Tax Exempt & Taxable Yield/Rate Levels - 08/30/2024

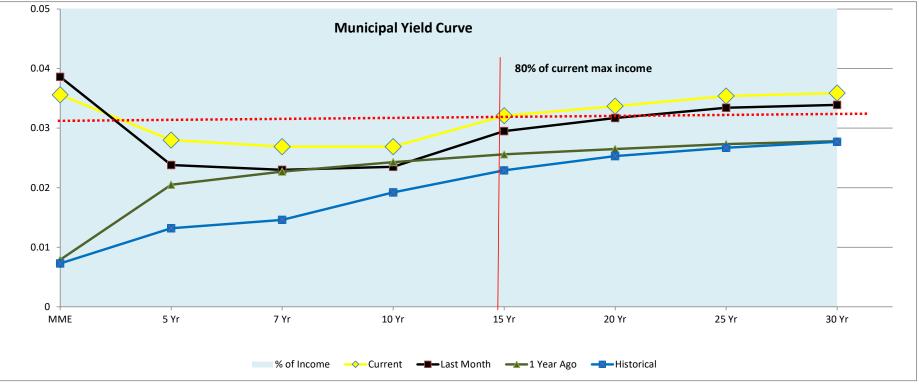
	4	AAA-Rated Mur	nicipal Yields		SOFR Swap Market Rates					
	Current	Last Month	1 Year Ago	10 Year Avg(2)	Current	Last Month	1 Year Ago	10 Year Avg(2)		
MME	2.92%	3.51%	4.06%	1.16%	5.33%	5.38%	5.30%	2.22%		
5 Yr	2.42%	2.75%	2.88%	1.52%	3.40%	3.63%	4.03%	1.91%		
7 Yr	2.55%	2.77%	2.88%	1.68%	3.40%	3.59%	3.90%	1.99%		
10 Yr	2.71%	2.82%	2.93%	1.95%	3.44%	3.60%	3.83%	2.10%		
15 Yr	2.98%	3.06%	3.42%	2.30%	3.51%	3.65%	3.81%	2.21%		
20 Yr	3.32%	3.40%	3.65%	2.53%	3.52%	3.65%	3.76%	2.26%		
25 Yr	3.52%	3.60%	3.82%	2.66%	3.46%	3.58%	3.65%	2.25%		
30 Yr	3.60%	3.68%	3.88%	2.74%	3.38%	3.50%	3.54%	2.23%		

NOTES:

(1) MME= Money Market Equivalent: Tax Exempt= 7 day vrdn rate, Taxable = O/N SOFR

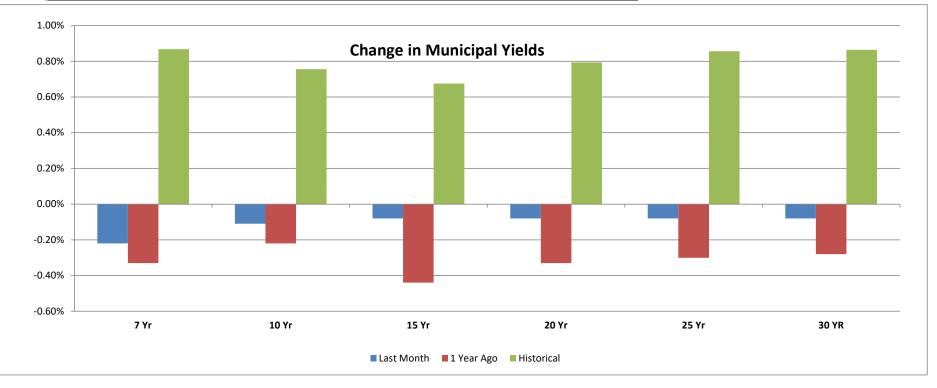
(2) = Bloomberg Fair Value Municipal Yields, AAA rated 5% coupon.

(3) Data from 08/31/2014, except overnight SOFR 04/02/2018



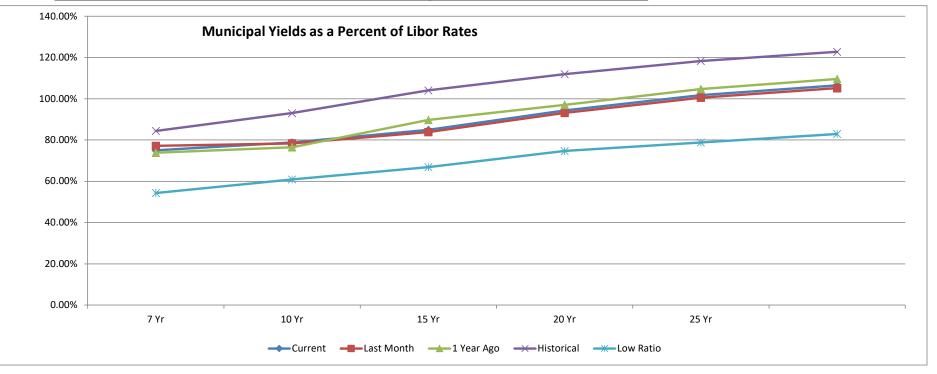
Change in Rates - 08/30/2024

	AAA	- Municipal Yie	elds	SO	SOFR Swap Market		
	Last Month	1 Year Ago	10 Year Avg	Last Month	1 Year Ago	10 Year Avg	
MME(1)	-0.59%	-1.14%	1.76%	-0.05%	0.03%	3.11%	
5 Yr	-0.33%	-0.46%	0.90%	-0.23%	-0.63%	1.49%	
7 Yr	-0.22%	-0.33%	0.87%	-0.19%	-0.50%	1.41%	
10 Yr	-0.11%	-0.22%	0.76%	-0.16%	-0.39%	1.34%	
15 Yr	-0.08%	-0.44%	0.68%	-0.14%	-0.30%	1.30%	
20 Yr	-0.08%	-0.33%	0.79%	-0.13%	-0.24%	1.26%	
25 Yr	-0.08%	-0.30%	0.86%	-0.12%	-0.19%	1.21%	
30 YR	-0.08%	-0.28%	0.86%	-0.12%	-0.16%	1.15%	

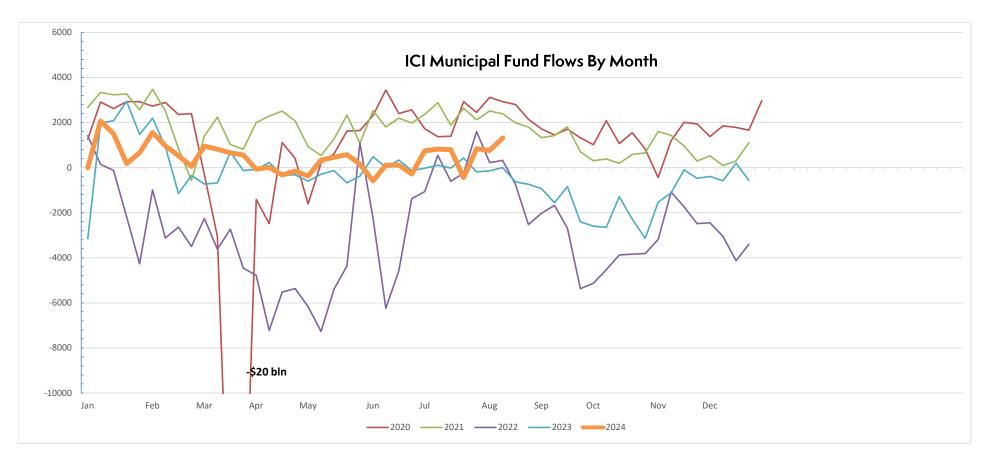


Ratio Municipal/SOFR Rates 08/30/2024

	Muni/SOFR Yield Ratios												
				Historical									
	Current	Last Month	1 Year Ago	Avg(3)	Min Ratio	Max Ratio	Std Dev						
MME (1)	54.78%	65.24%	76.60%	52.25%									
5 Yr	71.18%	75.76%	71.46%	79.40%	45%	1240%	0.96						
7 Yr	75.00%	77.16%	73.85%	84.42%	54%	894%	0.64						
10 Yr	78.78%	78.33%	76.50%	93.07%	61%	663%	0.44						
15 Yr	84.90%	83.84%	89.76%	104.07%	67%	660%	0.43						
20 Yr	94.32%	93.15%	97.07%	111.91%	75%	684%	0.44						
25 Yr	101.73%	100.56%	104.66%	118.32%	79%	966%	0.48						
30 Yr	106.51%	105.14%	109.60%	122.77%	83%	1248%	0.51						



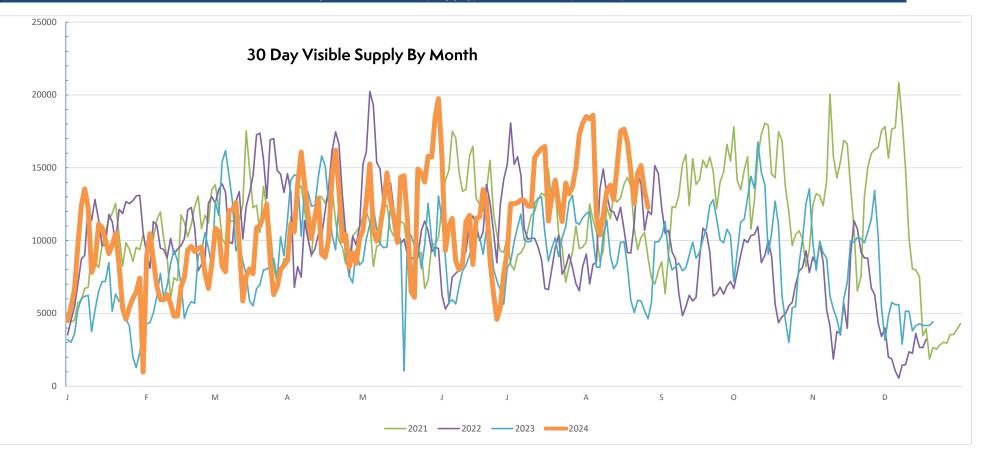
ICI Mutual Fund Flows as of 08/30/2024



Net Flows in mlns	10 Yr Avg	5 Yr Avg	2019	2020	2021	2022	2023	2024 ytd
Total			93,480	40,252	84,610	-144,794	-19,244	15,327
Average	294	15	1,764	759	1,627	-2,785	-370	464
Max	3,483	3,483	3,249	3,448	3,483	1,598	2,942	2,066
Min	-19,236	-19,236	-210	-19,236	-568	-7,270	-3,157	-587
Std	2,099	2,735	558	4,200	970	2,211	1,240	621

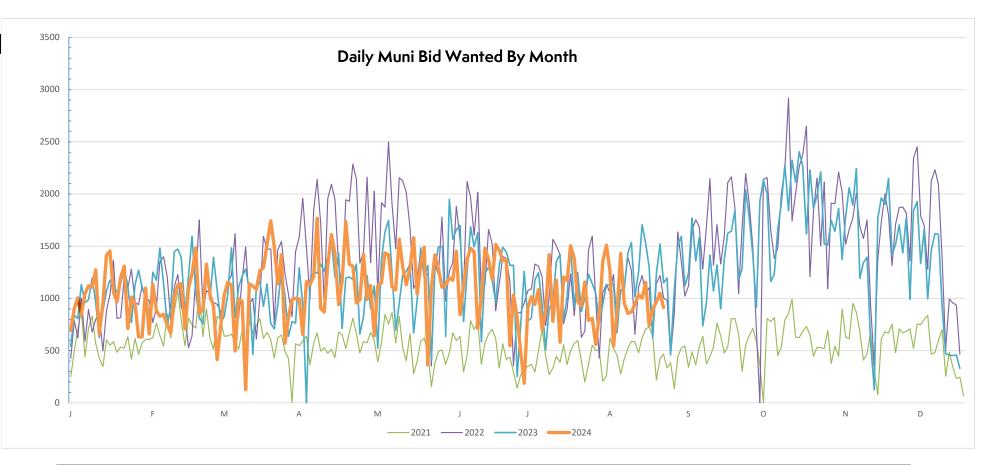
NNCFMBEW <index> Weekly data in millions

30 Day Muni Issuance (Supply) - 08/30/2024 (in mlns)



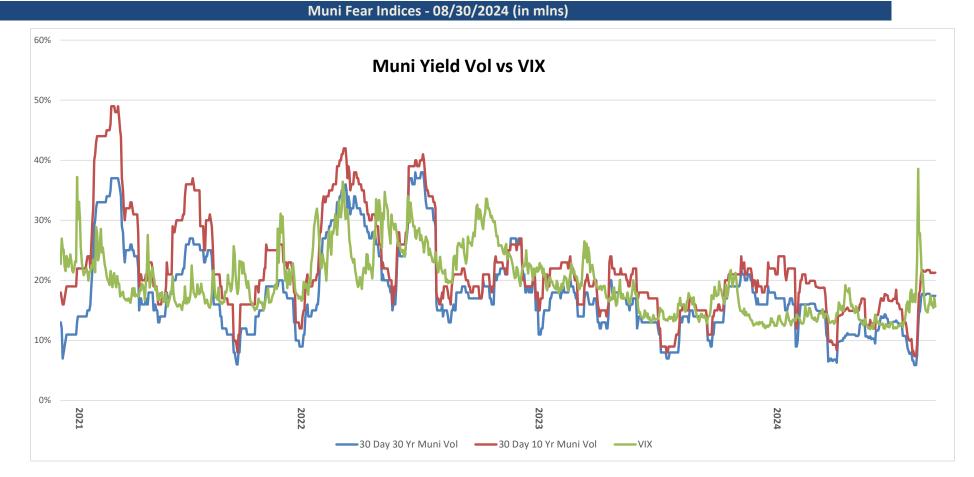
New Issue										
Supply	10 Yr Avg	5 Yr Avg	2020	2021	2022	2023	2024	Issuance (*)	Year-to Date	2024 Difference
Average	11,024	11,333	13,869	11,313	9,773	8,813	10,968	2023	247,671	33.7%
Max	31,003	31,003	31,003	20,859	20,249	16,771	19,751	2024	331,024	
Min	565	565	2,292	1,868	565	1,051	981	5 Year Avg	276,658	19.7%
Std	3,987	4,305	4,324	3,483	3,614	3,086	3,527	(*) As of 07/24/20	24	

SPLYTOT <index> in mlns



Bid Wanted	10 Yr Avg	5 Yr Avg	2020	2021	2022	2023	Current	Last Week	Last Month	Last Year
Average	818	960	744	560	1,364	1,236	913	739	1,157	1,520
Max	4,115	2,919	4,115	1,071	2,919	2,404	Difference	174	-244	-607
Min	0.19	0.19	0.19	0.82	0.25	0.49				
Std	451	503	518	182	509					

MBWDPAR<index>



	10 Year Muni				30 Year Muni		VIX			
	Average	Max	Min	Average	Max	Min	Average	Max	Min	
2019-2024	28%	216%	7%	23%	177%	6%	21%	83%	12%	
2019	19%	42%	10%	17%	30%	6%	15%	25%	12%	
2020	50%	236%	9%	40%	177%	7%	29%	83%	12%	
2021	26%	61%	10%	20%	37%	6%	19%	31%	15%	
2022	26%	45%	12%	24%	38%	9%	26%	36%	17%	
2023	18%	26%	20%	14%	17%	11%	18%	23%	12%	
2024	16%	26%	9%	12%	17%	6%	14%	17%	12%	
Current	25%	Vs '24 Avg	8%	17%	Vs '24 Avg	5%	16%	Vs '24 Avg	2%	
1 Week	25%	0%		17%	0%		16%	0%		
1 Month	10%	15%		7%	11%		17%	-1%		
1 Year	19%	6%		14%	3%		14%	2%		