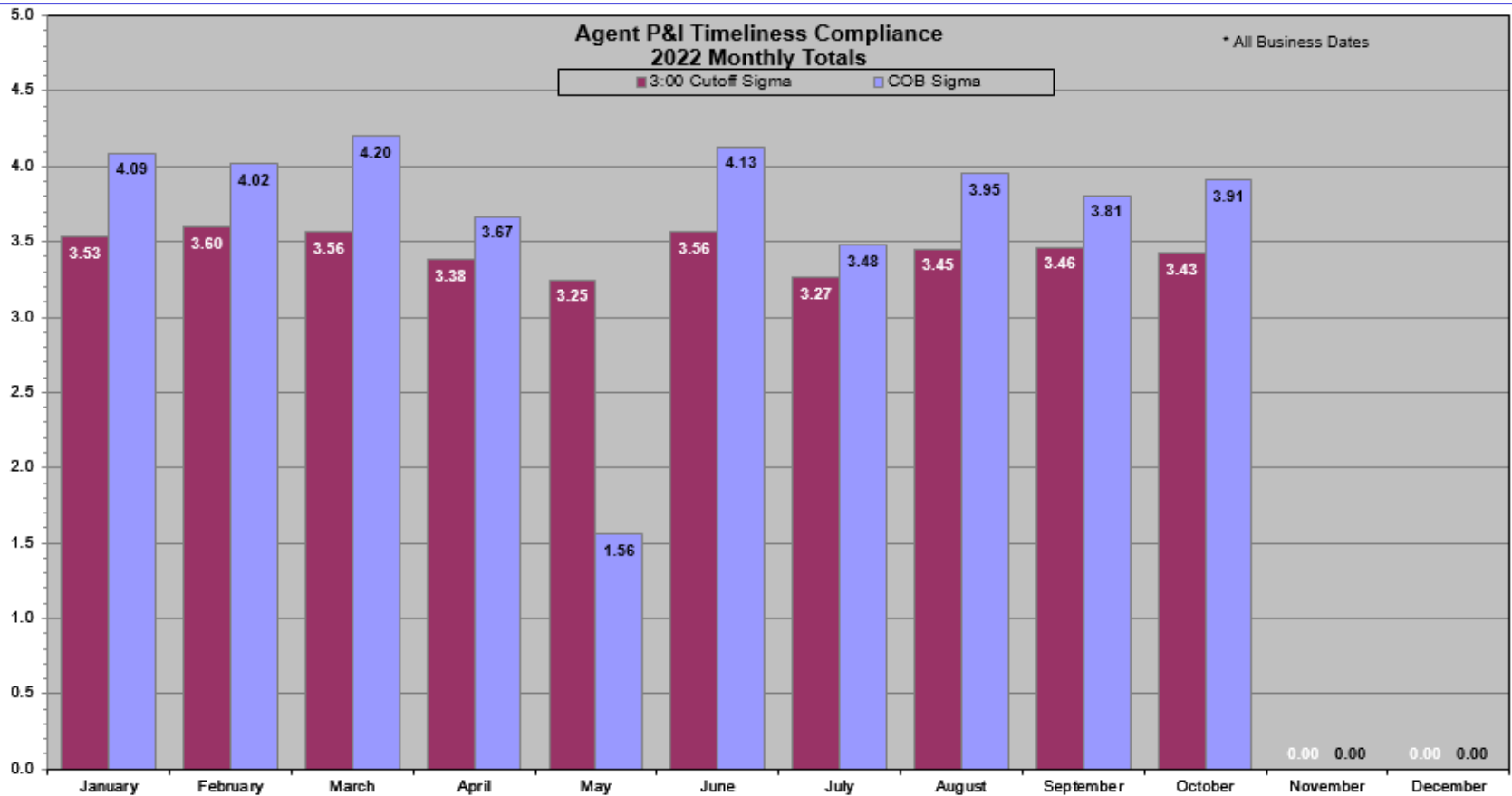
This report highlights the October 2022 performance of the top agents vs. industry targets. This report focuses on the following metrics:

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 October 2022 was  $3.43\sigma$  (97.31)%. This month's performance is below the target of  $3.67\sigma$  (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 October 2022 was  $3.62\sigma$  (98.30)%. This month's performance is below the target of  $3.83\sigma$  (99.00%).

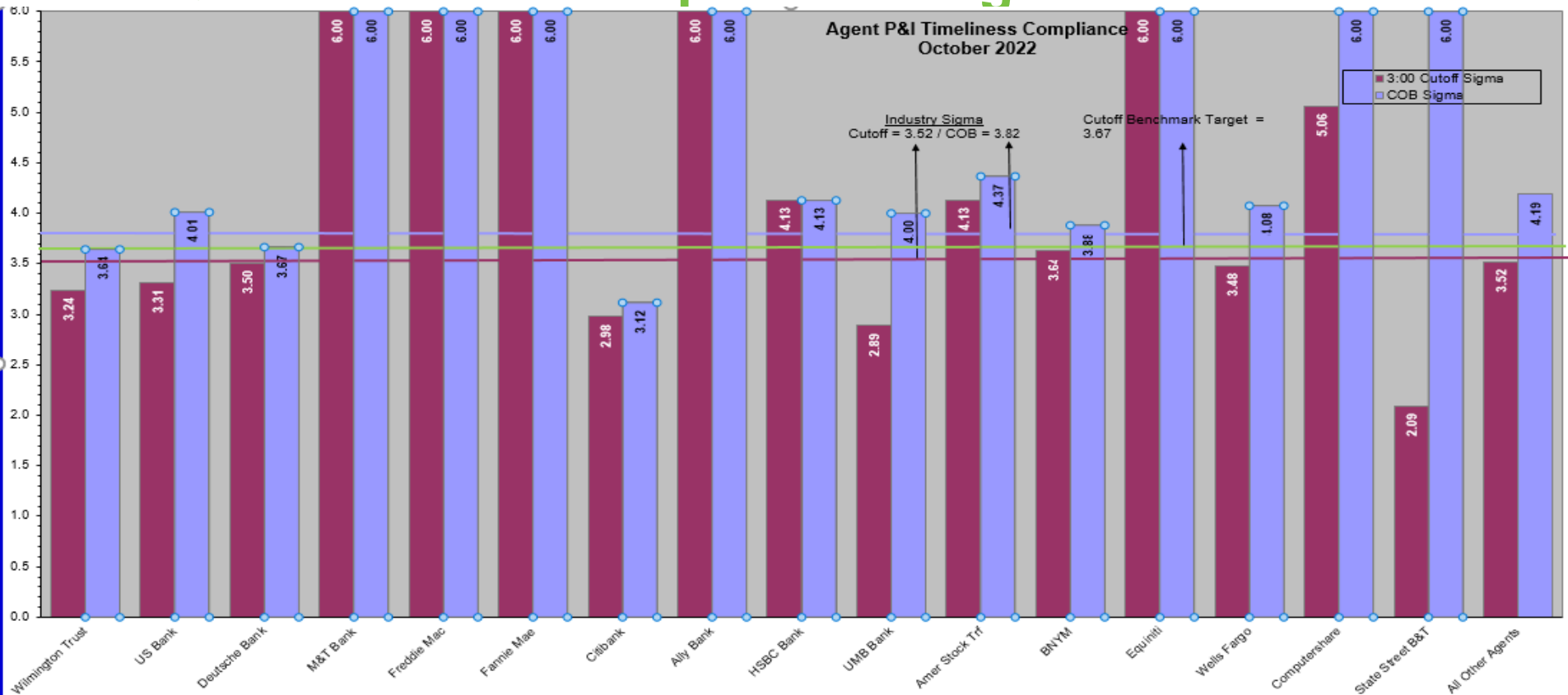
Please visit DTCC's web-site <http://dtcc.com/asset-services/asset-services-performance-metrics.aspx> for more detailed metric definitions and agent trend charts.

# P&I Allocations Monthly Trend



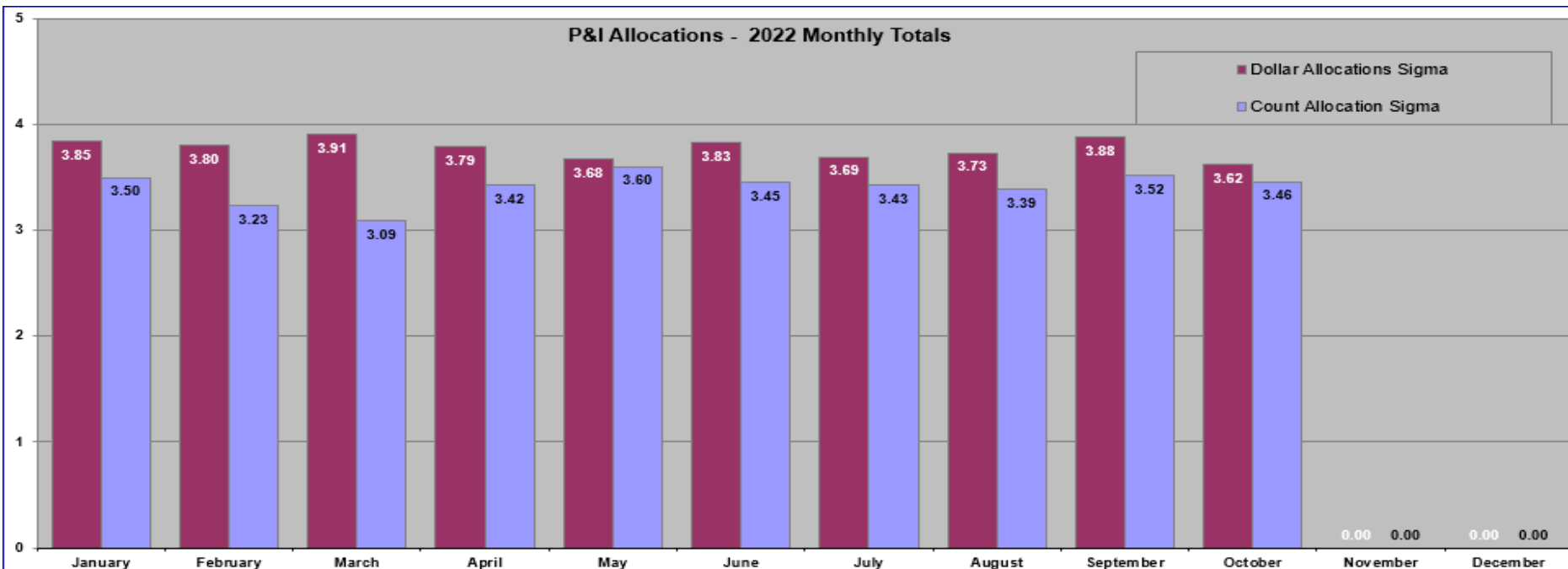
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
<b>Percent by 3:00 Cut-off</b>	97.89%	98.19%	98.04%	97.02%	95.98%	98.04%	96.14%	97.46%	97.51%	97.31%			97.39%
<b>Cutoff Sigma</b>	3.53	3.60	3.56	3.38	3.25	3.56	3.27	3.45	3.46	3.43			3.44
<b>Percent by COB</b>	99.52%	99.42%	99.65%	98.49%	52.29%	99.57%	97.61%	99.29%	98.95%	99.20%			94.38%
<b>COB Sigma</b>	4.09	4.02	4.20	3.67	1.56	4.13	3.48	3.95	3.81	3.91			3.09

# P&I Timeliness Compliance – Agent Performance



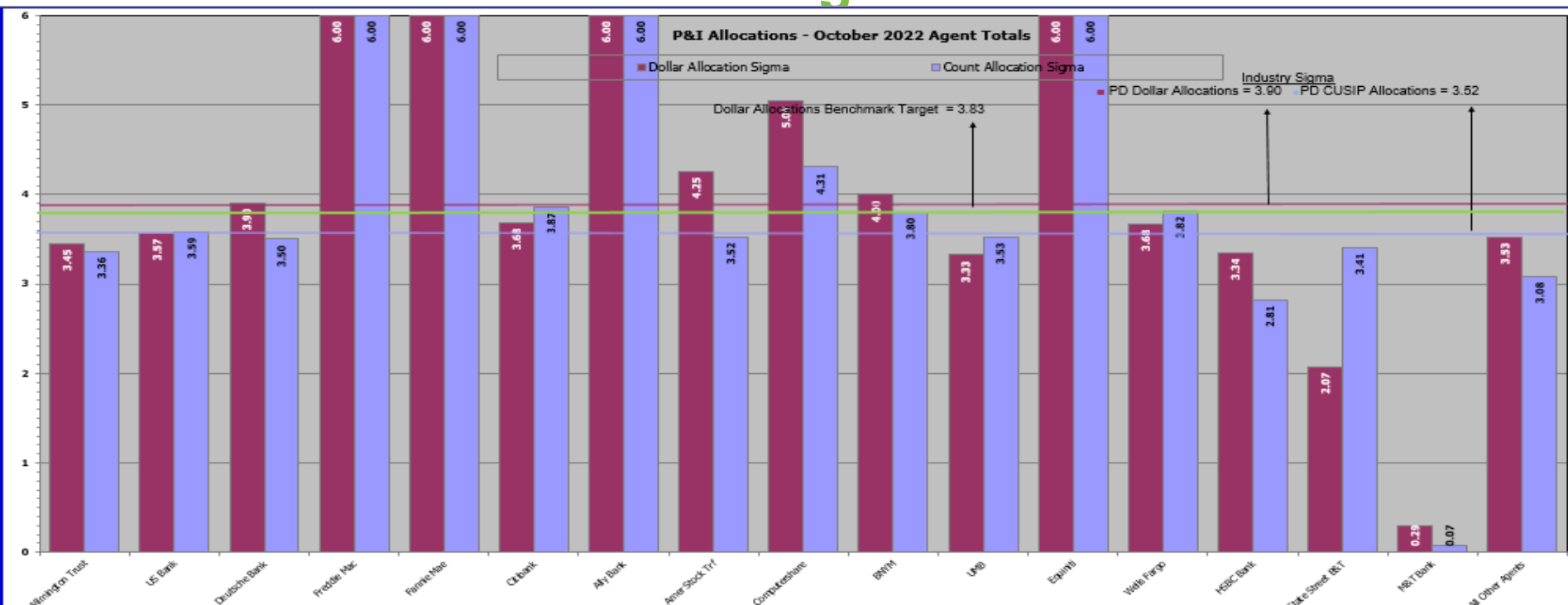
	Wilmington Trust	US Bank	Deutsche Bank	M&T Bank	Freddie Mac	Fannie Mae	Citibank	Ally Bank	HSBC Bank	Amer Stock Trf	BNYM	Equiniti	Wells Fargo	Computershare	State Street B&T	All Other Agents
<b>% of Total Allocations</b>	3.79%	16.57%	4.78%	0.00%	1.41%	0.08%	4.35%	0.30%	0.39%	2.05%	27.30%	3.37%	9.04%	11.05%	1.96%	13.00%
<b>Percent by 3:00 Cutoff</b>	95.92%	96.50%	97.74%	100.00%	100.00%	100.00%	93.01%	100.00%	99.57%	99.57%	98.38%	100.00%	97.61%	99.98%	72.37%	97.83%
<b>Cutoff Sigma</b>	3.24	3.31	3.50	6.00	6.00	6.00	2.98	6.00	4.13	4.13	3.64	6.00	3.48	5.06	2.09	3.52
<b>Variance from Industry Cutoff</b>	-0.19	-0.12	0.07	2.57	2.57	2.57	-0.45	2.57	0.70	0.70	0.21	2.57	0.05	1.63	-1.33	0.09
<b>Percent by COB</b>	98.40%	99.40%	98.48%	100.00%	100.00%	100.00%	94.70%	100.00%	99.57%	99.79%	99.14%	100.00%	99.50%	100.00%	100.00%	99.64%
<b>COB Sigma</b>	3.64	4.01	3.67	6.00	6.00	6.00	3.12	6.00	4.13	4.37	3.88	6.00	4.08	6.00	6.00	4.19

# P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
<b>Total Expected Allocations (Billions)</b>	\$323.178	\$297.874	\$355.941	\$280.999	\$320.382	\$371.911	\$286.222	\$282.510	\$360.651	\$284.671			\$3164.338
<b>Allocation % Percent</b>	99.05%	98.94%	99.19%	98.91%	98.52%	99.00%	98.59%	98.73%	99.13%	98.30%			98.85%
<b>Allocation \$ Sigma</b>	3.85	3.80	3.91	3.79	3.68	3.83	3.69	3.73	3.88	3.62			3.78
<b>Unallocated Impact (Billions \$)</b>	\$3.059	\$3.162	\$2.877	\$3.063	\$4.733	\$3.722	\$4.035	\$3.598	\$3.147	\$4.841			\$36.237
<b>Total CUSIP Expected</b>	278,521	378,197	314,794	268,591	271,832	357,011	281,107	378,751	314,944	271,216			3,114,964
<b>CUSIP Allocations %</b>	97.71%	95.82%	94.43%	97.29%	98.22%	97.46%	97.30%	97.08%	97.84%	97.51%			97.01%
<b>CUSIP Allocations Sigma</b>	3.50	3.23	3.09	3.42	3.60	3.45	3.43	3.39	3.52	3.46			3.38
<b>Unallocated Impact (Count)</b>	6,370	15,813	17,535	7,290	4,841	9,067	7,583	11,066	6,811	6,763			93,139

# P&I Allocations – Agent Performance



AGENT	Wilmington Trust	US Bank	Deutsche Bank	Freddie Mac	Fannie Mae	Citibank	Allly Bank	Amer Stock Trf	Computer share	BNYM	Equiniti	Wells Fargo	HSBC Bank	State Street B&T	M&T Bank	All Other Agents
<b>Total Expected / % of Industry</b>	<b>\$10.467</b>	<b>\$46.521</b>	<b>\$13.432</b>	<b>\$4.019</b>	<b>\$0.221</b>	<b>\$11.781</b>	<b>\$0.863</b>	<b>\$5.955</b>	<b>\$32.139</b>	<b>\$75.920</b>	<b>\$9.843</b>	<b>\$25.796</b>	<b>\$0.390</b>	<b>\$5.618</b>	<b>\$0.005</b>	<b>\$40.322</b>
	3.68%	16.34%	4.72%	1.41%	0.08%	4.14%	0.30%	2.09%	11.29%	26.67%	3.46%	9.06%	0.14%	1.97%	0.00%	14.16%
<b>Allocation \$ Percent</b>	<b>97.43%</b>	<b>98.07%</b>	<b>99.19%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>98.55%</b>	<b>100.00%</b>	<b>99.71%</b>	<b>99.98%</b>	<b>99.38%</b>	<b>100.00%</b>	<b>98.52%</b>	<b>96.73%</b>	<b>71.61%</b>	<b>11.36%</b>	<b>97.86%</b>
<b>Allocation \$ Sigma</b>	<b>3.45</b>	<b>3.57</b>	<b>3.90</b>	<b>6.00</b>	<b>6.00</b>	<b>3.68</b>	<b>6.00</b>	<b>4.25</b>	<b>5.05</b>	<b>4.00</b>	<b>6.00</b>	<b>3.68</b>	<b>3.34</b>	<b>2.07</b>	<b>0.29</b>	<b>3.53</b>
<b>Variance from Industry \$ Sigma</b>	<b>-0.17</b>	<b>-0.05</b>	<b>0.28</b>	<b>2.38</b>	<b>2.38</b>	<b>0.06</b>	<b>2.38</b>	<b>0.63</b>	<b>1.43</b>	<b>0.38</b>	<b>2.38</b>	<b>0.06</b>	<b>-0.28</b>	<b>-1.55</b>	<b>-3.33</b>	<b>-0.09</b>
<b>CUSIP Allocations %</b>	<b>96.86%</b>	<b>98.16%</b>	<b>97.74%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>99.10%</b>	<b>100.00%</b>	<b>97.83%</b>	<b>99.75%</b>	<b>98.92%</b>	<b>100.00%</b>	<b>98.97%</b>	<b>90.57%</b>	<b>97.19%</b>	<b>7.69%</b>	<b>94.29%</b>
<b>CUSIP Allocations \$</b>	<b>3.36</b>	<b>3.59</b>	<b>3.50</b>	<b>6.00</b>	<b>6.00</b>	<b>3.87</b>	<b>6.00</b>	<b>3.52</b>	<b>4.31</b>	<b>3.80</b>	<b>6.00</b>	<b>3.82</b>	<b>2.81</b>	<b>3.41</b>	<b>0.07</b>	<b>3.08</b>
<b>Variance from Industry CUSIP Sigma</b>	<b>-0.10</b>	<b>0.13</b>	<b>0.04</b>	<b>2.54</b>	<b>2.54</b>	<b>0.40</b>	<b>2.54</b>	<b>0.06</b>	<b>0.85</b>	<b>0.34</b>	<b>2.54</b>	<b>0.36</b>	<b>-0.65</b>	<b>-0.05</b>	<b>-3.39</b>	<b>-0.38</b>