

YIELD ANALYSIS

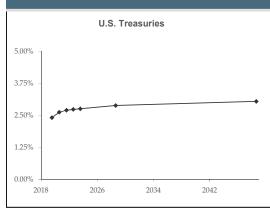
August 14, 2018

	U.S. Treasury Y	ields –
Coupon	Maturity	YTM
0.000%	07/18/19	2.41%
2.625%	07/31/20	2.62%
2.750%	08/15/21	2.70%
1.875%	07/31/22	2.73%
2.750%	07/31/23	2.75%
2.875%	08/15/28	2.88%
3.000%	08/15/48	3.04%

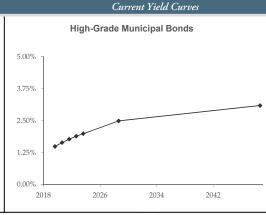
2020

Municipal Bond Yields ¹				
Maturity	YTM	Tax-Equiv. ²		
08/13/19	1.49%	2.13%		
08/13/20	1.64%	2.35%		
08/13/21	1.78%	2.54%		
08/13/22	1.89%	2.70%		
08/13/23	1.99%	2.84%		
08/13/28	2.49%	3.56%		
08/13/48	3.09%	4.42%		

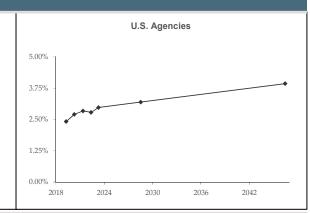
	i	J.S. Agency Yields - A	Active Bonds		
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLB	2.250%	04/26/19	\$99.87	2.41%	+29
FHLB	2.375%	04/16/20	\$99.44	2.70%	+36
FFCB	2.700%	05/10/21	\$99.62	2.84%	+30
FFCB	2.875%	05/25/22	\$99.75	2.78%	+8
FFCB	2.700%	04/11/23	\$98.76	2.97%	+13
FFCB	3.200%	07/12/28	\$100.08	3.19%	-37
FFCB	3.250%	06/28/46	\$88.42	3.93%	-49



2022



Description



Price

YTM

YTW

Description	Price	YTM	To Treasury (bp)
C (Baa1/BBB+) 2.4% 2/18/2020	\$99.09	3.02%	+40
JPM (Baa1 *+/BBB+) 3.38% 5/1/2023	\$98.25	3.78%	+106
MS (A3/BBB+) 4% 7/23/2025	\$100.14	3.98%	+122
BAC (A3/A-) 3.71% 4/24/2028	\$96.85	4.11%	+124
6.00% 4.00% 2.00%	•		

2024

2026

Corporate Bond Yields

1				
FHLB 2.25% 4/26/2019	N/A	\$99.87	2.41%	2.41%
FFCB 2.5% 4/23/2020	04/23/19	\$99.70	2.68%	2.68%
FHLB 3% 4/17/2023	04/17/19	\$99.21	3.17%	3.18%
FHLB 3.75% 4/24/2028	04/24/19	\$99.62	3.79%	3.80%
4.00% - 2.00% - 0.00%	•			
2019 2021	2023	2025	2027	

Bullet & Callable Agency Bond Yields ³

Call Date

2028